



Department for
Business, Energy
& Industrial Strategy

SMART METERING IMPLEMENTATION PROGRAMME

Review of the Data Access and Privacy
Framework



November 2018

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General information

Purpose of this document

This document provides information on the Government's review of the smart metering Data Access and Privacy Framework. The Framework determines the levels of access to energy consumption data from smart meters for energy suppliers, network operators and third parties. It also establishes the purposes for which data can be collected and the choices available to consumers.

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Territorial extent:

This review 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 Enterprise, Trade and Investment.

Additional copies:

You may make copies of this document without seeking permission. An electronic version can be found at: <https://www.gov.uk/government/publications/smart-metering-implementation-programme-review-of-the-data-access-and-privacy-framework>.

Other versions of the document in Braille, large print or audio-cassette are available on request. This includes a Welsh version. Please contact us at the above address to request alternative versions.

1. Introduction

The smart metering Data Access and Privacy Framework was established to safeguard consumers' privacy, whilst enabling proportionate access to energy consumption data.

Smart metering rollout

- 1.1. The roll-out of smart meters is an important enabler of a smarter energy system, giving consumers control over their energy use and helping improve investment decisions in Britain's energy infrastructure.
- 1.2. Energy suppliers are required to take all reasonable steps to install smart meters in domestic and smaller non-domestic premises by the end of 2020. Over 12 million smart and advanced meters are now operating across homes and businesses in Great Britain, providing energy suppliers with valuable experience and helping consumers save energy and money.

Energy consumption data

- 1.3. Smart metering will result in a step change in the volume and granularity of energy consumption data that is available from gas and electricity meters. Smart meters are capable of storing at least thirteen months of half-hourly gas and electricity consumption data.
- 1.4. A national communications infrastructure – the Data and Communications Company (DCC) – has been established, which enables authorised users to access data from smart meters, subject to the provisions of the Smart Energy Code (SEC).¹
- 1.5. Smart metering gives consumers near real time information on their energy consumption, allowing them to take steps to reduce their energy use and providing reassurance and certainty about the cost of bills. Energy suppliers will have access to accurate data for billing and to improve their customer service, whilst network operators will be able to use energy consumption information to manage reinforcement activity and make efficient investment decisions. Access to energy consumption information by third parties, with consumer consent, will also support the development of a wider energy services market.
- 1.6. These opportunities enabled by smart metering raised questions about the protection of data and consumers' rights to privacy. In order to address concerns and provide clarity to both consumers and industry, the Government established a smart metering Data Access and Privacy Framework.

¹ Further information on the Smart Energy Code is available here: <https://smartenergycodecompany.co.uk/>

Data Access and Privacy Framework

- 1.7. The Data Access and Privacy Framework (hereafter ‘the Framework’) was designed to safeguard consumers’ interests, whilst enabling proportionate access to data. The Framework determines the levels of access to energy consumption data that consumers, energy suppliers, energy networks and third parties have and the choices that consumers have in relation to managing this access.
- 1.8. The Framework covers access to energy consumption data from both domestic and microbusiness premises.
- 1.9. The Government consulted on the rules of the Framework in 2012, supported by a Privacy Impact Assessment and the findings from consumer attitudes research.² The provisions of the Framework are enacted through a range of regulatory requirements.³ The Framework was extended by Ofgem in 2015 to apply relevant provisions to all remote access meters.⁴
- 1.10. When the Government response to the consultation on the Framework was published in 2012, we made it clear that we would monitor the Framework’s effectiveness and undertake a full review at an appropriate point, no more than three years after the first provisions came into force. As the main regulatory provisions first came into effect in June 2013, this timeline required the review to conclude by June 2016.
- 1.11. The commitment to review was made in 2012, when it was expected that the DCC would start offering smart services towards the end of 2014. This would have provided the review with evidence from over a year of live operations and enabled consideration of energy supplier, network operator and third party access to data.⁵ In light of changes to Programme timelines, the Government consulted on deferring the review of the Framework and in 2015 confirmed that the review would conclude by the end of 2018.⁶

Purpose of this document

- 1.12. This document provides a summary of the provisions of the Framework (Chapter 2) and details the approach that has been taken to undertaking a full review of the extent to which it is continuing to meet its objectives (Chapter 3).

² These documents are available here: <https://www.gov.uk/government/consultations/smart-meter-data-access-and-privacy>

³ As set out in Energy Supply and Energy Distribution Standard Licence Conditions: <https://www.ofgem.gov.uk/licences-industry-codes-and-standards/licences/licence-conditions>; and the Smart Energy Code (SEC): <https://smartenergycodecompany.co.uk/the-smart-energy-code-2/>

⁴ Further details are available here: <https://www.ofgem.gov.uk/publications-and-updates/decision-extending-smart-meter-framework-data-access-and-privacy-remote-access-meters>

⁵ Whilst energy suppliers will have experience of accessing consumption data directly from SMETS1 meters (the first generation meters installed during the Programme’s foundation stage) it is only with the installation of second generation, SMETS2, meters, where communications services are provided centrally through the DCC, that energy networks and authorised third parties will be able to directly access energy consumption data.

⁶ The consultation on the timing of the review of the Framework, together with the Government response is available here: <https://www.gov.uk/government/consultations/consultation-on-the-timing-of-the-review-of-the-data-access-and-privacy-framework>

- 1.13. An overview of the evidence reviewed, together with the findings of the Government's assessment in each area of the review, is outlined in Chapters 4 – 6. Conclusions and information relating to ongoing monitoring of the Framework is provided in Chapter 7, together with planned next steps in relation to areas where the review identified that further work or consideration is needed.

2. Data Access and Privacy Framework

The central principle of the Framework is that consumers have control over who can access their energy consumption data, how often and for what purposes, except where this is required for regulated purposes.

- 2.1. Detailed energy consumption data from smart meters installed in domestic and microbusiness premises is likely to be ‘personal data’, for the purposes of data protection legislation. The protection of personal data is governed by a new data protection regime, which incorporates the Data Protection Act 2018 and the General Data Protection Regulation (GDPR). This regime came into force on the 25th May 2018.⁷
- 2.2. The Framework establishes sector-specific provisions relating to the processing of energy consumption data, which are designed to complement, but not replace, wider data protection legislation. It is recognised that other smart metering data may also be considered personal data⁸, and in these circumstances processing must be conducted in accordance with the new data protection regime.

Consumer access to consumption data

- 2.3. The Government has been clear that energy consumers should be able to easily access their own smart metering energy consumption data, and share this with third parties if they wish to do so.
- 2.4. Three key routes of access are available to consumers:
 - access through an In-Home Display, which energy suppliers are required to offer to domestic consumers at no additional charge;
 - access through the connection of additional devices⁹ to the Home Area Network (HAN); and
 - requesting information from their energy supplier.¹⁰

⁷ The protection of personal data is updated by the GDPR and further strengthened by the Data Protection Act 2018. The GDPR is directly applicable in UK law. The Data Protection Act 2018 supplements the GDPR and updates the data protection legislative landscape by repealing the Data Protection Act 1998. The Information Commissioner and her office (ICO) are responsible for enforcing various aspects of data protection in the UK.

⁸ Such as Meter Point Administration Number (MPAN) and Meter Point Reference Number (MPRN) identifiers, as well as data that can be linked to these identifiers and which relates to identifiable individuals.

⁹ Known as ‘Consumer Access Devices’ or CADs these devices are capable of receiving near real-time data from smart meters, which can then be transmitted onwards (e.g. via the internet or by Bluetooth), supporting mobile applications and enabling ‘smart’ devices within the home to respond to smart metering data (e.g. price information).

¹⁰ In relation to domestic consumers, energy suppliers are required to make available, upon request, up to 24 months of data relating to consumption in each day, week, month and year. The data must be made available

2. Data Access and Privacy Framework

- 2.5. Provisions relating to the pairing of devices to the HAN are set out in the SEC, together with measures that must be taken by energy suppliers to ensure that data available over the HAN is not visible to new occupants, without the previous occupant's consent, in the event of a change of tenancy.¹¹
- 2.6. In addition, the rights of access afforded to consumers under the new data protection regime continue to apply.

Energy supplier access to domestic consumption data

- 2.7. The Framework permits energy suppliers to access monthly and daily energy consumption data from domestic consumers in order to fulfil regulated duties, such as providing accurate bills.¹²
- 2.8. Consumers have a choice about access to more detailed energy consumption data, as well as access to data for other purposes:
 - Energy suppliers can access energy consumption data that is more detailed than monthly, but not more detailed than daily, where they either have the consumer's consent or the consumer has not opted-out from sharing this data (in which case seven days must have elapsed from the date that notice¹³ was given to the consumer). This is referred to as 'daily' data.
 - Energy suppliers can only access energy consumption data that is more detailed than daily if they have obtained the consumer's consent to do so. As part of the process for obtaining this consent they must provide the consumer with information on how the data will be used and how the consumer can withdraw their consent.¹⁴ The most granular data stored on smart meters relates to consumption in each half hour period and this data is therefore referred to as 'half-hourly' data.¹⁵

free of charge and in a readily understandable format. In relation to non-domestic consumers, energy suppliers are required, upon request, to ensure that non-domestic consumers (or their agents) have timely access to half-hourly consumption data.

¹¹ Obligations in respect of CAD pairing (through the DCC) are outlined in Section I1.3 (Service Requests) of the SEC. Specific provisions relating to change of tenancy are included in Section H3.17 (Change of Tenancy) and H3.18 (Cancellation of Future-Dated and Scheduled Services) of the SEC.

¹² These narrowly defined circumstances currently cover access where the licensee: has reasonable grounds to suspect theft and obtains data for the purposes of investigating this theft; obtains data only for the purposes of sending a bill or statement of account; obtains data only for the purposes of responding to an enquiry or complaint; has received a request from the consumer for access to data and obtains data for the purposes of meeting this request; or obtains data only by virtue of registering a prepayment top-up or which relates to periods between top-ups. Ofgem recently consulted on proposals to introduce a new regulated purpose, enabling energy suppliers to access half-hourly energy consumption data for the purposes of implementing market-wide Half-Hourly Settlement. Ofgem's proposals and draft Data Protection Impact Assessment are available here: <https://www.ofgem.gov.uk/publications-and-updates/consultation-access-half-hourly-electricity-data-settlement-purposes>

¹³ Energy Supply Licence Conditions establish requirements for the issuing of notice to consumers in these circumstances, including what the notice must contain.

¹⁴ Half-hourly energy consumption data can also be obtained, in controlled circumstances, for the purposes of conducting authorised trials. Where this is the case, consumers have the right to opt-out.

¹⁵ Consumption data more detailed than half-hourly may be accessed through the pairing of a CAD.

- Where energy suppliers wish to use consumption data (at any level of granularity) for marketing purposes the explicit consent of the consumer is required.
- 2.9. This places the onus on energy suppliers to clearly explain why they wish to access this information and incentivises the development of products and services to offer to consumers in return for more detailed access.
- 2.10. Where energy suppliers are accessing data more detailed than monthly, they are required to comply with rules set out under both the Framework and wider data protection legislation relating to the provision of notice and information (as appropriate). These rules are designed to ensure that consumers are able to make informed choices about sharing their detailed consumption data and include requirements to keep consumers updated, at appropriate intervals, in relation to the energy consumption data being collected from their smart meters.

Energy network operator access to domestic consumption data

- 2.11. Energy network operators have obligations relating to the safe and efficient management and reinforcement of energy networks. Smart meter data will assist energy networks in fulfilling these obligations, maintaining continuity of supply and responding to the changing needs of the energy system.
- 2.12. Under the Framework, energy networks can only access consumption data relating to periods of less than one month if:
- they have obtained the consumer's consent (following the provision of information to the consumer regarding what data will be collected and the purposes for which it will be used); or
 - they have implemented procedures, which have been approved by Ofgem, to treat the data such that, as far as reasonably practicable, it can no longer be associated with an individual consumer, at a particular premise.¹⁶
- 2.13. Energy consumption data obtained in either of the ways outlined above can only be used by energy networks for the purposes of complying with their regulated duties.
- 2.14. In addition, energy networks can also access detailed energy consumption data in the following circumstances:
- where they have reasonable grounds to suspect theft or abstraction and obtain data solely for the purposes of investigation; or
 - following receipt of approval to undertake a trial and after having provided information to the relevant consumers, together with the opportunity to opt-out from participation in the trial.
- 2.15. The Framework does not impose any restrictions on network operator (or energy supplier) access to other data, such as voltage reads. However, any access to such

¹⁶ Ofgem published an open letter on Distribution Network Operators' privacy plans for access to smart meter data in September 2016. Available here: <https://www.ofgem.gov.uk/publications-and-updates/open-letter-dnos-privacy-plans-access-smart-meter-data>

data would be subject to compliance with data protection legislation (to the extent that the data constitutes personal data).

Third party access to consumption data

- 2.16. The ability for consumers to share their energy consumption data with third parties will help to deliver benefits and promote innovation and competition in the energy services market.
- 2.17. In the context of smart metering, the term ‘third party’ is generally taken to refer to non-licensed parties, such as energy services companies and switching sites. It can also refer to energy suppliers in situations where they are providing services to customers for whom they are not the registered supplier.
- 2.18. As noted above, a number of routes are available to consumers in terms of being able to access their own energy consumption data. This would then enable them to pass it directly to third parties, should they wish to do so. Additionally, the new data protection regime provides consumers with a right to ‘data portability’, which could¹⁷ apply to energy consumption data and would enable consumers to request the transfer of their data to third party organisations.
- 2.19. To further support consumers in the sharing of their energy consumption data, the Government established provisions in the SEC that enable authorised third party users of the DCC (known as ‘Other Users’) to access energy consumption data directly from a consumer’s smart meters, subject to the following privacy safeguards:
- the consumer’s consent must be obtained prior to requesting energy consumption data via the DCC;
 - information must be provided to the consumer ahead of data collection and – where data collection is ongoing – at appropriate intervals, including information on how the data is being used and the consumer’s right to opt out;
 - third parties must take steps to verify that the request for services and the consent that they have subsequently obtained has in fact come from the individual occupying the premises in question (and not from someone else purporting to be that person).
- 2.20. In order to support compliance with these provisions, Other Users are subject to a privacy assurance regime.¹⁸ The details of this regime are established in Section I of

¹⁷ The extent to which the right to data portability afforded under the GDPR applies will depend on the manner in which the energy consumption data was collected and the legal basis under which processing was conducted. The right to data portability is additionally limited to data ‘provided to the data controller’ and would not extend to any analysis conducted on the raw data. Further information on the right to data portability is available here: <https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/individual-rights/right-to-data-portability/>

¹⁸ This regime includes a three-year cycle of Privacy Assessments, beginning with a Full Privacy Assessment (undertaken as part of the DCC’s User Entry Process) and including self-assessment and random sample assessment. Further information on these requirements is available here: <https://smartenergycodecompany.co.uk/assessment-process-2/>

the SEC, with further information on the approach taken to assurance outlined in a Privacy Controls Framework.¹⁹

- 2.21. The controls outlined in 2.20 apply irrespective of the granularity of the energy consumption data being collected and must be followed when accessing data from any smart meter through the DCC (domestic, microbusiness or other non-domestic).

Access to microbusiness energy consumption data

- 2.22. The Government acknowledged in its original consultation on the Framework that the variety of current and future metering arrangements in the non-domestic market adds complexity to consideration of data access and privacy. It was also noted that similarities do exist in relation to concerns regarding privacy and, on balance, it was felt that a basic level of protection was justified and necessary for microbusiness consumers.
- 2.23. Privacy concerns may be as acute for microbusinesses as for domestic consumers, because there will be fewer people in the organisation than in larger businesses and because the premise itself may be a shared living/working space. Information that relates to a business and its activities can be personal data under the new data protection regime, if it can be related to or identifies an individual, and this is more often the case where the business is a sole trader or a smaller enterprise.
- 2.24. Energy suppliers of microbusiness premises are therefore prohibited from accessing energy consumption data from microbusinesses at a level more granular than monthly, unless the energy supplier has given the microbusiness advance notice and the microbusiness has not objected (opted-out).
- 2.25. In recognition of the benefits access to microbusiness energy consumption data could offer to network operators in terms of managing their network, no restrictions are in place in relation to gas and electricity network operators accessing microbusiness energy consumption data.

¹⁹ Further details are available here: <https://smartenergycodecompany.co.uk/privacy-controls-framework/>

3. Approach to Review

The Government committed to monitoring the effectiveness of the Data Access and Privacy Framework and undertaking a full review of its provisions, to conclude by the end of 2018.

Review scope and approach

- 3.1. In line with the commitment made in 2012 and the timelines confirmed in 2015, the Government has undertaken a review of available evidence relating to the effectiveness of the Framework and the extent to which it is meeting its objectives in relation to access to data for consumers, energy suppliers, network operators and third parties.
- 3.2. The review has considered access to data in both the domestic and microbusiness sectors. The review focused on experiences to date in relation to access to data and assessed currently available evidence; the scope and robustness of this data was influenced by the current stage of the smart meter roll-out. In several areas, limited evidence was available and in these instances a precautionary approach has been taken, recognising that as the roll-out progresses further evidence is likely to become available. Details of ongoing monitoring of the Framework are outlined in Chapter 7.
- 3.3. The review incorporated evidence from a variety of sources, including:
 - research undertaken by BEIS;
 - information submitted to BEIS as part of annual and quarterly information requests to energy suppliers;
 - research and reviews undertaken and published by industry and consumer groups;
 - views shared at a BEIS-led stakeholder workshop on the Framework;²⁰
 - bilateral discussions with interested parties;
 - participation in relevant working groups, including the Public Interest Advisory Group on smart energy data (convened by Sustainability First and the Centre for Sustainable Energy).
- 3.4. In undertaking its review, the Government has taken on board comments received from the Information Commissioner's Office when the Framework was established, which noted that it offered a good level of control and protection to consumers, such that any relaxation of the provisions would need to be justified with evidence.

²⁰ This workshop was held on 11 June 2018 and involved representatives from: Ofgem, energy suppliers, energy networks, third party organisations (including commercial, charitable and academic), and consumer groups.

The review's consideration of the Framework can be broken down into three principal areas:

Protecting consumers (Chapter 4)

- 3.5. Safeguarding consumers' interests is a central objective of the Framework, which was designed to provide consumers with clarity and reassurance about how their energy consumption data would be accessed and used.
- 3.6. This area of the review sought to evaluate the extent to which consumers felt that the Framework offered an appropriate level of protection and assessed levels of concern in relation to privacy and smart metering. It also reviewed the safeguards in place to ensure that consent is obtained (where necessary) and that appropriate steps are being taken to address data privacy concerns in the event of a change of tenancy.
- 3.7. More widely, this area considered experiences to date in relation to the privacy assurance regime established under the SEC covering third party access to energy consumption data.

Information provision (Chapter 5)

- 3.8. The Framework introduced requirements to ensure that consumers receive clear and accurate information about how their data is used and what choices they have in this regard. This includes issuing notice to consumers ahead of data collection, as well as the need to provide information at appropriate intervals where data collection is ongoing.
- 3.9. In this area, the review considered how consumers were being provided with information, if they were aware of how to amend their preferences and the extent to which the Data Guide²¹ developed by Energy UK and Citizens Advice is being used by energy suppliers.

Delivering benefits and facilitating competition (Chapter 6)

- 3.10. The rollout of smart meters provides opportunities for innovation and the development of new products and services, both by parties already active within the energy industry and more widely. Delivering these benefits relies on the right balance being struck to ensure that data can be shared as easily as possible, whilst maintaining robust privacy and assurance regimes.
- 3.11. This area of the review considered the extent to which parties are seeking access to consumers' detailed energy consumption data, and the types of services being offered in return. In line with the commitment made when the Framework was first published in 2012, this area of the review also considered whether the existing rules adequately supported access to data for public interest purposes.
- 3.12. Consideration was also given to the progress made by network operators in developing plans to access detailed consumption data and the extent to which the existing requirements in this area supported the delivery of benefits.

²¹ The Data Guide (previously referred to as the Privacy Charter) was developed by Energy UK members in conjunction with Citizens Advice and was published in 2013. The Guide is available here: <https://www.energy-uk.org.uk/policy/smart-meters.html>

Wider market developments

- 3.13. The Government was clear when the Framework was established that its provisions were designed to complement wider obligations and initiatives, such as relevant data protection legislation and midata in energy.²² In undertaking this review we have been mindful of wider developments within the energy market, which may impact upon the provisions of the Framework.
- 3.14. Related to this, two specific areas were out of scope of this review:
- Consideration of any amendments required to the Framework in light of the new data protection regime. Ahead of this regime coming into force, necessary modifications were proposed to ensure that relevant provisions were included within the SEC. These modifications were approved and implemented on 25 May 2018.²³
 - Consideration of any amendments necessary to provide access to half hourly energy consumption data for settlement purposes. This work is being led by Ofgem, with support from BEIS, and a consultation on options for data access for settlement purposes took place between July and September 2018.²⁴

²² midata is the electronic transfer of a customer's data (with their consent), from a supplier's system to a Third Party (TP). This means that energy consumers can use an application ('app') or website developed by a TP to, amongst other things, compare energy tariffs using their data held by their current supplier to find an energy deal which is right for them. The introduction of midata into the energy sector will be delivered through amendments to Ofgem's supply licence conditions and a cross-referenced specification. A cross-government project team, supported by leading players in the data space will work closely with stakeholders to define, design and implement the new licence condition and specification. The Government response to the midata Call for Evidence is available here: <https://www.gov.uk/government/consultations/call-for-evidence-implementing-midata-in-the-energy-sector>

²³ SECMP 0045: Incorporation of the requirements of the General Data Protection Regulation.

²⁴ Full details of the consultation and associated Data Protection Impact Assessment and consumer attitudes research is available here: <https://www.ofgem.gov.uk/publications-and-updates/consultation-access-half-hourly-electricity-data-settlement-purposes>

4. Protecting Consumers

Overall levels of consumer concern regarding privacy in relation to smart metering remain low, consumers are generally reassured by the Framework and appropriate safeguards are in place. As the number of smart meters installed continues to grow, further evidence is likely to become available and ongoing monitoring will be required.

Consideration of available evidence

- 4.1. In assessing the extent to which the Framework is protecting consumers, we have reviewed evidence of consumers' attitudes towards smart metering and privacy as well as considering the effectiveness of specific safeguards.

Do consumers feel adequately protected by the Framework?

- 4.2. The Framework was established following extensive consultation and its provisions were informed by consumer attitudes research, undertaken by Navigator Research, in 2012.²⁵ This research explored reactions to the proposed safeguards, together with any concerns consumers had regarding their privacy when sharing smart meter data. Overall, this research found that the Framework was seen to give householders choice and control. The overwhelming concern was the possibility that data collected via a smart meter might lead to more unwanted marketing communication.
- 4.3. In order to establish whether consumer views in this area have changed since this research was conducted, a range of evidence was reviewed. This included:
- Regular public attitudes tracking undertaken on behalf of Smart Energy GB, which has shown consistently low levels of concern amongst consumers in relation to privacy, with only 5% of those surveyed in the most recent report raising privacy as a concern.²⁶
 - The BEIS Smart Meter Customer Experience Study (2016-2018), which found that 2% of survey respondents cited data privacy as a concern.²⁷
 - Recent research undertaken on behalf of Ofgem in which consumers ranked half-hourly consumption data as the least sensitive of nine examples of personal data, with 49% including it in the least sensitive three items and only 4% considering it

²⁵ Smart Metering Data Access and Privacy: Public Attitudes Research, undertaken by Navigator Research and published December 2012. Available here: <https://www.gov.uk/government/consultations/smart-meter-data-access-and-privacy>

²⁶ Smart Energy Outlook is the largest independent survey of national public opinion on energy and smart meters. It is carried out biannually by Populus, on behalf of Smart Energy GB. The latest report is available here: <https://www.smartenergygb.org/-/media/SmartEnergy/essential-documents/press-resources/Documents/Smart-energy-outlook-October-2018.ashx>

²⁷ Respondents were asked an open question about whether they had any concerns about having a smart meter, the responses were recorded and grouped by category. Details of the report and methodology are available here: <https://www.gov.uk/government/publications/smart-meter-customer-experience-study-2016-18>

to be one of the three most sensitive.²⁸ This research also considered consumers' willingness to share their energy consumption data and found that, where scenarios were presented in which the consumer could potentially benefit directly from sharing their data, a third (34%) were willing to share in all scenarios, a further 37% were willing to share in at least one scenario and 15% were not willing to share in any scenario.²⁹ Consumers' willingness to share increased slightly when scenarios related to improved market operation – such as more efficient settlement processes – were tested, with over half (55%) willing to share in all scenarios, whilst 71% were willing to share in at least one scenario and 13% were unwilling to share.

- Qualitative research undertaken by Ipsos MORI on behalf of electricity networks, which found that consumption data was not considered sensitive by most participants, with many comfortable that this data was being accessed to support the maintenance of an efficient network.³⁰
- Recent research undertaken on behalf of Citizens Advice, which found higher levels of concern amongst consumers than was found in the studies reported above, with around a quarter (26%) of respondents noting concerns about how energy suppliers use smart meter energy usage data. Significantly, most respondents (60%) who had expressed concern felt reassured when the provisions of the Framework were explained.³¹
- Research commissioned by Which? looking at attitudes to data collection in general (not energy specific), which found that whilst individuals are often pragmatic about data collection and use, the majority of respondents (81%) were concerned about organisations selling data to third parties. Significantly, this included anonymised data.³²

4.4. The review also considered consumers' willingness to share their energy consumption data with their energy supplier. Information received by BEIS from the large energy suppliers indicates significant variation in the proportion of an energy supplier's customers who are opting in to share their half-hourly consumption data. It is likely that this variation arises from a combination of factors, including: whether energy suppliers are actively requesting this data, differing approaches to consumer engagement and the extent to which consumers are being offered attractive services in return.

²⁸ The nine examples were (in order of overall sensitivity ranking, from most to least sensitive): financial records, medical records, friends/family contact details; photos and videos; smart home/connected device data; social media activity; web browsing history; location data; half hourly energy consumption data. Ofgem: Consumer views on sharing half-hourly settlement data (July 2018). Available here: <https://www.ofgem.gov.uk/publications-and-updates/consultation-access-half-hourly-electricity-data-settlement-purposes>

²⁹ The remainder were either unsure in all scenarios or a mix of unsure and unwilling.

³⁰ Data privacy and smart meters: Ipsos MORI research for the ENA explores consumer attitudes to smart meter data being used to more effectively manage the UK electricity network (April 2017). Available here: <https://www.ipsos.com/ipsos-mori/en-uk/data-privacy-and-smart-meters>

³¹ Citizens Advice: Early consumer experiences of smart meters (July 2018). Available here: <https://www.citizensadvice.org.uk/about-us/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/early-consumer-experiences-of-smart-meters-2018/>

³² Britainthinks, on behalf of Which?: Control, Alt or Delete? Consumer research on attitudes to data collection and use (Policy research report, June 2018). Available here: <https://www.which.co.uk/policy/digitisation/2707/control-alt-or-delete-consumer-research-on-attitudes-to-data-collection-and-use>

4. Protecting Consumers

- 4.5. The levels of consumer opt-ins currently being recorded do not suggest that significant numbers of consumers are unwilling to share their data and indeed the BEIS Smart Metering Customer Experience Study found that of those participants who recalled being asked for access to their half-hourly data (33%)³³, the majority (94%) provided consent.³⁴
- 4.6. The evidence available under the review suggests that where consumers understand the provisions of the Framework and are engaged by their energy supplier, they are generally reassured and do not have significant concerns. Research available in relation to consumer attitudes to network access to data also suggests that the requirements of the Framework remain appropriate and that where consumers are aware of the wider benefits arising from access to smart metering data, concerns are low.

Does the scope of the Framework remain appropriate?

- 4.7. Work undertaken ahead of the establishment of the Framework identified energy consumption data as the area of most sensitivity in relation to privacy. The principal concern raised in consumer attitudes research related to the use of smart metering data for marketing and an apprehension that access to this information could result in increased and unwanted sales approaches.
- 4.8. The Framework therefore focused on protections and rights in relation to access to energy consumption data and introduced a specific requirement for energy suppliers to obtain consent in order to use energy consumption data from domestic consumers for marketing purposes.
- 4.9. Whilst not as sensitive as energy consumption data, other data stored by smart meters could be considered to be personal data and may have value from a marketing perspective.³⁵ The Framework is designed to complement, but not to replace wider data protection legislation. Wider data protection legislation, including the Privacy and Electronic Communications (EC Directive) Regulations 2003, continues to apply in respect of any smart metering data considered to be personal data.
- 4.10. Since the Framework was established a new data protection regime has come into force, which creates some new rights for individuals and strengthens some existing rights (e.g. rights of access, erasure and portability). It also sets a higher standard for consent, where this is used as the basis for processing.
- 4.11. Considering the lower sensitivity of non-consumption data and the data processing protections in place (when considered to be personal data), together with wider protections designed to safeguard consumers from unwelcome marketing, we consider that the scope of the Framework remains appropriate. This view received broad

³³ Note that energy suppliers are only required to request consumer consent where they intend to access half-hourly energy consumption data.

³⁴ BEIS: Smart Meter Customer Experience Study 2016-2018. Available here:

<https://www.gov.uk/government/publications/smart-meter-customer-experience-study-2016-18>

³⁵ This could include data identifying the meter (i.e. MPAN and MPRN), debt data and other data that can be related to identifiable individuals.

support from stakeholders at the BEIS-led workshop on the Framework, held in June 2018.³⁶

Are current requirements in relation to consent appropriate?

- 4.12. The Framework establishes clear obligations in relation to access to energy consumption data, including requirements for third parties to obtain consumer consent and for energy suppliers to obtain consent where half-hourly data is being collected from domestic consumers.³⁷
- 4.13. The Framework provides broad flexibility in relation to how this consent is obtained, recognising that approaches may vary in response to consumer preferences and an organisation's business model. Notwithstanding the need for flexibility, the Framework requires records to be retained and, in the case of third parties, a privacy assurance regime is in place to monitor compliance.
- 4.14. Information submitted to BEIS by energy suppliers as part of their regular smart metering reporting requirements highlighted a range of approaches being used in relation to securing consumer consent. These included requesting consent as part of the smart meter installation process and providing consumers with the opportunity to update their preferences through their online account.
- 4.15. Discussions with prospective third party users have also indicated that a range of approaches are being considered in relation to seeking consumer consent to access energy consumption data, including phone and online methods. One area of potential challenge, which has been raised by prospective users, relates to implementing a requirement in the Smart Energy Code (SEC) to verify that the individual from whom consent has been obtained is the Energy Consumer (Section I1.5).³⁸
- 4.16. In order to meet this obligation, those parties accessing energy consumption data must have sufficiently robust procedures in place to verify identity. However, there is a risk that overly onerous approaches could create a burden on consumers seeking to use these services, resulting in low levels of uptake and a poor customer experience. It is clear that an appropriate balance needs to be struck and BEIS has been working with the Independent Privacy Auditor and interested parties to develop guidance, which can be incorporated into the SEC Privacy Controls Framework (PCF). Following consultation the SEC Panel recently approved amendments to the PCF which will be published shortly.
- 4.17. Where consent is required for access to energy consumption data, both energy licence conditions and the SEC specify that this must be obtained from the individual responsible for arranging the energy supply (i.e. the bill payer). Situations may arise where the bill payer does not occupy the premises in question and therefore would not be considered to be the 'data subject' under data protection legislation. In these circumstances, consent from the bill payer may not be sufficient to meet wider data

³⁶ This workshop was held on 11 June 2018 and involved representatives from: Ofgem, energy suppliers, energy networks, third party organisations (including commercial, charitable and academic), and consumer groups.

³⁷ Half-hourly energy consumption data can also be obtained by energy suppliers, in controlled circumstances, for the purposes of conducting authorised trials. Where this is the case, consumers have the right to opt-out.

³⁸ Energy Consumer is defined by the SEC as the person who receives, or wishes to receive, a supply of energy to the relevant property and can generally be considered to refer to the bill payer.

protection obligations. In order to address this and provide some examples of good practice, BEIS issued guidance to industry.³⁹ Information submitted to BEIS by energy suppliers has indicated that understanding of this issue and accompanying guidance may be low and that further action needs to be taken to raise awareness.

Are consumers adequately protected in relation to the local retrieval of data from smart meters?

- 4.18. In addition to wider protections under the new data protection regime, specific technical obligations have been put in place through the SEC to ensure that consumer data cannot be accessed over the HAN following a change of tenancy (except where the consumer has given their consent for this data to be available).
- 4.19. When an energy supplier becomes aware of a change of tenancy, they are required to send a 'Restrict Access for Change of Tenancy' service request to the meter, which places a flag on the meter and comms hub preventing access to consumption data via the HAN relating to the period of time before the change of tenancy. This ensures that the new occupant in the property is unable to view the previous tenant's consumption data.⁴⁰
- 4.20. Additionally, as soon as practicable after the service request has been sent, the DCC is required to cancel any and all service requests from third party Other Users for future-dated services or scheduled services.⁴¹
- 4.21. These protections are dependent upon consumers notifying their supplier that they have moved in or out of the property. During discussions at the June 2018 stakeholder workshop it was noted that there can be delays between a change of tenancy occurring and the consumer notifying the supplier. Smart metering increases the volume of historical consumption data available directly from the meter and introduces the means through which this can be easily displayed and accessed from within the premise. Additionally, energy suppliers and third parties need to be aware that a change in physical occupancy can take place without a formal change of tenancy (e.g. where a landlord is responsible for paying energy bills). This scenario and some suggestions of good practice for addressing privacy issues are discussed in an open letter from BEIS to SEC Parties.⁴²
- 4.22. Whilst appropriate technical protections are in place, there may be scope for industry-wide consideration of best practice in relation to identifying change of tenancy events.

³⁹ In September 2016, the Government consulted on this issue and subsequently widened the scope of the User Entry Guide to draw Users' attention to any relevant privacy guidance. In September 2017, BEIS issued a letter to SEC parties provided further information on consent in tenanted properties. The relevant consultation is available here: <https://www.gov.uk/government/consultations/consultation-on-smart-energy-code-and-licence-amendments-september-2016> and the letter to SEC parties is available here:

<https://smartenergycodecompany.co.uk/latest-news/letter-to-sec-parties-regarding-privacy-and-smart-metering-energy-consumption-data-in-domestic-and-microbusiness-premises/>

⁴⁰ As outlined in SEC Section H3.17 (Change of Tenancy) and H3.18 (Cancellation of Future-Dated and Scheduled Services) of the SEC.

⁴¹ As outlined in H3.18 (Cancellation of Future-Dated and Scheduled Services) of the SEC.

⁴² Available here: <https://smartenergycodecompany.co.uk/latest-news/letter-to-sec-parties-regarding-privacy-and-smart-metering-energy-consumption-data-in-domestic-and-microbusiness-premises/>

Are current requirements in relation to issuing notices and retaining records appropriate?

- 4.23. The Framework requires energy suppliers to issue written notice to domestic and microbusiness consumers in cases where data is being collected is at a greater than monthly granularity. This requirement ensures that consumers are fully informed about the collection and use of their consumption data.
- 4.24. Energy suppliers and third parties must maintain accurate records of any notices issued to consumers and must ensure that domestic consumers are kept up to date, at appropriate intervals.
- 4.25. Third parties accessing data through the DCC must provide information to consumers at the point of obtaining consent. Where this consent enables ongoing data collection, they must update consumers at appropriate intervals, and are also required to maintain records.
- 4.26. In light of the current limited development of the third party route, evidence in this area primarily relates to the experience of energy suppliers. The Framework review showed that energy suppliers are taking varied approaches to record keeping and the provision of notice to consumers, but no evidence was identified to suggest that the requirements of the Framework are overly burdensome, or that they do not adequately protect consumers.

Does the privacy assessment regime established under the SEC provide sufficient safeguards?

- 4.27. Audit arrangements are established in the SEC, designed to provide reasonable assurance of compliance with the relevant provisions of Section I in respect of third party Other Users. These assessments are undertaken by an Independent Privacy Auditor, appointed by the SEC Panel, with the costs generally being borne by the Other User undergoing the assessment (with the exception of random assessments).
- 4.28. The SEC sets out three categories of assessment to be completed over a recurring three-year cycle:
 - A full privacy assessment: to be conducted upon User Entry and again in year one of a three-year cycle;
 - A privacy self-assessment: to be conducted in years two and three of a three-year cycle;
 - Random privacy assessments: to be carried out on a direction by the SEC Panel at least once during the three-year cycle.
- 4.29. The SEC requires that a Privacy Controls Framework is maintained, setting out the arrangements for undertaking privacy assessments.⁴³
- 4.30. In accordance with the requirements of the SEC, an Independent Privacy Auditor has been appointed and a small number of full privacy assessments have been undertaken

⁴³ The Privacy Controls Framework is available here (requires website registration): <https://smartenergycodecompany.co.uk/privacy-controls-framework/>

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although, to date, no Other User has entered the second or third years of the privacy assessment cycle.

- 4.31. Demand for privacy assessments could increase significantly in the near future as increased numbers of SMETS2 meter installations drives appetite for third party providers. It will be important to ensure that sufficient resource and appropriate privacy expertise is available to the SEC Panel to inform evaluation of assessments and ensure that the PCF remains up to date.
- 4.32. The privacy assessment regime provides assurance that Other Users have appropriate procedures in place to ensure that they only access consumption data where they have the consumer's consent. The inclusion of random privacy assessments in the audit cycle also provides a mechanism through which any failure in these procedures can be identified and action taken.
- 4.33. In the event that a consumer has concerns that an unauthorised party is accessing their consumption data, they can ask their energy supplier or a trusted Other User for records on which DCC Users have requested this data from their meter.⁴⁴
- 4.34. Citizens Advice has developed a 'proof of concept' Data Dashboard that harnesses this functionality to provide the consumer with information on who is accessing their smart meter data and at what frequency, potentially also providing the consumer with the opportunity to request amendments.⁴⁵

Government conclusions

- 4.35. Privacy concerns in relation to smart metering have remained low and research has found that the existence of the Framework offers reassurance to some consumers that appropriate safeguards are in place.
- 4.36. Whilst overall concerns are low, variations in attitudes do exist between consumers – for example, on the basis of age.⁴⁶ Research conducted by Ipsos MORI which looked more widely at attitudes towards data sharing within the energy industry identified four broad customer types:⁴⁷
 - Happy to share: relaxed about sharing own information in most cases
 - Depends who's asking: comfortable sharing own data where the value, to them or others, of doing so is clear
 - Quid pro quo: comfortable sharing own data where the value to them personally of doing so is clear
 - Big brother: reluctant to share own data in most/any circumstances

⁴⁴ This functionality is provided in the SEC Section H8.16(c)

⁴⁵ Citizens Advice: Smart Metering Data Dashboard: Helping consumers see what their smart meter data is used for (2018). Available here: <https://www.citizensadvice.org.uk/about-us/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/the-smart-meter-data-dashboard/>

⁴⁶ Citizens Advice's 2018 Early consumer experiences research found that 32.6% of 16-24 year olds were concerned about sharing their energy usage data, compared to 25.3% of 45-54 year olds and 20.1% of 70+ consumers.

⁴⁷ Ipsos Mori: Public priorities for our future energy system (Presentation to Ofgem) Available here: <https://www.ofgem.gov.uk/publications-and-updates/getting-know-future-consumer>

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- 4.37. The identification of these groups leads Ipsos MORI to conclude that sharing our data is a very personal trade-off. The smart meter roll-out will extend to all homes and small businesses in GB, capturing premises occupied by consumers who fall into each of these groups. It is necessary for the Framework to strike the right overall balance, but equally to provide individual consumers with the flexibility to change the level of data they are sharing. By placing consumers in control of how much data they are sharing (except where this is required for regulated purposes) the Framework enables them to adjust permissions in line with their personal preferences.
- 4.38. Whilst evidence relating to consumer attitudes towards privacy in the context of smart metering is important, there is a need to be cautious when drawing conclusions. Energy is often a low interest topic, and awareness amongst consumers of how the system and industry parties operate can be limited. Consumer attitudes in this area may be influenced by wider events and views on privacy more generally.
- 4.39. The review also considered privacy safeguards, including consumer consent requirements and the provision of notices to consumers, together with the effectiveness of the privacy assurance regime. Consideration of these areas, together with evidence related to consumer attitudes, found that the Framework is continuing to effectively protect consumers.
- 4.40. The Government has been clear that the Framework was designed to complement wider data protection legislation, including the new data protection regime which came into force on 25th May 2018 and incorporates the Data Protection Act 2018 and the General Data Protection Regulation (GDPR). The new data protection regime updates existing consumer protections and introduces new rights for data subjects. The new data protection regime directly applies to energy suppliers and other authorised parties.
- 4.41. In light of this, energy suppliers seeking access to personal data, such as energy consumption data, will need to review their existing processes and satisfy themselves their activities are lawful processing as provided for under the data protection regime. The Framework gives consumers the right to opt-out of the collection of daily data, in the case of domestic consumers, and any data collection more detailed than monthly, in the case of microbusiness consumers. We intend to retain the right of consumers to opt-out in these circumstances in recognition of the reassurance offered by the existing Framework and the findings of early consumer attitudes research in relation to energy consumption data. This right complements the protections provided by the new data protection regime where such data is determined to be personal data.
- 4.42. In developing and monitoring their approaches to accessing data, energy suppliers, networks and third parties will need to ensure that they are compliant with the requirements of both the Framework and wider data protection legislation. In order to support this, and following feedback from stakeholders, we intend to work with relevant partners to clarify how the Framework aligns with the new data protection regime and raise awareness of obligations where we have identified uncertainty or misunderstanding within the industry. The review has also identified areas where there may be benefits in encouraging the sharing of good practice within industry.
- 4.43. As the number of smart meters installed continues to grow, further evidence regarding the effectiveness of the Framework is likely to become available and new issues may emerge. We will continue to monitor the extent to which the Framework is effectively protecting consumers through our ongoing research activity and existing evidence gathering channels.

5. Information Provision

Although few consumers are concerned about their smart meter data, levels of awareness about how data will be accessed are low, with some consumers saying that they would like to receive more information. Opportunities exist to improve the quality of information provided to consumers, including through the sharing of good practice.

Consideration of available evidence

- 5.1. The previous chapter demonstrated that the Framework provides reassurance to consumers who may have concerns about the privacy of their energy consumption data. In order for consumers to make informed decisions about sharing data, they need to be given information about how their data will be used and feel empowered to modify their data choices, should they wish to do so.
- 5.2. In reviewing the provision of information to consumers, we have considered whether this is clear and accurate (including use of the Data Guide).⁴⁸ We have also explored consumer perceptions, including whether they are content with the level and frequency of information provided and know how to amend their preferences.

Do consumers recall receiving information about their data choices?

- 5.3. Monitoring data shows that most energy suppliers have procedures in place to provide consumers with information about how their smart metering data will be used.
- 5.4. Despite this, the BEIS Smart Meter Customer Experience Study (2016-2018) found that approximately 10 weeks after their smart meter installation, only one in six (16%) respondents recalled receiving information about how their energy supplier stores consumption data from their smart meter.⁴⁹ Higher levels of recall were found in a recent Citizens Advice survey, where 47% of smart meter owners said they knew how regularly they were sharing consumption data with their energy supplier. This still represents less than half of respondents, and 35% of smart meter owners could not remember their energy supplier explaining the different data sharing options.⁵⁰
- 5.5. Additionally, research undertaken by BEIS in 2017 found that 36% of respondents wanted to know more about who can access their smart metering data and for what purposes.

⁴⁸ Available here: <https://www.energy-uk.org.uk/policy/smart-meters.html>

⁴⁹ BEIS, 'Smart Meter Customer Experience Study 2017: Post-installation Survey Report' Smart Meter Customer Experience Study 2016-2018. Note that this finding is particularly susceptible to recall bias and does not demonstrate that the consumers did not receive this information - only that they did not recall this. Available here: <https://www.gov.uk/government/publications/smart-meter-customer-experience-study-2016-18>

⁵⁰ Citizens Advice: Early consumer experiences of smart meters (July 2018) <https://www.citizensadvice.org.uk/about-us/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/early-consumer-experiences-of-smart-meters-2018/>

- 5.6. Energy suppliers and third parties (where data sharing is ongoing) are also required to provide consumers with information on their data sharing choices, at appropriate intervals. Flexibility is provided in terms of timings, enabling these notices to be issued when they are most likely to be relevant to the consumer (e.g. when fixed tariffs are coming to an end, or in conjunction with an annual statement). Research undertaken by Citizens Advice, however, found that of the 267 smart meter users who had had their meter installed for longer than a year, 71% could not remember being contacted by their energy supplier regarding their current data choices.⁵¹
- 5.7. We will continue to review these approaches and escalate any concerns relating to compliance with the provisions of the Framework to Ofgem.

Is effective use being made of the Data Guide?

- 5.8. When the Framework was established, the Government concluded that as part of the overall consumer engagement package, a 'Privacy Charter' should be developed to provide clear reassurance to consumers about the ways in which their personal data will be used and the choices they can make about this. The Charter was intended to reflect, but not replace, regulatory requirements and be presented in a way that is accessible to consumers.
- 5.9. The energy industry, through Energy UK, worked with Citizens Advice to undertake consumer research to inform the development of this Charter, which was published as the 'Data Guide for Smart Meters' in 2013.⁵²
- 5.10. Monitoring data for large energy suppliers (2017) shows that the majority of large energy suppliers are making effective use of the Data Guide and tailoring it to suit their and their customers' needs. Some energy suppliers provided evidence of clear, accessible and innovative approaches to providing information to consumers. Customers of these energy suppliers were able to receive information through a variety of channels, both before and after the installation, and were encouraged to review their data choices. Where access to the most granular information was being sought the benefits associated with 'opting-in' were clearly outlined.
- 5.11. However, the data also highlighted that a number of energy suppliers were not using the guide or following the associated recommendations.⁵³ In these cases the information presented to consumers on their data choices was difficult to access or understand (e.g. through the use of lengthy terms and conditions). This places consumers at risk of not understanding the data implications of smart metering and may have contributed to the low levels of consumer recall found in other studies.

⁵¹ Citizens Advice: Early consumer experiences of smart meters (July 2018)

<https://www.citizensadvice.org.uk/about-us/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/early-consumer-experiences-of-smart-meters-2018/>

⁵² The customer research gave specific insight into what to call this document and 'Guide' was preferred to 'Charter'. The Data Guide can be found here: <https://www.energy-uk.org.uk/policy/smart-meters.html>

⁵³ The Data Guide was informed by research undertaken by Citizens Advice – Smart and Clear: Consumer attitudes to communicating rights and choices on energy data privacy and access is available here: <http://webarchive.nationalarchives.gov.uk/20140522163010/http://www.consumerfutures.org.uk/reports/smart-and-clear-customer-attitudes-to-communicating-rights-and-choices-on-energy-data-privacy-and-access>

Government conclusions

- 5.12. The previous chapter concluded that the provisions in place to safeguard consumers' privacy remain appropriate, with no evidence identified to suggest that further protections are required. The extent to which these obligations deliver the objectives of the Framework depends upon the effectiveness of industry's approach to implementation.
- 5.13. The evidence reviewed in this chapter has highlighted that whilst examples of good practice exist across the industry, there is significant variation in the extent to which the information provided to consumers is engaging, accessible and capable of being recalled. In many cases the information that is being received is either failing to resonate or does not meet the needs of consumers.
- 5.14. These conclusions are not just relevant to energy suppliers and third parties. Consumer research undertaken by Ipsos MORI on behalf of the Energy Networks Association found that whilst consumers were broadly content with their data being accessed to support the efficient maintenance of the network, there is appetite for further information on the additional value this level of data provides Distribution Network Operators (DNOs).
- 5.15. Opportunities exist to improve the quality of information provided to consumers in relation to their data access choices through the sharing of good practice. In light of new research and consumer experience in relation to information on data and privacy, this is an appropriate point for industry to consider whether new industry initiatives could support consumer engagement in this area.

6. Delivering Benefits and Facilitating Competition

Levels of innovation using energy consumption data are broadly in line with expectations. Interest in the opportunities offered by smart meter data is continuing to grow, with scope for ongoing awareness raising in this area, both within and beyond the energy industry.

Consideration of available evidence

- 6.1. Smart metering is the foundation for a smarter energy system, with smart technologies and services playing a vital role in decarbonising the energy sector and delivering the Government's Clean Growth Strategy.⁵⁴ Access to energy consumption data is central to the development and success of new products and services that will support the Government's ambition for a smarter, more flexible energy system.⁵⁵
- 6.2. The Framework was developed to support proportionate access to energy consumption data by energy suppliers, network operators and third parties. It was recognised that a basic level of access would be required for energy suppliers in order to discharge regulated duties and provide an essential level of customer service. Equally, the benefits offered to the wider energy system through the authorised use of smart meter data by network operators supported access to this data by these parties, subject to certain privacy controls.
- 6.3. As the granularity of energy consumption data being accessed increases, so do potential concerns regarding privacy and the sensitivity of the data. As a result, access to the most granular data by energy suppliers and any access to energy consumption data by third parties⁵⁶ requires consumer consent.⁵⁷ These requirements place the onus on the party seeking consent to communicate clearly with the consumer, highlighting the benefits that will arise from granting access.
- 6.4. In this section of the review, we considered the extent to which the Framework is supporting the development of innovative products and services and whether access to energy consumption data is aiding more efficient management of the energy network. The review also considered whether the Framework supported the use of data for research and public interest purposes.

⁵⁴ The Clean Growth Strategy is an ambitious blueprint for Britain's low carbon future. Further details are available here: <https://www.gov.uk/government/publications/clean-growth-strategy>

⁵⁵ The Government and Ofgem jointly published a Smart Systems and Flexibility Plan in July 2017, available here: <https://www.gov.uk/government/publications/upgrading-our-energy-system-smart-systems-and-flexibility-plan>

⁵⁶ Including energy suppliers, where they are seeking access to consumer data at premises where they are not the registered energy supplier.

⁵⁷ Limited exemptions to the requirement for consent exist, relating to the use of half-hourly energy consumption data in trials approved by the Secretary of State. In these circumstances, consumers must be given the opportunity to opt-out of sharing their half hourly consumption data.

Are innovative products and services being developed using energy consumption data?

- 6.5. The roll-out of smart meters will provide a platform for innovation in new products and services, both for existing actors within the energy market and beyond. For example, access to energy consumption data will support the development and implementation of time-of-use tariffs, and other products and services that can support consumers to improve the efficiency with which they are using energy.
- 6.6. Two primary routes exist to support access to energy consumption data:⁵⁸
- Access through the Data and Communications Company (DCC): this enables access to energy consumption data as detailed as half hourly, directly from a consumer's smart meters, via the Wide Area Network (WAN).
 - Access through a Consumer Access Device (CAD): this enables access to energy consumption data as granular as 10 seconds (for electricity), following the pairing of a compatible device to the consumer's smart meter, via the Home Area Network (HAN).
- 6.7. In reviewing information submitted by large energy suppliers, the majority have either introduced, or have plans to introduce, products and services that harness half-hourly consumption data. This reflects a wider shift in the way energy suppliers are positioning themselves to their consumers, with many gradually moving towards considering a broader range of service propositions beyond the simple supply of energy. This is contributing to the emergence of a specialist market, with a handful of small-scale, smart-enabled 'time-of-use' tariffs now on the market, together with consideration of 'type-of-use' tariffs. At present, these are primarily targeted at early adopters and environmental enthusiasts but as energy suppliers develop experience in this area the range of products on offer is likely to grow.
- 6.8. Whilst levels of innovation are relatively modest at present, this is likely to be the result of factors other than the requirements of the Framework, including the current volume of second generation (SMETS2) smart meters that have been installed and existing levels of consumer engagement. In addition, energy suppliers have raised concerns about how more complex and dynamic tariffs will be incorporated into comparison tools, as both the cost of energy (which may be variable throughout the day) and the consumer's usage patterns will need to be considered.
- 6.9. Over 12 million smart and advanced meters were operating up to the end of June 2018, the vast majority of which are first generation (SMETS1) meters, which are currently being operated outside of the DCC's system. This has contributed to relatively low levels of third party engagement with smart metering energy consumption data, as they face challenges accessing energy consumption data from these meters. As the rollout of SMETS2 meters continues to ramp-up and SMETS1 meters begin being enrolled into the DCC, we expect interest in the opportunities offered by direct access to energy consumption data to grow, as commercial incentives to develop new products and services become more favourable.

⁵⁸ Further information on these routes for accessing energy consumption data is available in the Government's 'Smart Meters, Smart Data, Smart Growth' leaflet, available here: <https://www.gov.uk/government/publications/smart-meters-smart-data-smart-growth>

6. Delivering Benefits and Facilitating Competition

- 6.10. This view is supported by evidence of early-movers, including some who have launched services in the SMETS1 market with a view to refining their offerings and building customer bases ahead of wider expansion aligned with the SMETS2 rollout. In addition, there are a growing (albeit currently still relatively low) number of prospective third parties embarking on the process of becoming a DCC User.
- 6.11. The review identified the following areas where new products and services are already being developed or considered:
- Dynamic time-of-use **tariffs** and **switching** services.
 - Personalised **energy efficiency advice** based on information including energy consumption data.
 - Integrating energy consumption data into wider **diagnostic** tools to detect faulty or inefficient appliances.
 - Supporting **independent living and social care** by monitoring activities and behaviours within the home.⁵⁹
 - Disaggregating load and supporting home automation to enable **demand side response**.
- 6.12. At this time, limited evidence is available to assess the extent to which these opportunities are being realised and this is an area where further monitoring will be necessary to support ongoing evaluation and consideration of whether the Framework is presenting a barrier to innovation.
- 6.13. The evidence outlined above primarily relates to innovation focused on domestic consumers. Research undertaken on behalf of BEIS⁶⁰ has shown that small non-domestic consumers often lacked awareness and understanding of smart meters, including how to interpret smart meter data.
- 6.14. The research showed that a range of considerations are relevant to realising the full potential of smart meter data in the non-domestic space. As a basic minimum, organisations must be aware of the data that is available to them and have a means to access it. Following that, they need to understand how to take advantage of the information the meter provides, i.e. they need to be able to interpret data within the context of their own organisation and identify a cost-effective solution.
- 6.15. Evidence shows that the minimum baseline of data access is not always met. One reason is a lack of awareness that the data exists or how it could be used to support energy management. However, crucially, some of the non-domestic sites from the research were aware that such data was available but were unable to gain access. The research found evidence of organisations being given no means of accessing their data, being provided links to online supplier portals that did not work and energy suppliers being unable to provide data access due to interoperability issues (the latter will be resolved as SMETS2 meters are rolled out).

⁵⁹ See, for example, Smart Energy GB's report 'Energising Health: A review of the health and care applications of smart meter data'. Available here: <https://www.smartenergygb.org/en/resources/press-centre/press-releases-folder/energising-healthcare?tab=1&docspage=6>

⁶⁰ Smart metering in non-domestic premises: early research findings (2017). Available here: <https://www.gov.uk/government/publications/smart-metering-in-non-domestic-premises-early-research-findings>

- 6.16. Regarding data awareness and potential to translate data into meaningful action/behavioural change, the research highlighted the value of developing appropriate products/services that help organisations understand their energy use and identify practical ways to save energy. In response, BEIS has invested £8.8m into a Non-Domestic Smart Energy Management Innovation Competition. This is funding the development of tools/services such as apps and online tools which use smart meter data to help smaller non-domestic organisations better understand and manage their energy consumption. These tools and their ability to unlock data potential will be evaluated as part of an embedded research and evaluation programme which will report in 2020.
- 6.17. Easy access to consumption data is a basic requirement for unlocking the benefits of smart metering, both from a non-domestic consumer perspective and to unlock further opportunities around innovation and non-domestic smart energy market development. Low levels of engagement with energy consumption data amongst microbusiness consumers poses a risk to the delivery of smart metering benefits.

Are opportunities to use energy consumption data to support efficient network management being realised?

- 6.18. Electricity and gas distribution network operators have obligations relating to the planning, building and operation of their energy networks. It is important that they do this cost effectively, and smart metering data may support network operators in fulfilling these obligations, maintaining continuity of supply and transitioning to a smarter system.
- 6.19. The Framework does not place any restrictions on energy networks' access to non-domestic consumers' energy consumption data. As outlined in Chapter 2 several routes exist for network operators to access energy consumption data from domestic premises. Discussions with energy networks have indicated that the most viable of these routes is the implementation of procedures designed to treat energy consumption such that – as far as reasonably practicable – it can no longer be linked to an individual consumer/premise. These procedures must be approved by Ofgem, and an open letter setting out the criteria for evaluation of privacy plans was published in September 2016.⁶¹
- 6.20. In order to support the development of appropriate privacy plans, the Energy Networks Association commissioned research to assess the relationships between data aggregation and both privacy and the delivery of benefits.⁶² These reports have been supplemented by research undertaken by Ipsos MORI on consumer attitudes to privacy.⁶³
- 6.21. Regular engagement between BEIS and energy networks, including consideration of the benefits plans submitted in 2017 provide evidence of high level thinking regarding the utilisation of consumption data. In particular, once a significant penetration of

⁶¹ Ofgem: Open letter on DNOs' privacy plans for access to smart meter data. Available here: <https://www.ofgem.gov.uk/publications-and-updates/open-letter-dnos-privacy-plans-access-smart-meter-data>

⁶² EA Technology: Smart Meter Aggregation Assessment (July 2015). Available here: <http://www.energynetworks.org/electricity/futures/smart-meters.html>

⁶³ Ipsos MORI: Data privacy and smart meters (2017). Available here: <https://www.ipsos.com/ipsos-mori/en-uk/data-privacy-and-smart-meters>

6. Delivering Benefits and Facilitating Competition

SMETS2 meters is achieved, the majority of DNOs intend to utilise granular smart meter data to assist their reinforcement and network management activities.

- 6.22. As of October 2018, one electricity DNO – Western Power Distribution (WPD) – has submitted a plan to access detailed energy consumption data. This plan has been approved by Ofgem.⁶⁴ To ensure that households are informed about how their data will be used, WPD has provided information on their website⁶⁵ and will use the newsletters issued to all households in the region to keep consumers informed. Contact details are also provided, to enable consumers to request further information.
- 6.23. Concerns were raised by several DNOs during the review period regarding the extent to which the current requirement to anonymise (as far as reasonably practical) energy consumption data could limit the realisation of network benefits. However, insufficient evidence was provided to evaluate the extent to which disaggregated consumption data may be required by networks to either fully realise the anticipated benefits of smart metering or deliver further benefits. Towards the end of the review period one DNO submitted further evidence in support of their case, which is now being considered by BEIS as part of the ongoing monitoring of the Framework's effectiveness.
- 6.24. As energy networks continue to explore the potential offered by smart metering energy consumption data and the industry gains experience interacting with smart meter data, evidence may emerge that supports a re-evaluation of the existing data access requirements. This evaluation would need to consider any potential realisation of benefits in the context of the increased incursion into consumer privacy that would arise from permitting use of energy consumption data without anonymisation.

Does the Framework provide sufficient scope for public interest uses of energy consumption data?

- 6.25. In summer 2015, TEDDINET⁶⁶, the Centre for Sustainable Energy and Sustainability First launched a joint research challenge to understand how future household smart meter energy data might be deployed to serve the public interest. The reports from these projects highlighted the diverse public benefits to be realised from smart meter data, both at the national and sub-national level.⁶⁷ This work has used a specific definition of 'public interest', focused on the potential for using smart meter data for research or public policy and service delivery purposes.
- 6.26. Historically, the evidence base for research and policy interventions in the domestic energy sector has relied on national statistics, nationally representative surveys or data collected during small projects/field trials. At the most fundamental level, smart metering data has the potential to improve the quality and granularity of the consumption data available for research purposes.

⁶⁴ Details of the approach taken by WPD, together with Ofgem's approval letter are available here: <https://www.ofgem.gov.uk/publications-and-updates/approval-letter-wpd-s-data-privacy-plan-access-household-electricity-smart-metering-data>

⁶⁵ Information on how WPD will use smart metering data is available here: <https://www.westernpower.co.uk/About-us/Stakeholder-information/Smart-meter-data.aspx>

⁶⁶ Transforming Energy Demand through Digital Innovation NETWORK

⁶⁷ Smart meter energy data: Exploring the public interest agenda. Available here: <https://www.cse.org.uk/projects/view/1309>

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- 6.27. In addition, smart metering and the associated national infrastructure enable third party organisations to access energy consumption data directly, without establishing a relationship with the consumer's energy supplier. With consumer consent, organisations can retrieve detailed energy consumption data which can potentially be combined with more detailed information regarding the consumer, their habits and property type to develop a rich dataset.
- 6.28. The Smart Meter Research Portal (SMRP), led by UCL, is seeking to harness this step change in the availability of data direct from a consumer's smart meter to provide a "secure, consistent and trusted channel for researchers to access high resolution energy data". Funded by the Engineering and Physical Science Research Council (EPSRC), the SMRP will establish a pool of consumers who have given their consent for their smart meter data to be used for research purposes. Bodies seeking to access smart meter data for public interest research purposes may also be eligible to apply to the SMRP. The SMRP will also provide a facility through which energy consumption data from participants recruited for specific research projects can be accessed.
- 6.29. Smart metering energy consumption data has the potential to deliver wider public interest benefits, but evidence of the extent to which this potential can be realised in practice remains scarce. This is not unexpected, at this stage of the rollout and ahead of both the large scale deployment of SMETS2 meters and enrolment of SMETS1 meters into the DCC.
- 6.30. Owing to the reasons outlined above, there is limited evidence available at present to assess the extent to which the potential benefits of smart metering for public interest purposes are being realised, and this is an area where ongoing monitoring will be required. In particular, it has been suggested that smaller users pursuing public interest benefits may face challenges in meeting the stringent security and technical requirements necessary to become a DCC User. These challenges may be overcome through the further development of research portals and data repositories, such as SMRP, or through the use of emerging adapter services, which connect third parties with the DCC.
- 6.31. Analysis of energy consumption data could enable the development of new public services, aid planning decisions and promote targeted interventions. However, these activities would need to be carried out by trusted intermediaries, in a transparent manner. Requiring consumer consent before third parties can access this data places consumers firmly in control. Any consideration of amendments to the Framework to further facilitate public interest uses, which would have to include an assessment of the benefits arising from access to historic or aggregated data, will need to balance public interest considerations against consumer safeguards and concerns. For example, some respondents to the consumer attitudes research undertaken in 2012 found the idea of Government, in particular, having access to smart meter data 'unsettling'.⁶⁸ Towards the end of the Framework review a couple of stakeholders submitted further evidence in this regard which will be considered by BEIS as part of the ongoing monitoring of the Framework's effectiveness.

⁶⁸ BEIS: Smart Metering: Data access and privacy – public attitudes research (December 2012). Available here: <https://www.gov.uk/government/consultations/smart-meter-data-access-and-privacy>

Government conclusions

- 6.32. At this time, limited evidence exists to show that consumers are actively seeking to share their energy consumption data with third parties. This is likely to be a consequence of the limited opportunities currently available for consumers in this area but may also be driven by low consumer awareness of the ability to share data in this way, particularly in the non-domestic sector.
- 6.33. As the number of smart meters operated through the DCC continues to grow and the enrolment of SMETS1 meters progresses, we expect this will drive further innovation amongst third parties. BEIS has previously sought to support this by actively raising awareness of the opportunities offered by smart metering, providing clarity on obligations and facilitating the development of industry wide approaches where challenges arise.⁶⁹ We will continue to provide this support, where appropriate, and will remain alert to any evidence that suggests that the provisions of the Framework are presenting an unnecessary barrier to innovation.

Requirement for consent for third party access

- 6.34. Third parties accessing energy consumption data through the DCC are required to obtain consumer consent. This differs from the requirements placed on energy suppliers, who are only required to obtain consent where they are accessing energy consumption data more detailed than daily. It has been suggested by a number of third parties that this creates an unequal playing field and provides energy suppliers with an unfair advantage. This view was reiterated by a small number of attendees at the Framework workshop held in June 2018.
- 6.35. The Government has been clear that the central principle of the Framework is that other than where access to data is required for regulated purposes, consumers should have a choice about whether they share their energy consumption data. Energy suppliers are therefore required to provide consumers with the right to opt-out of allowing them access to daily energy consumption data, and to obtain opt-in consent from consumers in order to access half-hourly data. In the case of microbusinesses, this opt-out provision is extended to half-hourly data.
- 6.36. This is potentially more permissive than the regime that is in place for third parties, where consent is required in all circumstances. However, it should be noted that where energy suppliers are accessing data without consumer consent, they must still comply with the requirements of the new data protection regime. This includes establishing a lawful basis for processing the data. The provisions of the Framework introduce an additional privacy safeguard by providing consumers with the opportunity to opt-out of this data collection.
- 6.37. The Government considers that this regime remains appropriate. Established, contractual relationships exist between energy suppliers and their customers and consumers are likely to have a reasonable expectation that their energy supplier will

⁶⁹ This includes hosting an industry event in autumn 2017, attended by around 100 stakeholders, to raise awareness about smart meter technology, innovation and the opportunities offered by access to smart metering data. A set of CAD pairing principles for connecting third party CADs to SMETS1 meters were published in October 2018. Available here: <https://smartenergycodecompany.co.uk/latest-news/publication-beis-cad-testing-pairing-document/>

have an interest in accessing their energy consumption data. Consumers are able to identify their energy supplier – where this is not known – with relative ease and are likely to have previous experience of contacting them to discuss any issues or concerns. Consumers are less likely to be aware that third parties are capable of accessing their energy consumption data and may not have a wider relationship or previous experience of engaging with these parties. Requiring consent in these circumstances is therefore appropriate and is consistent with the Framework’s objective of establishing sector-specific requirements that complement the wider data protection regime.

- 6.38. It has also been suggested that the SEC requirement for users to put in place arrangements to ensure that when they are accessing energy consumption data the person from whom they have obtained consent is the energy consumer (i.e. the bill payer), is overly burdensome on third parties.⁷⁰ It is worth noting that this obligation covers all DCC Users, where they are accessing data on the basis of consent, and so captures both third party Other Users and energy suppliers (e.g. where they are accessing half-hourly consumption data). Verification checks, such as those required here, are commonplace in other sectors and the Government’s view is that they provide appropriate and necessary protection.

Supporting innovation and the transition to a smarter energy system

- 6.39. Smart metering energy consumption data has the potential to support innovation and provide a platform for the transition to a smarter energy system. The review identified a number of areas where further work is required to ensure that this potential is realised, whilst also ensuring that consumer protections keep pace with innovation. A number of activities are already underway within Government to support work in this area.
- 6.40. This includes delivering on commitments made in the Clean Growth Strategy to explore how smart meter data can support personalised recommendations for saving energy, more targeted policy interventions and help businesses develop energy saving offers. We are currently considering ways to deliver this commitment, including by supporting the development of innovative energy feedback products and services for households that can help them reduce their energy consumption.
- 6.41. In relation to non-domestic consumers’ access to energy consumption data, the Government has committed up to £8.8 million to develop innovative approaches to energy management using smart meter data, tailored to the needs of smaller non-domestic sites. The Non-Domestic Smart Energy Management Innovation Competition will help develop and strengthen the market for energy management products and services for smaller non-domestic sites, helping them cut their energy costs and be more energy efficient. This will, in turn, boost productivity and contribute to UK emissions reduction targets. The research and evaluation programme associated with this competition aims to generate a wide-ranging evidence base to determine ‘what works’ in terms of non-domestic engagement with smart meter data, specifying how and why.⁷¹

⁷⁰ Section I1.5 of the SEC

⁷¹ Further details on this competition and associated evaluation can be found here:

<https://www.gov.uk/government/publications/non-domestic-smart-energy-management-innovation-competition>

6. Delivering Benefits and Facilitating Competition

- 6.42. In addition, the Government has been working to support industry parties looking to harness the smart metering infrastructure to offer services based on detailed energy consumption data and other information held on smart meters. Guidance on accessing this data via the HAN has been published by Government, building on previous work in this area and promoting routes to access data complementing that offered by the DCC.⁷²
- 6.43. The move to a smart, flexible energy system can bring significant benefits for consumers, the energy industry and the wider economy. For instance, a study for the Government estimates that the UK could save £17-40 billion across the electricity system from now to 2050 by developing flexible technologies such as storage, demand side response and interconnectors (through helping to integrate low carbon generation, reducing the costs of operating the system and helping to avoid or defer costly reinforcements to the network).⁷³ Smart metering is a crucial enabler for this transition and further details of the work underway in this area are outlined in the Smart Systems and Flexibility Plan, which was jointly published by BEIS and Ofgem in July 2017, with a progress update published in October 2018.⁷⁴ This includes a commitment to ensuring consumer interests are respected as new services are offered and new business models emerge, building on the principles of ensuring consumers are treated fairly, understand what they are buying and have their privacy protected. In addition, the plan included an action to consult on seeking powers to set regulatory requirements for smart appliances. The Government recently published its response setting out its intention to take powers to set regulatory requirements for smart appliances and base these on the principles of interoperability, data privacy, grid-stability, cyber-security and consumer protection.⁷⁵

⁷² Smart Meters, Smart Data, Smart Growth - leaflet explaining how data from smart meters is expected to transform the market for energy services. Available here: <https://www.gov.uk/government/publications/smart-meters-smart-data-smart-growth>

⁷³ An analysis of electricity system flexibility for Great Britain (2016). Available here:

<https://www.gov.uk/government/consultations/call-for-evidence-a-smart-flexible-energy-system>

⁷⁴ BEIS: Upgrading our energy system: smart systems and flexibility plan (2017) and Smart systems and flexibility plan: progress update (2018). Available here: <https://www.gov.uk/government/publications/upgrading-our-energy-system-smart-systems-and-flexibility-plan>

⁷⁵ A Government response to consultation on proposals regarding smart appliances is available here :

<https://www.gov.uk/government/consultations/proposals-regarding-setting-standards-for-smart-appliances>

7. Conclusions and Next Steps

The Framework is continuing to ensure an appropriate balance is in place that safeguards consumer privacy whilst enabling energy consumption data to be shared, supporting the development of new services and the transition to a smarter energy system.

Review conclusions

- 7.1. This review considered the extent to which the Framework is meeting its objectives in three broad areas:
 - Safeguarding consumer privacy through appropriate regulatory protections, together with a robust assurance regime.
 - Ensuring consumers receive accurate, engaging and timely information on how their data may be used and the choices they have about access to their energy consumption information.
 - Facilitating innovation in relation to data and supporting the use of energy consumption data to improve system efficiency.
- 7.2. Available evidence demonstrates that appropriate protections are in place to protect consumers where data is being shared with energy suppliers, network operators and third parties. Whilst concerns have been raised that these protections may prevent the full benefits of smart metering being realised, at this time there is no clear evidence to suggest that the Framework needs to be relaxed.
- 7.3. Furthermore, in light of research which found that the Framework provides reassurance to consumers, any change to the existing provisions would need to be supported by robust data demonstrating proportionality. In the absence of such evidence, any perceived weakening of consumer protection risks compromising consumer privacy and undermining confidence in smart metering.
- 7.4. Whilst the review concluded that appropriate protections are in place, it identified several areas where energy suppliers' awareness and approaches to implementation could be improved, building on examples of good practice in the sector. In particular, approaches to providing information to consumers about their data access choices showed significant variation.
- 7.5. The review also considered the extent to which access to smart metering energy consumption data was enabling innovation. At present, levels of innovation are broadly in line with expectations, with modest but growing interest in the potential offered by smart meter data.
- 7.6. As the rollout of SMETS2 meters continues to ramp up and the programme for enrolling SMETS1 meters into the DCC progresses, the opportunities available to access smart metering consumption data will increase. We expect this to stimulate the development of new products and services which use smart meter data and we will continue to work with industry to raise awareness and, as appropriate, reduce barriers in this area.

- 7.7. Supporting the development of these new services and raising awareness of the opportunities available to industry from accessing this data is important, but the delivery of benefits also relies on consumers being aware of opportunities and taking up these offers. This consumer demand also has the potential to drive innovation and promote competition between energy service providers.
- 7.8. We are concerned that low consumer awareness and the difficulties involved in accessing energy consumption data in the microbusiness sector could be presenting a barrier to consumers taking control of their energy use. Microbusinesses face barriers to engaging with energy efficiency, including restrictions on their ability to access consumption data, energy suppliers' ability to charge for access to this data and, relative to large business consumers, limited management time and expertise.
- 7.9. In addition to the £8.8m BEIS has invested in a Non-Domestic Smart Energy Management Innovation Competition, we intend to undertake further work in this area with a view to bringing forward proposals that will promote microbusiness consumers' access to data.

Next steps

- 7.10. In addition to undertaking further work to support innovation and promote microbusiness consumers' access to energy consumption data (paragraph 7.9), we will work with relevant partners to improve industry's approach to implementation of the Framework. We anticipate that this will take place through a variety of channels, including:
- Supporting the sharing of good practice in relation to providing information to consumers on how their energy consumption data will be used and on their data access choices (paragraphs 7.11-7.14).
 - Clarification of the Framework's interaction with wider data protection legislation (paragraphs 7.15-7.17).
 - Ongoing monitoring of the Framework's effectiveness, including consideration of any evidence that the provisions are failing to adequately protect consumers or are acting as a barrier to the delivery of benefits (paragraphs 7.18-7.22).

Sharing good practice

- 7.11. The review of the Framework identified significant variations in the approaches taken within industry to engage with consumers in relation to how their energy consumption data will be used and how they can amend their preferences (where appropriate). To support energy suppliers in further developing and refining their approaches in this area, we propose facilitating the sharing of good practice, through existing smart metering governance fora.
- 7.12. The Smart Metering Implementation Programme's Consumer Reference Group (CRG) is composed of both large and small energy suppliers, together with representatives from consumer groups and Ofgem. It therefore offers an appropriate forum through which good practice in the following areas can be considered:
- Communicating data access policies and choices to consumers ahead of installation, including use of the Data Guide;
 - Approaches to seeking consent for access to half-hourly consumption data;

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- Providing notice to consumers and keeping them informed;
 - Managing situations where landlords are responsible for paying bills on behalf of tenants;
 - Engaging microbusiness consumers;
 - Identifying and acting upon a change of tenancy or occupancy event.
- 7.13. Other areas of the Framework may also benefit from good practice sharing and we would encourage interested parties to contact the CRG secretariat with any appropriate suggestions.⁷⁶
- 7.14. We would also encourage relevant parties to consider whether, in light of the proposed discussions within CRG, amendments to the Smart Metering Installation Code of Practice (SMICoP) are required to ensure that consumers continue to receive a positive installation experience.

Promoting understanding and awareness of the Framework

- 7.15. The Framework is implemented through a range of regulatory requirements, set out across the SEC, Energy Supply Standard Licence Conditions and Energy Distribution Standard Licence Conditions.
- 7.16. Currently, many stakeholders rely on the 2012 'Government response to the consultation on the Data Access and Privacy Framework'⁷⁷ to provide them with an authoritative summary of the regulatory requirements and their rationale. This document does not reflect amendments that were made to the Framework following publication in 2012 and in places may not be consistent with the new data protection regime.
- 7.17. It is the responsibility of all industry parties to ensure that they conduct their activities in accordance with their legal obligations, both where these arise from the conditions of their licences and from wider legislation. In light of industry feedback, to support compliance we will work with relevant partners to provide further clarification in this area, including the relationship between the Framework and the new data protection regime.

Ongoing monitoring

- 7.18. In drawing its conclusions, this review undertook a comprehensive assessment of available evidence. However, experience of the Framework remains limited in a number of areas. This is particularly the case where access to energy consumption data is dependent on the installation of SMETS2 meters or relies on meters being enrolled in the DCC.
- 7.19. Further evidence is therefore expected to become available as understanding and engagement with the Framework increases. Whilst we do not anticipate that a further standalone review of the Framework will be necessary, consideration of data access and privacy will be incorporated into ongoing monitoring of the smart metering regulatory framework. Additionally, consideration of the findings from consumer

⁷⁶ crq@beis.gov.uk

⁷⁷ Available here: <https://www.gov.uk/government/consultations/smart-meter-data-access-and-privacy>

research projects, together with regular data collection and bilateral engagement with industry parties, will enable BEIS to continue monitoring the Framework's effectiveness.

- 7.20. Evidence from stakeholders will play a key role in supporting this ongoing work. BEIS has already received additional evidence which we are now considering, and we would encourage any parties who feel that there is a strong case for specific provisions of the Framework to be amended to submit evidence for consideration. In doing so, parties should include the following points:
- description of the issue identified;
 - parties impacted (and how);
 - nature and scale of benefits foregone or extra cost incurred under current arrangements;
 - options to mitigate any associated reduction in privacy safeguards;
 - proposal for resolution (including consideration of other options and reasons for rejecting).
- 7.21. Evidence cases should be submitted to BEIS (smartmetering@beis.gov.uk) for consideration.
- 7.22. In line with the ongoing transition of responsibility for the SEC to industry it is expected that any concerns or issues relating to third party Other User access to energy consumption data will be considered collaboratively within relevant industry fora in the first instance. In order to support this work, we expect SEC Parties to take steps to ensure that appropriate mechanisms are in place for privacy issues to be explored, and expert advice to be made available to the SEC Panel. Instances may also arise where guidance or amendments to the Privacy Controls Framework would be an appropriate alternative to amending the SEC.

