

# DELIVERING A SMART SYSTEM

Consultation on a Smart Meter Policy Framework post 2020

Closing date: 11 November 2019, 10.00am





© Crown copyright 2019

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit <a href="nationalarchives.gov.uk/doc/open-government-licence/version/3">nationalarchives.gov.uk/doc/open-government-licence/version/3</a> or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: <a href="psi@nationalarchives.gsi.gov.uk">psi@nationalarchives.gsi.gov.uk</a>.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to us at: <a href="mailto:enquiries@beis.gov.uk">enquiries@beis.gov.uk</a>

# Contents

General information	5
Why We Are Consulting	
Consultation Details	_ 5
How to Respond	6
Confidentiality and Data Protection	6
Quality Assurance	6
Executive Summary	_ 7
Context	_ 7
A Market-Wide Rollout	8
Supporting Measures to a Market-Wide Rollout	_ 8
Background	9
Rollout Progress	_ 11
Consumer Experience	_ 13
Consumer Engagement and Operational Fulfilment	
The Requirement for a post 2020 Framework	_ 15
Section 1: A post 2020 Framework Proposal	_ 17
Delivering our Key Principles	_ 17
Principle 1: Encouraging Consumers to Benefit from Smart Meters	_ 17
Principle 2: Achieve Market-Wide Rollout to Ensure Maximum Benefits for Consumers	17
Principle 3: Normalisation of Smart Meters in Great Britain	_ 18
Principle 4: Giving Certainty to Industry	_ 19
Government's Proposed Approach	_ 19
Legal Text	
Impact Assessment	_ 22
Section 2: Policy Measures and Incentives	_ 25
The Data Communications Company (DCC) Charging	_ 26
Introduction	_ 26
Description of Issue	_ 26
Consideration of Options	
Government's Proposed Approach	
Co-ordinated Consumer Engagement Activities	
Background	
Progress on Co-ordinated Consumer Engagement	
Consumer Engagement Activities beyond 2020	
-	

Embedding Consumer Behaviour Change					
Delivering consumer benefits					
	Embedding consumer benefits				
O	ther Policy Incentives	35			
Nex	t Steps	37			
Summary of Questions					
Annexes					
•	Annex 1: Proposed amendments to standard conditions 33A and 39A	40			
•	Annex 2: Proposed amendments to standard conditions 37 and 43	40			
•	Annex 3: Proposed amendments to Section K of the Smart Energy Code (SEC)	40			
•	Annex 4: Analytical Evidence	40			
•	Annex 5: Impact Assessment	40			
	Annex 6: Consequential changes to standard conditions	40			

# General information

# Why We Are Consulting

We are consulting on a number of proposals to help inform the policy framework for energy suppliers to continue installing smart meters after 31 December 2020, when the current rollout duty ends. This includes proposals for changing the Smart Energy Code (SEC) to modify the way in which the Data Communications Company (DCC) charges for its services after the 31 December 2020.

Additionally, we are seeking more general views from consultees on:

- The future of coordinated consumer engagement activity beyond 2020, in the context of increasing numbers of households and small businesses having smart meters.
- Potential future policy measures to complement any policy framework beyond 2020 including initiatives to ensure that consumer benefits are maintained.

#### **Consultation Details**

**Issued:** 16 September 2019

Respond by: 11 November 2019, 10.00am

#### **Enquiries to:**

Smart Metering Implementation Programme
Policy and Governance Team
Department for Business, Energy and Industrial Strategy
2<sup>nd</sup> Floor
1, Victoria Street
London, SW1H 0ET

Email: smartmetering@beis.gov.uk

**Consultation reference:** "Delivering a Smart System: Consultation for a Smart Meter Policy Framework post 2020"

#### **Territorial extent:**

This consultation applies to the gas and electricity markets in Great Britain. Responsibility for energy markets in Northern Ireland lies with the Northern Ireland Executive's Department of Economy.

## How to Respond

Responses should be emailed to: <a href="mailto:smartmetering@beis.gov.uk">smartmetering@beis.gov.uk</a> or posted to the above address.

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome. We would advise you to follow the summary of consultation questions on page 38 of this document.

# Confidentiality and Data Protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable UK and EU data protection laws. See our privacy policy.

We will summarise all responses and publish this summary on <u>GOV.UK</u>. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

# **Quality Assurance**

This consultation has been carried out in accordance with the government's <u>consultation</u> <u>principles</u>.

If you have any complaints about the way this consultation has been conducted, please email: <a href="mailto:beis.bru@beis.gov.uk">beis.bru@beis.gov.uk</a>.

# **Executive Summary**

#### Context

Smart meters are a vital upgrade to our national energy infrastructure, providing the building blocks of a more flexible and resilient energy system fit for the 21st Century. They are a critical tool in modernising the way we all use energy and aiding the transformation of the retail energy market. Transforming the way we all use energy will play a key role in decarbonising the energy sector, helping us to deliver on our long-term target of net zero greenhouse gas emissions by 2050<sup>1</sup>. It will also help us deliver on our commitment under the Industrial Strategy and our Clean Growth Grand Challenge, to maximise the economic opportunity from both our domestic and the global shift to clean growth. We are determined for the UK to play a leading role in providing the technologies, innovation, goods and services that will be needed for clean growth.

Nearly 15 million smart and advanced meters are now operating in homes and businesses across Great Britain<sup>2</sup>, helping to spur innovation and allowing consumers to take control of their energy consumption. They are enabling energy suppliers to offer new products and services, including smart tariffs allowing consumers to save money by using energy at different times of the day. The Smart Systems and Flexibility Plan<sup>3</sup>, published jointly by Government and Ofgem in 2017 (and Progress Update in 2018), set out a number of actions that we are taking to enable smart homes.

The Smart Metering Implementation Programme ("the Programme") remains on track to offer smart meters to every home and small business by the end of 2020. Delivery to date has been achieved through cross-industry effort and investment by energy suppliers, their supply chains, third-party service providers and in particular the installer workforces of energy suppliers. Supported by the work of Smart Energy GB, 98% of people across Great Britain are now aware of smart meters<sup>4</sup>.

Second generation (SMETS2) smart meter installations continue to ramp up, with over two million SMETS2 meters enrolled into the national smart metering communications infrastructure run by the Data Communications Company (DCC).

Millions of energy consumers are already benefitting from smart meters and the overwhelming majority are having a good experience, which is testament to the hard work, skill and dedication of all the organisations involved in delivering the rollout:

- 9 in 10 people with smart meters say they are satisfied with the installation process<sup>5</sup>.
- 8 in 10 people with smart meters say they have a better idea of their energy costs<sup>6</sup>.

<sup>&</sup>lt;sup>1</sup> https://researchbriefings.files.parliament.uk/documents/CBP-8590/CBP-8590.pdf

<sup>&</sup>lt;sup>2</sup> https://www.gov.uk/government/collections/smart-meters-statistics

<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/government/publications/upgrading-our-energy-system-smart-systems-and-flexibility-plan

<sup>&</sup>lt;sup>4</sup> https://www.smartenergygb.org/en/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-March-2019.ashx.

<sup>&</sup>lt;sup>5</sup> BEIS, Smart Meter Customer Experience Study: Post-installation survey, August 2017 <a href="https://www.gov.uk/government/publications/smart-meter-customer-experience-study-2016-18">https://www.gov.uk/government/publications/smart-meter-customer-experience-study-2016-18</a>

<sup>&</sup>lt;sup>6</sup> Smart Energy GB, Smart Energy Outlook March 2019: <a href="https://www.smartenergygb.org/en/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-March-2019.ashx">https://www.smartenergygb.org/en/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-March-2019.ashx</a>

- 76% of people with smart prepayment meters say they would recommend them to family or friends <sup>7</sup>.
- 9 in 10 smart prepayment customers say that topping up has become easier since getting a smart meter<sup>8</sup>.

#### A Market-Wide Rollout

Over the course of the rollout, the Programme aims to upgrade 53 million meters in homes and small businesses. With consumers at the heart of Great Britain's rollout the emphasis throughout has been to take the time necessary to ensure thorough testing of systems and equipment so that consumers have a good experience from the outset.

The energy retail market has been changing fast, with more energy suppliers and more choice for consumers. The smart meter rollout therefore needs a regulatory framework beyond 2020 that is adapted to these evolving market conditions, while at the same time continuing to deliver a good consumer experience. The Government has implemented measures to normalise smart metering as the default meter offer in Great Britain with the mandate on all energy suppliers to become DCC Users, which is a key tool to deliver interoperability across the sector, and the activation of the New and Replacement Obligation (NRO)<sup>9</sup>.

We are making substantial progress with c.30 million meters forecast to have been installed by the end of 2020. We want to ensure that the rollout continues with this positive momentum after the end of 2020 when the current regulatory framework ends.

Government is therefore consulting on the introduction of a new regulatory framework for energy suppliers that builds on the 2020 commitment whilst driving the ambition to complete the smart meter rollout as soon as practicable. The proposed market-wide obligation is based on the following design principles:

- To encourage consumers to benefit from the rollout of smart meters, including how to use the data from their smart meters;
- To deliver a market-wide rollout of smart meters as soon as possible, that ensures value for money, and maintains installation quality so that consumers can derive maximum benefit and have a good experience.
- To normalise smart meters so they are the default meter used in Great Britain; and
- To give certainty to the whole sector to invest and plan, ahead of and beyond 2020.

# Supporting Measures to a Market-Wide Rollout

Alongside the introduction of a new obligation, we have considered a number of different policies and measures to drive performance after 2020. The timeframe for implementation will consider when any measures would be needed to create the right incentives and drive the pace of smart meter installations. Encouraging uptake and increasingly effective consumer engagement will need to continue to be a core part of this.

<sup>&</sup>lt;sup>7</sup> Smart Energy GB, Smart Energy Outlook March 2019: <a href="https://www.smartenergygb.org/en/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-March-2019.ashx">https://www.smartenergygb.org/en/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-March-2019.ashx</a>

<sup>&</sup>lt;sup>8</sup> BEIS, Smart Meter Customer Experience Study: Post-installation survey, August 2017 <a href="https://www.gov.uk/government/publications/smart-meter-customer-experience-study-2016-18">https://www.gov.uk/government/publications/smart-meter-customer-experience-study-2016-18</a>

<sup>&</sup>lt;sup>9</sup> https://smartenergycodecompany.co.uk/latest-news/government-response-to-january-2019-consultation-on-the-new-and-replacement-obligation-nro-activation-date/

# Background

1. The development of a smart energy system delivering secure, cheap and clean energy is an important part of the Government's Industrial Strategy<sup>1</sup>. As our Clean Growth Strategy highlights, smart technologies and services will play a key role in decarbonising the energy sector, supporting the long-term target of net zero greenhouse gas emissions by 2050.

# Smart Metering & the Industrial Strategy

The Industrial Strategy's five foundations of productivity are the essential attributes of every successful economy. Smart metering supports these foundations in a number of ways, smart meters are therefore contributing to the UK's vision for a transformed economy.



# **INFRASTRUCTURE**

Smart meters are digitising the retail energy market and providing a platform for a smarter energy system. They are a key step to the delivery of a smart, efficient and reliable energy system.



#### PEOPLE

The planned rollout of 53 million smart meters to every home and small business in GB has created thousands of jobs with existing workforce being upskilled.



#### **PLACES**

Smart meters will enable the smarter use of energy across GB connecting homes and business with the energy system as never before.



428

# €1.23



#### DEAS

The smart metering communication infrastructure enables parties to access energy consumption data, creating opportunities for innovation inside and outside the energy sector.



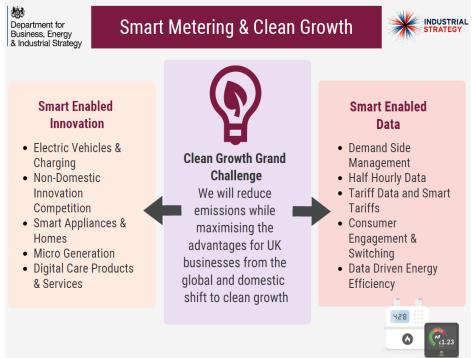
# Department for Business, Energy & Industrial Strategy



## BUSINESS ENVIRONMENT

Smart meters are enabling SMEs to reduce their energy use and negotiate better tariffs.

- 2. The Smart Systems and Flexibility Plan<sup>10</sup>, published jointly by Government and Ofgem in 2017 (together with a Progress Update in 2018), set out a number of actions that we are taking to enable a smart and flexible energy system. This includes the consideration for market-wide half-hourly settlement, which will incentivise energy suppliers to offer smart tariffs by exposing them to the true cost of their customers' energy use, and taking powers to support the uptake of smart appliances such as washing machines and heating systems that respond automatically to price signals. Empowering consumers to shift their electricity use away from peak times will be critical to the future of our energy system, reducing the need for costly reinforcement of energy networks and the need for investment in additional peak generation capacity. This will allow consumers to use energy when it is cheaper and/or when there is surplus renewable electricity on the system. A smart and flexible energy system could achieve savings of up to £40bn by 2050<sup>11</sup>.
- 3. The Government is committed to ensuring that the energy system will continue to provide secure, reliable and affordable energy. However, the low carbon transition will mean some profound
  - changes in the way energy is delivered.
    This transformation will be driven by new business models and innovative products and services, enabled by the deployment of smart meters, smart appliances and digitalisation.
- 4. Smart meters are the next generation of gas and electricity meters and a vital upgrade to our national energy infrastructure. They offer a range of intelligent functions and will bring an end to



estimated bills. All domestic consumers will also be offered an In-Home Display (IHD), giving them near real-time information on their energy consumption to help them control and manage their energy use, save money and reduce carbon emissions. Government is committed to all homes and small businesses being offered smart meters by the end of 2020<sup>12</sup>.

5. The successful delivery of the Programme depends upon coordinated effort from a wide range of organisations. The Programme is led by the Department for Business, Energy and Industrial Strategy (BEIS), the relevant licence holders are regulated by the Office of Gas and Electricity Markets (Ofgem), with the smart meter rollout being delivered by energy suppliers. The Government's role includes developing smart metering policy and strategy, providing the right framework against which energy suppliers and network operators can plan, and ensuring benefits are delivered to consumers. Ofgem is responsible for the regulation (including monitoring, reporting)

<sup>&</sup>lt;sup>10</sup> https://www.gov.uk/government/publications/upgrading-our-energy-system-smart-systems-and-flexibility-plan

<sup>11</sup> https://www.gov.uk/government/publications/upgrading-our-energy-system-smart-systems-and-flexibility-plan

The 2017 Conservative Party manifesto states "We will ensure that smart meters will be offered to every household and business by the end of 2020, giving people control over their energy bills that they have not had before" https://www.conservatives.com/manifesto

and enforcement) of the licence obligations placed on energy suppliers by the Government to deliver smart meters.

- 6. The Data Communications Company (DCC) was granted its licence <sup>13</sup> by the then Department of Energy and Climate Change (DECC) in September 2013 to establish and manage the data and communications network for smart meters. As a monopoly provider of services to the market, the DCC is regulated by Ofgem. The DCC must also comply with the Smart Energy Code (SEC) which, amongst other things, sets out the arrangements by which DCC will provide smart meter related services to energy suppliers, network operators and other third parties.
- 7. In 2012 and following an extensive consultation <sup>14</sup>, the Government imposed a legal obligation on energy suppliers to take "all reasonable steps" (ARS) to install smart meters in all premises by the end of 2019. In 2013, this obligation was extended to the end of 2020 ("the 2020 rollout duty"). This obligation has driven huge investment across the energy sector to design and deliver a national interoperable metering infrastructure. Millions of people across Great Britain are already benefitting from smart meters, and many more are expected to do so before the end of 2020.

# **Rollout Progress**

- 8. There are nearly 15 million smart and advanced meters operating across homes, small businesses and smaller public sector sites in Great Britain, as at the end of June 2019<sup>15</sup>. Energy suppliers are now installing second generation (SMETS2) smart meters. There are now over two million SMETS2 meters connected to the national data communications system operated by the DCC. These second generation meters are designed to be fully interoperable between all energy suppliers, so consumers will be able to retain their smart services when they switch energy supplier. The programme to upgrade systems to support the interoperability of first generation (SMETS1) meters is underway so that consumers retain smart services when they switch energy suppliers.
- 9. The Government continues to work closely with industry and consumer organisations to ensure that more households and non-domestic consumers have access to smart meters and experience the full benefits they unlock.

<sup>&</sup>lt;sup>13</sup> Strictly speaking the DCC holds a Smart Meter Communication Licence under both the Electricity Act 1989 and the Gas Act 1986. For convenience these combined licences are referred to at the DCC Licence.

<sup>14</sup> https://www.gov.uk/government/consultations/smart-metering-implementation-programme

<sup>&</sup>lt;sup>15</sup> https://www.gov.uk/government/collections/smart-meters-statistics

#### End June 2019 status 14.9 million More than 1 in 4 households smart/advanced meters and smaller non-domestic sites have a smart/advanced in operation at the end of meter June 2019 2019 Q1 Q2 2019 Data 2018 Communications 2017 630,000 Company 2016 2015 2019 Q2 2014 1.3million 2018 Q4 13.8m 14.9m 2018 Q3 240,000 Smart/advanced 47,000 meters in operation DCC data on SMETS2 connections at the end of recent quarters Supplier landscape 3% of domestic meters 72 small 46 small operated by suppliers 2016 2018 suppliers small 12 large 14 large suppliers suppliers suppliers At end 96% domestic 93% domestic 2018 market share market share 73% non-domestic 39% of non-domestic 77% non-domestic market share market share meters operated by small suppliers Small suppliers transition to large suppliers once their portfolio is stable above the threshold of 250,000 customers on a single fuel Programme milestones December: more than 10m June: more than 1m smart meters March: more than 100,000 smart meters operating smart meters installed in a installed for the 10th consecutive quarter for the first time March: more than 1m smart | quarter meters installed in a quarter

2014

2015

2016

2017

2018

2019

# **Consumer Experience**

- 10. Consumers are at the heart of the Programme. Government undertakes regular and comprehensive monitoring of consumer benefits, including consumer research, monitoring of key indicators through industry and third-party data and the Programme's published official statistics.
- 11. The Consumer Benefits Stocktake report published alongside this consultation <sup>16</sup> notes the significant progress in smart meter installations; highlighting areas where customer satisfaction and advocacy of smart meters has remained consistently high, and others where Government intends to take further action to ensure full benefits realisation. The report focuses on the following areas:
  - i. Energy Consumption Reduction. This has been one of the main benefits of the Programme, where Government and other organisations have been deployed to support a change in consumers' behaviours by increasing awareness, knowledge and incentives to encourage energy savings. In the longer term, we expect that the change in availability of energy consumption data will lead to innovation in new products and services that will help consumers manage their consumption. Some suppliers are now offering apps that provide energy efficiency feedback and customised home energy reports.
  - ii. **Prepayment Benefits**. Smart meters are transforming the prepay consumer experience by offering a range of additional benefits, including greater visibility of their credit balance and the opportunity to top-up online or over the phone. The Government has worked with industry to share good practice to ensure that prepayment consumers (who are more likely to be in vulnerable circumstances) receive targeted support. As a result of these improvements, prepayment consumers are particularly strong advocates of smart metering.
  - iii. **Engagement in the Energy Market.** Smart metering is expected to expand consumer engagement in the energy market through increased switching between tariffs and suppliers. This will be driven by raising consumers' awareness of energy costs and by providing easier and quicker access to the data involved in managing the switching process, including opening it up to third party intermediaries. In the short term our priority is to ensure an interoperable system to support consumers' ability to switch. The enrolment of SMETS1 meters into the Data Communications Company (DCC) is a longstanding policy commitment and the Government has announced that DCC is required to offer an enrolment service for 99% of installed SMETS1 meters<sup>17</sup>. We will continue to monitor switching and consumer experiences of smart meters as we transition to a fully interoperable system.
  - iv. **Consumer Protection.** The Government and Ofgem have worked with a range of consumer and other organisations to use the opportunities created by smart metering to protect and provide benefits for those in vulnerable circumstances and to avoid possible disbenefits. The Programme has put in place measures designed to ensure that consumer interests are fully protected. These measures include a Code of Practice covering the necessary steps required during installation; and a Data Access and Privacy Framework, which sets out the purposes for which energy consumption data can be collected and the choices that consumers have about access to their data. The

<sup>&</sup>lt;sup>16</sup> https://www.gov.uk/government/publications/smart-meters-progress-on-realising-benefits-for-consumers

<sup>17</sup> https://www.gov.uk/government/consultations/enrolment-of-secure-smets1-meters-in-the-data-communications-company-dcc

- Programme monitors consumer protection policy, to ensure appropriate safeguards are in place, including for vulnerable and prepayment consumers
- v. The report also presents evidence on the <u>safety and distribution benefits</u> enabled by the Programme and the development of a wide range of <u>innovative products and services</u> directly linked to smart meters. Ensuring the safety of the smart meter rollout is a priority for the Programme and it will continue to be one of our major objectives going forward. In terms of innovation, we expect the development of innovative products and services to accelerate as the number of meters enrolled in the DCC grows and access to data by service providers becomes easier. Government will continue to work to ensure that the policy framework is innovation-friendly.

# Consumer Engagement and Operational Fulfilment

- 12. Energy supplier engagement with their customers is critical to the delivery of the Programme. Smart Energy GB<sup>18</sup>, a not for profit organisation funded by energy suppliers, leads the programme of national engagement to raise awareness of smart meters, drive behaviour change and help consumers benefit from smart metering. This aims to ensure consumers across Great Britain receive consistent messages and deliver better value for money, by avoiding multiple energy suppliers running similar, overlapping campaigns. As a result, awareness and understanding of smart meters has risen steadily over time, with 98% of people across Great Britain now aware of smart meters<sup>19</sup>.
- 13. Energy supplier customer engagement complements this national campaign and is critical to generating and delivering successful installations of smart meters in homes and non-domestic premises. Through Government's monitoring of the Programme, we identified a large spread in performance across energy suppliers throughout the activities required to generate consumer smart metering appointments and in fulfilling those appointments. Government is working with energy suppliers to identify and share good practice to support energy suppliers in improving their customer journeys and operational processes.
- 14. This resulted in the decision to develop a "maturity model" defining current industry activities and capabilities across five key areas: Demand Generation, Supply & Demand Management, Failure Management, Learning & Change Management, and Integrated Operating Model.
- 15. Key learnings from this work include:
  - i. High levels of customer insight facilitate high performing demand generation;
  - ii. A highly flexible and iterative approach to consumer messaging is important in identifying the most effective messaging;
  - iii. Maximising the utilisation of inbound customer contacts to generate smart appointments;
  - iv. Creating flexibility in field operations both in geographical deployment of installers and the timings of shifts creates maximum opportunity for appointment bookings;
  - v. Optimised pre-appointment contact is required to keep customers engaged and maximise access; and
  - vi. When installations cannot take place, there needs to be focus on issue rectification, rebooking the appointment, second time success, and keeping the customer informed.

<sup>&</sup>lt;sup>18</sup> https://www.smartenergygb.org

<sup>&</sup>lt;sup>19</sup> <a href="https://www.smartenergygb.org/en/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-March-2019.ashx">https://www.smartenergygb.org/en/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-March-2019.ashx</a>.

- 16. Using the maturity model, Government has been able to engage with participating energy suppliers identifying key areas in which their organisation can make improvements. Government has facilitated a number of workshops with the energy supplier community to help further refine their views on best practice and share the maturity model more widely. Government continues to engage with a wide range of energy suppliers through ongoing bilaterals during which the performance and speed of improvement of energy suppliers will be monitored using the maturity model. In addition, we will use these interactions to continue to iterate the maturity model to ensure that the resource remains relevant to all energy suppliers.
- 17. Government's overall expectation is that energy suppliers must continue to improve their consumer engagement and fulfilment strategies to help increase consumer acceptance of smart meters.

# The Requirement for a post 2020 Framework

- 18. The latest rollout plans submitted by large energy suppliers to Ofgem in Spring 2019 forecast c.30 million meters will have been installed by the end of 2020 as part of the national upgrade. However, more remains to be done to achieve market-wide smart meter penetration.
- 19. The existing obligation on energy suppliers to take all reasonable steps to install smart meters, expires on 31 December 2020, with smart meter penetration levels varying greatly between energy suppliers. We anticipate that without further Government action investment in the rollout will slow down and it will be difficult to regain momentum. This will fundamentally undermine the transition to a smart energy system, with the risk of large numbers of consumers being left behind, unable to participate in the future retail market and the benefits this will bring. The energy retail market has also been changing quickly, with more energy suppliers and more choice for consumers. The smart meter rollout therefore also needs a regulatory framework beyond 2020 that is adapted to these changing market conditions, while at the same time continuing to deliver a good consumer experience.
- 20. The Government also recognises that industry needs clarity and certainty on the policy landscape post 2020 to plan and make decisions to ensure the Programme maintains its momentum. In November 2018 the National Audit Office recommended that the Department review the 2020 rollout duty<sup>20</sup>. The then Energy Minister, the Rt. Hn. Claire Perry MP, confirmed at the BEIS Select Committee in January 2019, that Government would provide clarity during 2019 on its plans for the future smart meter policy framework beyond 2020.
- 21. The current framework has set strong foundations for the delivery of a smart meter platform that will enable a smart energy system in the long term. With consumers at the heart of Great Britain's rollout, the emphasis throughout has been to take the time necessary to ensure thorough testing of systems and equipment so that consumers, including those that are vulnerable, have a good experience from the outset. However, not all consumers will have smart meters by the end of 2020. It is therefore important that the Programme's ambition is set at a level beyond 2020 that enables momentum to continue to deliver a market-wide rollout. On this basis, we are proposing the introduction of a new obligation that builds on the 2020 commitment whilst driving the ambition to complete the smart meter rollout as soon as practicable, enabling the associated consumer, energy and wider environmental benefits.
- 22. Following engagement with energy suppliers, Ofgem and Citizens Advice, we have identified four key principles for the policy framework beyond 2020:

<sup>&</sup>lt;sup>20</sup> https://www.nao.org.uk/report/rolling-out-smart-meters/

- i. To encourage consumers to benefit from the rollout of smart meters, including how to use the data from their smart meters:
- ii. To deliver a market-wide rollout of smart meters as soon as possible, that ensures value for money, and maintains installation quality so that consumers can derive maximum benefit and have a good experience;
- iii. To normalise smart meters so they are the default meter used in Great Britain; and
- iv. To give certainty to the whole sector to invest and plan, ahead of and beyond 2020.
- 23. The delivery of these principles has been fundamental in the consideration of options and the development of a post 2020 smart metering regulatory landscape. Subsequent sections in this document set out the Government's key proposals for the policy landscape beyond 31 December 2020, including: changes in the DCC charging regime; evolution of co-ordinated consumer engagement activities; and the potential introduction of policy measures (regulatory and non-regulatory) to support the rollout of smart meters.
- 24. Proposals set out in this document are intended to be equally applicable to domestic-only, non-domestic-only and mixed-portfolio energy suppliers unless explicitly stated otherwise.

# Section 1: A post 2020 Framework Proposal

# Delivering our Key Principles

- 25. A future framework should be considered on the basis of the key principles stated above which have been used to assess our proposals. In carrying out our assessment we have taken into account the balance between consumers, industry and wider Government ambitions to move the country to a smarter, more flexible and more resilient energy system.
- 26. The future framework needs to deliver the Government's overall ambition of achieving market-wide rollout of smart meters as soon as practicable, whilst providing some flexibility to account for any delivery challenges faced by energy suppliers and safeguarding a good consumer experience throughout the process. The following sections set out our considerations under each principle.

#### Principle 1: Encouraging Consumers to Benefit from Smart Meters

- 27. A key aim of the Programme is ensuring that customers have full access to the wide range of benefits offered by smart meters. Generating consumer understanding of how to use the data from smart meters to unlock the benefits of having a smart meter will be fundamental to incentivise consumer acceptance. The quality of energy suppliers' customer journeys throughout the booking and installation process will need to continue to improve to ensure consumers remain protected and derive maximum benefit in any future framework.
- 28. Working with energy suppliers, Smart Energy GB has made significant progress in generating high levels of consumer awareness and ensuring that households across the country understand the benefits of smart meters.
- 29. Government is actively engaging with energy suppliers to refine and improve consumer engagement. We continue to share latest developments and good practice and have worked with energy suppliers to develop a "maturity model", discussed on page 14. This model defines best practice in industry performance and operational activities across a number of areas including consumer engagement.
- 30. Encouraging consumer take up of smart meters will continue to be a priority beyond 2020. Section 2 of this document seeks views on coordinated consumer engagement activity and potential future incentives to complement the proposed new framework by encouraging uptake and increasing effective consumer engagement.

# Principle 2: Achieve Market-Wide Rollout to Ensure Maximum Benefits for Consumers

31. A market-wide smart meter rollout supports an effective transition to a smart energy system and is a crucial underpinning for clean growth. Therefore, when formulating a robust strategy to drive an effective rollout post 2020 we need to ensure that the ambition set, in terms of the delivery trajectory, takes into account the need to unlock these benefits as soon as possible.

- 32. The current 2020 obligation has helped the Programme to set out the foundations and capability to build a national smart meter infrastructure and driven rollout progress and investment. However, we do not consider that a market-wide smart meter rollout can be delivered solely through consumers actively choosing to accept a smart meter. Smart Energy GB's latest research <sup>21</sup> suggest that at present only 39% of consumers who don't yet have a smart meter, would actively seek or accept a smart meter offer. It is therefore important that the Programme's ambition is set beyond 2020 to enable momentum and that we consider incentivisation of consumer uptake to deliver a market-wide rollout.
- 33. We acknowledge that there will inevitably be delivery challenges and unforeseen external factors that may impact on energy suppliers' ability to maintain installation rates and progress towards achieving market-wide rollout. Some of these factors will be common amongst energy suppliers (for example, in relation to consumer acceptance), others will be specific to each individual energy supplier and their operating models. Any future framework needs to recognise that energy suppliers will adopt different mitigating actions to respond to these factors. On this basis, we must ensure a level of flexibility around the delivery expectations to account for these challenges. We also acknowledge that delivery challenges may increase in the later stages of the Programme, as potential installation density reduces and so do installer productivity levels. It is therefore possible that installation rates may exceed set expectations in the initial years of the obligation and become harder at the end, responding to more challenging market conditions towards the end of the rollout.

#### Principle 3: Normalisation of Smart Meters in Great Britain

- 34. Government has implemented measures to normalise smart metering as the default meter offer in Great Britain with the mandate on all energy suppliers to become DCC Users, which is a key tool to deliver interoperability<sup>22</sup> across the sector, and the activation of the New and Replacement Obligation (NRO)<sup>23</sup>.
- 35. To ensure the "normalisation" of smart meters, any future framework should focus on the importance of maintaining the pace of the rollout and ensuring high penetration. Any future obligation should therefore be met via the number of installations made by individual energy suppliers in a given period, rather than through acquisition of smart meters from other energy suppliers, as a result of consumer switching.
- 36. It is also worth noting that the energy retail market has evolved considerably since the start of the rollout. In particular, we have seen significant market entry of smaller energy suppliers, especially in the domestic sector. Competition between energy suppliers has meant that large energy suppliers have seen their market share reduce as consumers switch to these new smaller energy suppliers. As the smart meter mandate covers all energy suppliers, regardless of size, the Programme has adapted its engagement and monitoring accordingly over the life of the rollout to ensure that it covers all of the market.

<sup>&</sup>lt;sup>21</sup> https://www.smartenergygb.org/en/resources/press-centre/press-releases-folder/smart-energy-outlook-march18

<sup>&</sup>lt;sup>22</sup> The term "interoperability" refers to the ability for a smart meter to be able to continue operating after switching energy suppliers.

https://smartenergycodecompany.co.uk/latest-news/government-response-to-january-2019-consultation-on-the-new-and-replacement-obligation-nro-activation-date/

37. On this basis, the policy framework must take into account the impact of and on new entrants to the energy market (independent of their size) while considering the overall principles of competition and proportionality when achieving the overall strategic objectives of the Programme.

### Principle 4: Giving Certainty to Industry

- 38. In order to drive the sector to invest to the right level, we need to provide clarity on the Government's commitment to a market-wide smart meter rollout. Setting a framework beyond 2020 is fundamental to signal this commitment, giving energy suppliers and the whole smart meter supply chain, the certainty they need as they develop their business strategies and plans to make investment decisions.
- 39. We expect the vast majority of technical constraints associated with installing smart meters to have been resolved by the end of 2020; with widespread deployment of SMETS2 meters across all areas of GB and for different customer types, and meter variants available to support rollout at scale for those domestic and non-domestic consumers requiring more complex metering solutions. There will therefore be less need for regulatory flexibility than has been provided for under the current 'all reasonable steps' provision in place up to the end of 2020 in order to accommodate these constraints. A post 2020 framework would accordingly have scope for setting clear milestones and a clear definition of what is expected as an overall delivery trajectory towards market-wide rollout, as well as considering individual energy supplier performance.
- 40. The framework should provide for accurate monitoring of the progress towards market-wide rollout. It is essential that monitoring is based on specific, well defined principles to prevent unequal treatment and market distortion. Equally, reporting requirements should not become so burdensome that they distract energy suppliers from the objectives of the Programme.

# Government's Proposed Approach

- 41. Taking into account all the considerations outlined above, it is Government's view that solely relying on the New and Replacement Obligation (NRO) implemented on 30 June 2019 would be insufficient to deliver a market-wide rollout in a timely manner that supports the transition to a smart energy system. Our assessment of a future framework against the proposed principles underlying this proposal, also identifies a strong rationale for a different regulatory approach to the existing one, based on "all reasonable steps (ARS)"- see paras 60 and 61 for further information.
- 42. The current policy framework (bound by ARS) has been effective in driving progress while the technical barriers have been overcome and as energy suppliers have learned to install and operate smart meters. However, we expect that the vast majority of technological solutions to install in all premises will be in place by the end of 2020. In addition, the delivery of the SMETS2 rollout at scale, means that the timing is now right to move away from a framework with a high degree of flexibility, allowing the implementation of a clearly defined framework. On this basis, we do not view the current policy framework as appropriate as the Programme moves into the latter phase of the rollout, beyond 2020.
- 43. Therefore, it is the Government's proposal to introduce a new licence obligation from 1 January 2021 to support energy suppliers towards the delivery of a market-wide rollout as soon as practicable.

- 44. The concept of "market-wide" rollout recognises the importance of ensuring high levels of smart meter penetration as soon as practicable to ensure an effective transition to a smart energy system and enabling the path towards low carbon technologies and wider decarbonisation ambitions.
- 45. The concept of "as soon as practicable" recognises the importance of setting a realistic upward trajectory towards market-wide rollout to ensure that a smart and flexible energy system is in place within the timescales required to deliver the Government's long-term target of net zero greenhouse gas emissions by 2050.
- 46. In line with the overall principles of competition and fairness, we propose that the new obligation would apply to all energy suppliers in the market, regardless of size, and to new entrants. On this basis, the proposal would apply to any energy supplier entering the market before the end of 2020 and afterwards.
- 47. The Government's proposed approach envisages a monitoring framework set through regulation of energy suppliers. This monitoring framework is proposed to be in place over a specific period of time and would bind energy suppliers to achieve pre-set annual milestones within an overarching straight-line delivery trajectory towards market-wide smart meter coverage. The proposed straight-line upward trajectory is intended to minimise the risk of energy suppliers back-ending the delivery of their respective smart meter installation programmes.
- 48. The new methodology under the proposed framework establishes annual meter installation milestones for each energy supplier based on a straight-line delivery trajectory towards market-wide smart meter coverage. This methodology takes account of both the starting position of individual energy suppliers as of 31 December 2020 and their performance thereafter in increasing their smart meter coverage. Annual obligations would apply separately for gas and electricity installations as per amended licence conditions (see Annex 1). Reporting, monitoring, compliance and enforcement will be a matter for Ofgem and they will consult separately on the reporting requirements of any new obligation in due course.
- 49. The Government recognises that external factors may restrict the installation of smart meters and that these should therefore be accounted for as part of the setting of annual milestones.
- 50. On the basis of our analysis (see graph 1 in Annex 4) we consider it reasonable to propose a regulatory monitoring framework for a period of 4 years (from 1 January 2021 to 31 December 2024) allowing an overall tolerance level of 15% by the end of the period to account for external factors. This proposed overall tolerance level determines a minimum coverage level required at the end of the monitoring framework period, i.e. 85% for every energy supplier. An illustrative list of external factors has been included in Annex 4. We note that this list is not intended to be exhaustive. However, we suggest that the proposed tolerance is applied consistently across the market as each energy supplier will encounter a different combination of external factors unique to their business. We consider this a minimum floor coverage, with particular reference to those energy suppliers currently at the lowest level of smart meter coverage. Our analysis indicates several energy suppliers can achieve a coverage level beyond this minimum in the time period under consideration. We will continue to work with industry to achieve delivery beyond this minimum, ensuring that all consumers can benefit as early as possible.
- 51. We also recognise that delivery challenges faced by energy suppliers are likely to change over time in line with changes in market conditions and may become harder as smart meter coverage reaches higher levels. We expect this to be balanced against smart meters becoming increasingly normalised and growth in new products and services enabled by smart meters. On this basis, we propose to apply the permitted tolerance in stages, growing in a straight line to the final year of the monitoring framework. Therefore, the key variables that will determine the annual installation

milestones for each supplier will be the tolerance level allowed for that year, and the number of customers energy suppliers have without smart meters at the start of the year. Graph 2 in Annex 4 illustrates how this permitted tolerance zone would apply in practice in the setting of annual milestones.

- 52. We recognise that the smart meter coverage levels of individual energy suppliers are influenced by consumers that have had a smart meter installation and then subsequently switched energy suppliers. By resetting milestones each year, our proposed methodology would enable energy suppliers to take credit for each smart meter installation they deliver within a given year regardless of whether the consumer remains with the energy supplier, creating a strong focus on delivering towards market-wide rollout.
- 53. We acknowledge that some uncertainty remains regarding the external factors and market conditions that could influence the path towards the delivery of a market-wide rollout. We therefore propose to undertake a mid-point review during the early stages of the new regulatory framework. This will consider whether tolerance levels within the framework period remain relevant to market realities, and whether specific policy measures or incentives should be introduced to support the delivery of a market-wide rollout more quickly. The introduction of complementary policy measures and incentives is explored in more detail in section 2 of this document.
- 54. As outlined above a number of fast-growing energy suppliers have entered the retail energy market. This has changed the smart metering delivery landscape ahead of the next phase of the rollout beyond 2020. We therefore plan to give consideration to the membership of key transitional governance forums, such as the Smart Metering Delivery Group (SMDG) and we will engage and consult on this separately so all parties can reflect and provide input into our considerations.

# **Legal Text**

- 55. Draft legal text setting out new standard condition 39A of electricity supply licences and new standard condition 33A of gas supply licences in relation to the post 2020 rollout duty and installation is set out at Annex 1.
- 56. Draft legal text setting out proposed amendments to standard condition 43 of electricity supply licences and standard condition 37 of gas supply licences in relation to the post 2020 requirements for provision of information to the Secretary of State is also set out at Annex 2. We believe that the nature of the information that we will wish to be reported on rollout will change as a consequence of the post 2020 rollout duty and if the proposed amendments are implemented. We will be writing to licensees in due course with these changes. We understand that Ofgem is separately considering whether changes are needed to standard conditions 44 and 38 of electricity and supply licences respectively, both in relation to reporting requirements.
- 57. We have also considered the consequential changes that the amendments above will have on other licence conditions. Annex 6 sets out the proposed amendments to condition 42 (gas) and condition 48 (electricity) as a result of the previous amendments (see Annexes 1 and 2). These changes are intended to continue to exempt energy suppliers who supply only non-domestic consumers who do not or will not have Smart Metering Systems enrolled with DCC, from being required to become DCC Users. Annex 6 also sets out proposed changes to the definition of "Relevant Supplier" for Alt Han in conditions 49 (Gas) and 55 (electricity) as a result of consequential changes in line with the amendments suggested in Annex 1 and 2.

## Impact Assessment

- 58. We have undertaken an Impact Assessment of the proposed policy options, which is included at Annex 5. This analysis shows that the introduction of milestones during the monitoring framework period (from 2021 to 2024) and the achievement of a minimum coverage of 85% at the end of the framework period would be expected to deliver an additional net benefit of around £1.5bn compared to a 'do nothing' policy where the NRO is the sole obligation on energy suppliers relating to the installation of smart meters.
- 59. Reducing the monitoring framework period by a year (to end of 2023) would deliver an additional net benefit of around £10m on top of the above. However, this more ambitious framework, although realistically achievable for some energy suppliers, as shown in graph 1 of Annex 4, is likely to be challenging for other energy suppliers. This alternative option could push energy suppliers to accelerate installation rates in order meet the required minimum coverage level at an earlier point, by reducing the duration of the monitoring framework period. These ambitious milestones may be challenging for some energy suppliers to achieve, which risks the successful delivery of marketwide smart meter coverage and could potentially lead to unquantified additional costs to mitigate these challenges.
- 60. As set out in paragraph 41, we do not consider that the NRO alone will be able to deliver market-wide smart meter penetration within the timescales required to achieve an effective transition to a smart energy system and feed into the Government's decarbonisation ambitions. Based on current installation rates and estimates on annual metering point population (new metering points plus expired meters) we predict that the NRO will only deliver smart meters to around 7% of the remaining "non-smart" population each year. This means that from 2020, coverage under the NRO will only increase by around 3 to 3.5% per year during the initial years, decreasing afterwards. These projections show that market-wide levels, will be achieved much more slowly than under the suggested policy scenario, where a minimum coverage level of 85% will be required at the end of the monitoring framework period. Our assumptions suggest this level of smart meter penetration i.e. 85% by 2031 if no further obligation is introduced.
- 61. Similarly, the current ARS obligation has helped lay the foundations and build the capability for a national smart infrastructure. However, it is important that going forward the Programme's ambition is set at a level beyond 2020 that enables momentum to continue to deliver market-wide rollout. By the end of 2020 we expect the maturity of the technology available to be such that the regulatory flexibility provided by ARS is no longer expected to be required. Due to this flexibility, we consider that the option of extending ARS would not be certain to deliver significant numbers of smart meter installations above those required under the NRO. This would lead to a risk of market-wide smart meter coverage failing to be delivered. For these reasons, we have not separately assessed the impact of this option.
- 62. In order to evaluate the impact that these differences in rollout rate will have on the overall costs and benefits of smart metering, we use the methodology and values for quantifying costs and benefits from the 2019 Smart Metering Cost-Benefit Analysis <sup>24</sup>. This is a fully quality assured analysis of the Programme's costs and benefits, which is being published alongside this consultation.

<sup>&</sup>lt;sup>24</sup> https://www.gov.uk/government/publications/smart-meter-roll-out-cost-benefit-analysis-2019

#### Questions

- 1. Do you agree that there is a need for an overarching obligation for energy suppliers to continue the rollout of smart meters, in addition to the New and Replacement Obligation (NRO)? Please give reasons for your answer.
- 2. Do you agree with our conclusion that extending the existing "ARS" obligation would not deliver market-wide rollout in a timely manner consistent with wider Government objectives, in particular the long-term ambition of net zero greenhouse gas emissions by 2050? Please give reasons for your answer.
- 3. The obligation proposes a monitoring framework with binding pre-set annual milestones for four years (from 2021 to 2024). Do you agree with this time period? If not, we would welcome your views on alternative time periods. Please provide evidence to support your answer.
- 4. Do you agree with our assessment that an 85% minimum coverage at the end of the framework period is achievable? Please provide evidence to support your answer.
- 5. Do you agree with the application of permitted tolerance in stages, growing in a straight line to the final year of the monitoring framework? We would welcome your views on alternative methods to apply tolerance around the annual milestones. Please support your answer with relevant information.
- 6. Do you agree that pre-defined annual milestones will facilitate the progress towards rollout completion? Please give reasons for your answer.
- 7. Do you agree with the proposal that "customer churn" arising from consumers switching energy suppliers- should be accounted in energy suppliers' pre-set annual milestones? Please give reasons for your answer.
- 8. Do you agree with the proposal that any post 2020 obligation should be applied to all energy suppliers regardless of size and date of entry into the market? Please give reasons for your answer.
- 9. Do you agree with the proposal of a mid-point review to revisit tolerance levels within the monitoring framework period in line with market conditions?
  - a. If the answer is yes, when do you think will be the best time for this review?
  - b. If the answer is no, please explain why not.
- 10. Do you agree that the legal drafting in Annex 1 implements the policy intention proposed in this consultation? Please give reasons for your answer.
- 11. Do you agree with the legal drafting in Annex 2 in relation to the post 2020 reporting requirements on rollout information to be provided to the Secretary of State? Please give reasons for your answer.

12. Do you agree with the legal drafting in Annex 6 setting out proposed consequential changes to existing licence conditions as a result of the previous amendments? Please give reasons for your answer.

# Section 2: Policy Measures and Incentives

- 63. Alongside the introduction of a new obligation, we have considered a number of different policies and measures to drive performance after 2020. We will also consider whether and when any measures would be needed to create the right incentives and drive the pace of smart meter installations. Encouraging uptake and increasingly effective consumer engagement will need to continue to be a core part of any policy framework going forward.
- 64. In addition to setting out smart metering energy supply licence obligations, the Government has used wider energy policies to encourage the smart meter rollout. For example, the metering requirements under the new Smart Export Guarantee are enabled by the functionality provided by smart meters. Energy suppliers are also offering tariff plans associated with the installation of smart meters, enabling consumers to access the benefits of a smart system earlier.
- 65. In the short-term, we have also identified aspects of the smart meter licence conditions that change or expire on 31 December 2020. One such example is the allocation of DCC charging which is due to switch from a market-share to an enrolled meter basis for domestic meter points. This could unfairly penalise those energy suppliers that have made more progress under the 2020 rollout duty. The assessment and rationale of our proposed approach for a post 2020 smart meter policy framework is set out in section 1 of this document.
- 66. In the short to medium term, the Government considers that there remains a need for centrally coordinated activity to drive consumer engagement. We expect there to be a need for this activity to evolve in line with rollout requirements. This section seeks views on the type of consumer engagement activities necessary to incentivise smart meter uptake and maximise effective management of energy use.
- 67. In the longer term, the introduction of any measures to incentivise smart meter uptake needs to respond to the existing market conditions at the time and in line with the current extent of smart meter coverage to ensure the feasibility and cost effectiveness of the implementation. This section seeks views on potential future policy measures in addition to the regulatory framework to incentivise consumer acceptance. Any suggested measures will be considered against a range of criteria, including to test their effectiveness and implementability.

# The Data Communications Company (DCC) Charging Introduction

- 68. The Data Communication Company (DCC) recovers its allowed revenues through a number of different charges, in particular through both Fixed Charges and Explicit Charges levied on its Users. Licence Condition 18 of the DCC licence sets out policy objectives relating to the charging methodology and Section K of the Smart Energy Code (SEC) provides the actual methodology by which DCC charges are levied.
- 69. In the period to end-2020 the charging arrangements differ between domestic and non-domestic sectors: domestic energy suppliers are charged on a market-share basis until end-2020, with charging on the basis of numbers of meters enrolled in the DCC post 2020; whereas non-domestic energy suppliers are charged on an enrolled meter basis both pre and post 2020.
- 70. This chapter proposes amendments to the charging methodology to reflect energy suppliers' progress towards meeting their rollout obligations and non-domestic policy developments in the period since the current provisions were implemented.

### Description of Issue

71. The existing DCC Charging Methodology in Section K of the SEC makes provision for a change in the way in which fixed (per meter) charges are levied post 2020. The current and future charging arrangements are as follows:

DCC charging basis				
	DOMESTIC	NON-DOMESTIC		
Current charging arrangements	Number of mandated smart metering systems (SMSs) i.e. number of domestic meter points in relation to which the relevant energy supplier is required to take all reasonable steps to install a Smart Metering System ('market share basis')	Number of enrolled SMSs		
Future charging arrangements	Number of enrolled SMSs			

72. When the SEC provisions were developed, non-domestic energy suppliers were permitted to optout of using the DCC and also they could install advanced meters in non-domestic premises as an alternative to SMETS meters.<sup>25</sup> These factors created uncertainty regarding the initial volumes of non-domestic meters that would be operated via the DCC. However, non-domestic energy suppliers are now required to operate smart meters within the DCC, therefore some of the previous uncertainties no longer apply.

- 73. In addition, the SEC provisions were implemented on the basis that by end-2020 energy suppliers would have largely completed their smart meter rollouts. However, this assumption is no longer valid.
- 74. If the existing SEC provisions were to continue to apply, we expect this would see a substantial reduction in the charging base as it applies to energy suppliers of domestic premises, leading to significant increase in prices compared to current charges. This would particularly impact those energy suppliers who have rolled out most smart meters as a proportion of their portfolios.

### Consideration of Options

- 75. We have considered several options including extending the current arrangements beyond 2020, moving to a market-share basis for both domestic and non-domestic sectors post 2020, and introducing differential charging whereby enrolled SMSs attract a lower charge.
- 76. We do not consider that extending the current arrangements and retaining the distinction between domestic and non-domestic energy suppliers beyond 2020 is appropriate, in particular given the removal of the DCC opt-out. This approach could incentivise increased deployment of advanced meters for the non-microbusiness segment of the non-domestic sector and/or delayed deployment of smart meters in the non-domestic sector in general.
- 77. Moving to a market-share basis for both domestic and non-domestic sectors would mitigate the risk under the current approach of increased costs post 2020 for those energy suppliers who have made most progress in meeting their 2020 obligations. It would also remove the current differentiation between domestic and non-domestic energy suppliers, which we consider is no longer necessary in light of the removal of the DCC opt-out. In addition, it would help to remove any incentives on energy suppliers to delay the rollout of smart meters to microbusinesses.
- 78. We recognise, however, that under this approach a mechanism would be needed for DCC to identify advanced meter sites to ensure that non-domestic energy suppliers are not charged for DCC services in respect of those sites.
- 79. Differential charging would strengthen incentives on energy suppliers to install smart meters<sup>26</sup>. However, it would be more complex than other options to implement, for example to determine appropriate prices for smart and traditional meters. We consider it may also require amendments to aspects of the DCC's charging policy objective.

<sup>&</sup>lt;sup>25</sup> Advanced meters meet energy suppliers' rollout obligations where they have been installed by 5 December 2018 (the 'advanced meter exception end-date'). In addition, the 'consumer choice' policy means larger businesses (non-microbusinesses) can be offered the choice between a SMETS or an advanced meter, and these installations will still meet the mandate. Following the advanced meter exception end-date, microbusinesses must be offered a SMETS meter in all circumstances.

<sup>&</sup>lt;sup>26</sup> An example of differential charging would be to levy a lower charge where a Smart Metering System has been installed and a higher charge where a Smart Metering System is yet to be installed.

#### Government's Proposed Approach

- 80. In light of the considerations set out above, our current view is that there is a strong rationale for moving to a market-share basis for both domestic and non-domestic energy suppliers in the period after 2020. As noted above it will be necessary to establish the number of advanced meters in each non-domestic energy supplier's portfolio to ensure they are not included in the DCC's calculations<sup>27</sup>.
- 81. Hence this consultation proposes that a new charging period the COMR period<sup>28</sup> based on a market-share approach for both domestic and non-domestic premises would be introduced from April 2021. This period would extend to the end of a Regulatory Year determined by the Secretary of State. The enduring charging methodology (based on number of Enrolled Smart Metering Systems) would take effect as planned after the end of the COMR period. Assuming our proposed monitoring framework period specified in section 1 of this document, then we would expect that the COMR period would end on 31 March 2025. We also propose that the DCC should retain its existing methodology for determining Charging Croup Weighting Factors during the COMR Period again so that DCC can determine these factors based on actual usage after mass rollout of smart meters have been largely completed.
- 82. We propose that the amended Section K of the Smart Energy Code (SEC) provides for charging arrangements to move to an enrolled meter basis for both domestic and non-domestic sectors to a date where market-wide rollout has been achieved to align with the post 2020 rollout obligation proposed in this consultation.
- 83. While we are not minded to introduce differential pricing at this stage, we will keep this position under review, depending on energy suppliers' progress towards meeting the proposed post 2020 rollout objectives.
- 84. Draft legal text setting out proposed amendments to Section K of the Smart Energy Code (SEC) to implement the preferred approach is set out at Annex 3.

#### Questions

- 13. Do you agree with the proposed changes to DCC charging arrangements in the period after end-2020? Please give reasons for your answer.
- 14. Do you agree that the legal drafting in Annex 3 implements the policy intention? Please give reasons for your answer.

<sup>&</sup>lt;sup>27</sup> We are currently discussing the means of doing this with DCC and relevant parties.

<sup>&</sup>lt;sup>28</sup> Refers to the period, during which "mass rollout" of Smart Metering Systems is to be completed (as per Section K of the Smart Energy Code)

# Co-ordinated Consumer Engagement Activities

### Background

- 85. The rollout of smart meters across Great Britain is bringing significant benefits to consumers, helping them take control of their energy use and use energy more efficiently. These benefits will only be fully realised if consumers are effectively engaged and have the confidence both to accept the offer of a smart meter and use it to support changes in their behaviour.
- 86. The Government's response to the consultation on a Smart Metering Consumer Engagement Strategy in 2012<sup>29</sup> concluded that energy suppliers would have the primary consumer engagement role, as the main interface with the consumer during the installation process. It also concluded that energy supplier engagement needed to be supported by a programme of co-ordinated engagement, undertaken by a Central Delivery Body (CDB).
- 87. Energy suppliers are responsible for ensuring that the CDB meets its objectives. These objectives are outlined in the energy supply licences, together with the funding and governance arrangements for the organisation.<sup>30</sup>
- 88. The objectives of the CDB are to:
  - i. Build consumer confidence in the installation of smart meters.
  - ii. Build consumer awareness and understanding of how to use smart meters and the information obtained from them.
  - iii. Increase consumer willingness to use smart meters to change their behaviours so as to enable them to reduce their energy consumption.
  - iv. Assist vulnerable, low income and prepayment consumers to realise the benefits of smart metering systems while continuing to maintain an adequate level of warmth and meet their other energy needs.
- 89. The CDB was established in June 2013 as a not-for-profit company and subsequently rebranded as Smart Energy GB.<sup>31</sup> In introducing the requirement for energy suppliers to establish the CDB, the Secretary of State retained the power to disband the Body. It was anticipated, when the obligation was introduced, that this would occur up to a year after the end of mass rollout to ensure that those consumers who receive a smart meter towards the end of the Programme are fully engaged. Smart Energy GB's current plans run to the end of 2020, with a wind-down period in 2021.
- 90. The Government concluded in 2012 that the CDB's objectives would apply to non-domestic micro-business consumers, but only where domestic engagement material could be cost-effectively adapted and supplemented to meet microbusiness engagement needs. In the period since Smart Energy GB was established, research and analysis has shown that

<sup>&</sup>lt;sup>29</sup> https://www.gov.uk/government/consultations/smart-meter-consumer-engagement-strategy

<sup>30</sup> Electricity Standard Supply Licence Condition 45 and Gas Standard Supply Licence Condition 39

<sup>&</sup>lt;sup>31</sup> Smart Energy GB website:

extending domestic-focussed messaging to a microbusiness audience is not effective, and awareness of smart metering amongst microbusinesses (30% at March 2018) is lower than that of domestic consumers. In May 2019, following consultation<sup>32</sup>, Government therefore decided to formally extend the domestic objectives (apart from iv) to microbusinesses<sup>33</sup>, giving Smart Energy GB a stronger remit to carry out microbusiness-focused engagement.

- 91. Respondents to the Government's consultation on extending Smart Energy GB's remit to microbusinesses emphasised that the way these consumers engage with their energy use is very different to households. As a result, it is likely that Smart Energy GB's activity will need to take a different approach to that taken in the domestic campaigns it has carried out to date. For example, consultees highlighted that very targeted information (e.g. at a sector level) is often more effective than broader, simpler messages. It was also noted that businesses are more likely to pay attention to information delivered via trusted intermediaries, like trade associations.<sup>34</sup>
- 92. With the Government's proposal to introduce an obligation on energy suppliers to continue the rollout beyond 2020, now is an appropriate point at which to reflect on the progress that has been made to date in raising awareness and promoting consumer engagement with smart metering.
- 93. It is expected that co-ordinated consumer engagement activities will be necessary to achieve market-wide rollout and ensure that consumers are fully supported, particularly those that may be in vulnerable circumstances or have particular barriers to engagement. This consultation seeks views on how this can best be achieved, and the type of consumer engagement activities that are likely to be required as we enter the next phase of the rollout.

# Progress on Co-ordinated Consumer Engagement

- 94. The focus of the national consumer engagement campaign has evolved as the rollout has progressed, in response to the specific targets set by large energy suppliers under Smart Energy GB's Performance Management Framework. In particular, the emphasis of the campaign has shifted from awareness raising in the early stages of the rollout through to generating large numbers of consumers ready to seek or accept a smart meter. This has primarily been achieved through a large-scale, multi-channel campaign, complemented by PR activity.
- 95. In late 2014, only 18% of adults in GB clearly understood what a smart meter was and who was responsible for the rollout. This had increased dramatically to 58% of adults by the end of 2017, with 98% of the population aged 21 or over <sup>35</sup> now saying they know about smart meters. There is also significant appetite for smart meters, with 39% of people who do not

<sup>32</sup> https://www.gov.uk/government/consultations/smart-metering-implementation-programme-realising-non-domestic-benefits

<sup>33</sup> https://www.gov.uk/government/consultations/smart-metering-implementation-programme-realising-non-domestic-benefits

<sup>34</sup> Smart Metering Implementation Programme: realising non-domestic benefits (2019). Available here: <a href="https://www.gov.uk/government/consultations/smart-metering-implementation-programme-realising-non-domestic-benefits">https://www.gov.uk/government/consultations/smart-metering-implementation-programme-realising-non-domestic-benefits</a>
35Prior to August 2017, *Smart Energy Outlook* reports featured a representative sample of the adult population of Great Britain aged 18 +. People aged 18-20 are less likely to be responsible for managing energy bills in comparison to the rest of the British population. A sample of the adult population aged 21 + is now used.

currently have smart meters saying they would seek or accept one in the next six months – this is equivalent to 13 million people across Great Britain <sup>36</sup>. In addition, uptake and usage of IHDs is high amongst domestic consumers, with recent research finding that after a year, eight in ten smart meter owners still have their IHD plugged in and in-use. Just under half of IHD owners (45%) also reported looking at their energy consumption at least weekly one year after installation, with three in ten (29%) reporting that they looked at it most days.<sup>37</sup>

96. Smart Energy GB is also a prominent voice in the media, through both its communications handling and PR activity. The role of its Press Office has been particularly important in the context of a challenging media landscape with increased volumes of coverage across broadcast, print and online media.

### Consumer Engagement Activities beyond 2020

- 97. With nearly 15 million smart and advanced meters operating across Great Britain and millions of homes and small businesses awaiting their upgrades, the Government is of the view that there remains a need for a programme of centrally coordinated engagement activity beyond 2020. This activity is needed to encourage and support consumers to accept smart meters in both domestic and non-domestic premises, whilst also assisting consumers to use smart meters to better manage their energy consumption.
- 98. We expect that co-ordinated consumer engagement activities will need to evolve to meet the needs of the rollout. In particular, as the rollout progresses and the proportion of households and businesses with smart meters increases, it will be necessary for consumer engagement activities to increasingly focus on:
  - Supporting uptake amongst those consumers who have not yet accepted smart meters, or who have previously experienced an unsuccessful installation attempt.
  - Championing closer co-ordination between consumer engagement and operational fulfilment initiatives and ensure that consumers benefit from smart metering (see paras12 to 17 for further information).
  - Helping consumers to benefit from the new functionality offered by their smart meters (particularly for prepayment consumers) and use energy more efficiently.
- 99. Within this context, we welcome views on the future of co-ordinated consumer engagement activities for the rollout, which could include some, or all, of the following:
  - i. Greater use of co-ordinated local engagement approaches to encourage consumer take up, drawing on findings from the pilot activity currently being designed by energy suppliers and Smart Energy GB, supported by BEIS.

<sup>&</sup>lt;sup>36</sup> Smart Energy GB, Smart Energy Outlook March 2019: <a href="https://www.smartenergygb.org/en/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-March-2019.ashx">https://www.smartenergygb.org/en/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-March-2019.ashx</a>

<sup>&</sup>lt;sup>37</sup> Ipsos MORI, 2017 Smart Meter Customer Experience Study (BEIS, 2018): https://www.gov.uk/government/publications/smart-meter-customer-experience-study-2016-18

- ii. Improved collaboration and sharing of information (where appropriate) between relevant organisations to enable tailored engagement activity and ensure value for money.
- iii. Increased focus on activities that engage and support more vulnerable and hard to reach audiences, including through partnerships with relevant consumer groups and a greater focus on assisting these consumers during the installation process.
- iv. Strengthening public advocacy and address consumer concerns about smart metering, including through targeted campaigns, and highlight the role of smart metering in delivering an essential national infrastructure upgrade.
- v. Initiatives to increase access to and engagement with energy efficiency feedback informed by smart meter data, to support all households in taking steps to manage their energy use.
- 100. The Programme has made significant progress to date. However, the need to engage energy consumers at scale on smart meters across Great Britain will continue beyond 2020 and a variety of measures and policy incentives will be needed to encourage uptake and increasingly effective consumer engagement will be central to this activity. We are seeking views on how co-ordinated consumer engagement activity needs to evolve to meet the needs of the rollout post-2020.
- 101. We expect the role for co-ordinated consumer engagement on smart metering to be complete by the mid 2020's. However, there could be a role for a programme of activity to drive consumer understanding, awareness and uptake of smart tariffs and other innovations catalysed by smart metering. Such arrangements and any related funding arrangements would be subject to consultation and would need to consider how effectively energy suppliers and other parties have collaborated to deliver the smart meter rollout.

#### Questions

15. What types of co-ordinated consumer engagement activities are necessary in the period after 2020 to support delivery of a market-wide rollout? Please provide your rationale to support your suggestions.

# **Embedding Consumer Behaviour Change**

#### Delivering consumer benefits

- 102. Smart metering provides a range of direct benefits to energy consumers, including through the offer of an In-Home Display (IHD) and the provision of tailored energy efficiency advice during the smart meter installation visit.
- 103. In 2012, the Government set out its consumer policy framework in the Smart Meter Consumer Engagement Strategy. The objectives of this strategy were to:
  - i. Build consumer support for the rollout, by increasing confidence in the benefits of smart meters and by providing reassurance on areas of consumer concern.
  - ii. Facilitate the realisation of consumer benefits, by building acceptance of the installation of smart meters and by helping consumers to use smart metering to manage their energy consumption.
  - iii. Ensure that vulnerable, low-income and prepayment consumers can benefit from the rollout.
- 104. As outlined in Paragraph 12, the rollout of smart meters has already delivered significant benefits, for both domestic and non-domestic consumers. In addition to summarising these benefits, the Consumer Benefits Stocktake report also outlines the Government's expectations in relation to the future direction for smart metering consumer policy, including in the following key areas:
  - i. **Energy Consumption Reduction**: In light of the effectiveness of the existing policy framework, the Government intends to maintain current requirements, including the IHD mandate for domestic consumers<sup>38</sup>.
  - ii. **Prepayment benefits**: The experience of using energy with a smart meter is particularly transformative for prepayment consumers, with credit balances more easily visible through the IHD and alternative top-up methods (including phone and online) increasingly available to consumers. As industry confidence grows, the Government expects energy suppliers to explore ways to prioritise the offer and installation of smart meters to prepayment consumers.
  - iii. **Consumer Protection**: The Government will continue to monitor current consumer safeguards and take action where necessary to ensure appropriate support remains in place for vulnerable and prepayment consumers.

 $<sup>{}^{38}\,\</sup>underline{\text{https://www.gov.uk/government/publications/smart-meters-derogation-guidance-supporting-energy-supplier-applications-for-trials-of-in-home-display-alternatives}$ 

#### Embedding consumer benefits

- 105. Smart metering is expected to expand consumer engagement in the energy market, including by raising awareness of energy costs and by providing easier and quicker access to the data involved in managing the switching process.
- 106. It is vital that the benefits of smart metering are embedded and that consumers are able to continue to realise these benefits beyond the first installation of a smart meter in their property. This is particularly relevant as some consumers, including those moving into new build properties, will not have been present when their smart meter was installed and may not have received energy efficiency advice or been offered an IHD.
- 107. We are therefore seeking views on whether any amendments or new policy initiatives should be considered to ensure that consumers are able to continue benefiting from smart metering, including following a change of energy supplier or change of tenancy in a property where smart meters are already installed. This could include the introduction of enduring obligations in relation to the provision of energy feedback and advice or specific requirements in relation to the provision of support post-installation.
- 108. In offering views, we encourage stakeholders to outline how they align with the principles underpinning the design of the new regulatory framework. These principles are outlined in paragraph 21 and have been included below for reference:
  - i. To encourage consumers to benefit from the rollout of smart meters, including how to use the data from their smart meters;
  - ii. To deliver a market-wide rollout of smart meters as soon as possible, that ensures value for money, and maintains installation quality so that consumers can derive maximum benefit and have a good experience;
  - iii. To normalise smart meters so they are the default meter used in Great Britain; and
  - iv. To give certainty to the whole sector to invest and plan, ahead of and beyond 2020.

#### Questions

16. What policy amendments or new initiatives you consider will be required to ensure that the consumer benefits of smart metering are sustained? Please provide evidence to support your views.

## Other Policy Incentives

- 109. In addition to the existing policy and regulatory framework, we have ensured wider energy policies complement and support the smart meter rollout. For example, and as mentioned above, the metering requirements under the new Smart Export Guarantee are enabled by the functionality provided by smart meters. We have worked with the Ministry of Housing, Communities and Local Government (MHCLG) to ensure that the "How to rent" <sup>39</sup> and "How to let" <sup>40</sup> guides include appropriate information on tenants' rights in relation to smart meters. In addition, we are actively liaising with the Department of Transport (DfT), more specifically with the Office of Low Emission Vehicles (OLEV) on smart charging for Electric Vehicles (EVs). A consultation on proposals for electric vehicle charge-point smart technology regulations was published by DFT and OLEV on 15 July 2019 <sup>41</sup>. That consultation is also researching, via a call for evidence, what is needed to implement a long-term solution for EV charging and how charge-point data could be used to help better electricity network planning.
- 110. To date, we have engaged with a number of stakeholders, and have heard a number of suggestions for potential policy measures that Government could take to support the rollout. These suggestions have been focussed on changes to the wider energy policy framework to drive 'normalisation' of smart meters.
- 111. We have considered some of these suggestions in more detail, but we want to take this opportunity to ensure all stakeholders have a chance to present their ideas and the evidence to support these. As such, we would welcome views on additional policy measures that the Government could consider to further complement and support the smart meter rollout post 2020.
- 112. To better inform our view, we would expect consultees to give as much evidence and detail as possible in their answers, addressing the following points:
  - i. **Implementation:** How they see their proposed measures being implemented: whether through supply licence obligations or other means.
  - ii. **Enforcement:** Which are the parties that should be held accountable for non-compliance;

#### iii. Impact:

- On other Governmental policies and/or on existing regulation;
- In terms of delivering the rollout of smart meters;
- Other economic, environmental, public health and social impacts and costs;
- The distribution of impacts;
- When these impacts are likely to occur;
- The likelihood that these measures will deliver the predicted outcomes;
- The associated risks for each measure and how these risks might be mitigated;
- The 'best mix' of measures and the overall outcomes they could achieve;
- Barriers to achieving these outcomes and how these barriers might be overcome;
- Any relevant impacts on domestic and non-domestic consumers covered by the mandate

<sup>39</sup> https://www.gov.uk/government/publications/how-to-rent

<sup>40</sup> https://www.gov.uk/government/publications/how-to-let

<sup>41</sup> https://www.gov.uk/government/consultations/electric-vehicle-smart-charging

**Timing:** At which stage in the rollout their proposed measures would fit best i.e. is it immediate or will be implemented at a later date in the rollout. We welcome proposals that could be implemented both before and after the end of the 2020 rollout duty, i.e. 31 December 2020.

- 113. These themes will represent the main criteria against which all the policies proposals will be assessed. Please state any assumptions that have been made, evidence gaps and other evidence that you consider to be relevant to the measures proposed.
- 114. We would expect the proposed measures to complement, not replace, the market-wide rollout obligation put forward in this consultation and to apply only in case we consider that the framework is not fully delivering according to expectations.

#### Questions

17. What other policy measures should the Government consider in order to complement the proposed market-wide rollout obligation? Please give a rationale and evidence to support your suggestions.

# **Next Steps**

- 115. Stakeholders and other interested parties are invited to provide their views on the Government's proposed approach and, more specifically, the questions set out in this consultation. A summary of all questions has been included in the following section for ease of reference.
- 116. This consultation closes **at 10am on Monday 11 November 2019.** Details on how to respond to this consultation have been provided in the General Information section in page 5 of this document.

# **Summary of Questions**

#### **SECTION 1: Post 2020 Framework Proposal**

- Do you agree that there is a need for an overarching obligation for energy suppliers to continue the rollout of smart meters, in addition to the New and Replacement Obligation (NRO)? Please give reasons for your answer.
- 2. Do you agree with our conclusion that extending the existing "ARS" obligation would not deliver market-wide rollout in a timely manner consistent with wider Government objectives, in particular the long-term ambition of net zero greenhouse gas emissions by 2050? Please give reasons for your answer.
- 3. The obligation proposes a monitoring framework with binding pre-set annual milestones for four years (from 2021 to 2024). Do you agree with this time period? If not, we would welcome your views on alternative time periods. Please provide evidence to support your answer.
- 4. Do you agree with our assessment that an 85% minimum coverage at the end of the framework period is achievable? Please provide evidence to support your answe
- 5. Do you agree with the application of permitted tolerance in stages, growing in a straight line to the final year of the monitoring framework? We would welcome your views on alternative methods to apply tolerance around the annual milestones. Please support your answer with relevant information.
- 6. Do you agree that pre-defined annual milestones will facilitate the progress towards rollout completion? Please give reasons for your answer.
- 7. Do you agree with the proposal that "customer churn" arising from consumers switching energy suppliers- should be accounted in energy suppliers' pre-set annual milestones? Please give reasons for your answer.
- 8. Do you agree with the proposal that any post 2020 obligation should be applied to all energy suppliers regardless of size and date of entry into the market? Please give reasons for your answer.
- 9. Do you agree with the proposal of a mid-point review to revisit tolerance levels within the monitoring framework period in line with market conditions?
  - a. If the answer is yes, when do you think will be the best time for this review? If the answer is no, please explain why not.
- 10. Do you agree that the legal drafting in Annex 1 implements the policy intention proposed in this consultation? Please give reasons for your answer.
- 11. Do you agree with the legal drafting in Annex 2 in relation to the post 2020 reporting requirements on rollout information to be provided to the Secretary of State? Please give reasons for your answer.
- 12. Do you agree with the legal drafting in Annex 6 setting out proposed consequential changes to existing licence conditions as a result of the previous amendments? Please give reasons for your answer.

#### **SECTION 2: Policy Measures and Incentives**

#### **DCC Charging**

13. Do you agree with the proposed changes to DCC charging arrangements in the period after end-2020? Please give reasons for your answer.

14. Do you agree that the legal drafting in Annex 3 implements the policy intention? Please give reasons for your answer.

#### **Coordinated Consumer Engagement Activity**

15. What types of co-ordinated consumer engagement activities are necessary in the period after 2020 to support delivery of a market-wide rollout? Please provide your rationale to support your suggestions.

#### **Embedding Consumer Behaviour Change**

16. What policy amendments or new initiatives you consider will be required to ensure that the consumer benefits of smart metering are sustained? Please provide evidence to support your views.

#### **Other Incentives**

17. What other policy measures should the Government consider in order to complement the proposed market-wide rollout obligation? Please give a rationale and evidence to support your suggestions.

# Annexes

- Annex 1: Proposed amendments to standard conditions 33A and 39A
- Annex 2: Proposed amendments to standard conditions 37 and 43
- Annex 3: Proposed amendments to Section K of the Smart Energy Code (SEC)
- Annex 4: Analytical Evidence
- Annex 5: Impact Assessment
- Annex 6: Consequential changes to standard conditions

