

Smart Metering Implementation Programme

Data access and privacy

Consultation document

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The consultation can be found on DECC's website:
http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx

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General information

Purpose of this consultation

In this consultation document the Government is seeking views on a proposed framework for smart metering data access and privacy. This includes proposals about the levels of access that suppliers, network operators and third parties should have to energy consumption data from smart meters, for which purposes, and the choices that consumers should have about this.

The Government would welcome views from all interested parties.

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Respond by: 1 June 2012

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Territorial extent:

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

How to respond:

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Responses to this consultation should be sent to smartmetering@decc.gsi.gov.uk no later than 1 June 2012.

Responses should be clearly marked "Consultation on smart metering data access and privacy"

Hard copy responses should be sent to the address above.

Additional copies:

You may make copies of this document without seeking permission. An electronic version can be found at http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx

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 address above to request alternative versions.

Confidentiality and data protection:

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

We will summarise all responses and place this summary on our website at http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx This summary will include a list of names or organisations that responded but not people's personal names, addresses or other contact details.

Quality assurance:

This consultation has been carried out in accordance with the Government's Code of Practice on consultation, which can be found here:

<http://www.bis.gov.uk/files/file47158.pdf>

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

DECC Consultation Co-ordinator
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Executive Summary

Smart meters will lead to a step change in the amount of data that will be available about consumers' energy consumption. Consumers will be able to access the information they need to understand and manage their energy use, save money on bills, and reduce carbon emissions. Smart metering energy consumption data will also enable the industry to operate more efficiently and support the provision of new energy services to help consumers manage their energy use.

Consumers' interests must be protected in the smart metering world. Concerns about privacy have been raised in many countries rolling out smart meters, and it will be important to give consumers clarity and reassurance about the ways in which their energy consumption data can be accessed, by whom, for which purposes, and the choices that consumers have about this.

In this consultation document, the Government is seeking views on a proposed framework for smart metering data access and privacy. Consultation questions on specific aspects of the Government's proposals are included within each of the following chapters. A full list of consultation questions follows this Executive Summary.

Consumer access to data

Through the Smart Metering Implementation Programme, and consistent with the Government's broader midata¹ initiative, arrangements are being put in place to enable domestic consumers easily to access their own energy consumption data. Consumers will be able to access their own energy consumption data through their in-home display, through the connection of additional devices to the Home Area Network, or by requesting information from their supplier.

These arrangements are set out in more detail in **Chapter 2**.

Supplier access to data

The Government's proposed framework for supplier access to domestic consumers' energy consumption data links the level of consumer choice to the level of data being accessed, and gives consumers control about how their data is used, except for where this is required for billing or to fulfil regulated duties.

In summary, the proposed framework would:

- Allow suppliers to access monthly (or less granular) energy consumption data, without customer consent, for billing and for the purposes of fulfilling any statutory requirement or licence obligation;
- Allow suppliers to access daily (or less granular) energy consumption data for any purpose except marketing, with clear opportunity for the customer to opt out; and

¹ More information about midata is available online at <http://www.bis.gov.uk/policies/consumer-issues/personal-data>

- Require that suppliers must receive explicit (opt-in) consent from the customer in order to access half-hourly energy consumption data, or to use energy consumption data for marketing purposes.

There would be some exceptions to this basic framework, for example to allow half-hourly energy consumption data to be used for the purposes of approved trials, provided that the consumer had the opportunity to opt out of the trial.

These proposals are set out in more detail in **Chapter 3**.

The Government is proposing to implement the framework for supplier access to data through use of licence conditions. Draft licence conditions are included at **Annex A**.

Network operator access to data

Distribution network operators have suggested that they would be able to deliver benefits through having access to domestic customers' half-hourly energy consumption data, and that they could aggregate this data such that individual households could not be identified from it.

Before giving such access to network operators, the Government is proposing that they should be required to develop and submit for approval plans detailing how privacy concerns would be addressed and what the data would be used for.

The Government is seeking views on what the arrangements should be in circumstances where network operators have not submitted such plans or they have not been approved. One option would be to apply the same basic framework for access to data as applies to suppliers, although the Government recognises that there may be important practical issues with this approach that would need further consideration.

These proposals are set out in more detail in **Chapter 4**.

Third party access to data

Consumers should be able to share their energy consumption data easily with third parties, such as switching sites and energy services companies, should they choose to.

Where consumers give third parties permission to access their energy consumption data remotely via the Data and Communications Company (DCC), the Government proposes that arrangements should be put in place to protect consumers. In particular, the Government is proposing to use the Smart Energy Code to ensure that third parties:

- Take steps to verify that the request for third party services has come from the individual living in the premises in question;
- Properly obtain consent from consumers to access their data; and
- Provide annual reminders to consumers about the data that is being collected.

In order to ensure that these requirements are complied with, the Government proposes that audit arrangements could be developed by the Smart Energy Code Panel.

These proposals are set out in more detail in **Chapter 5**.

Non-domestic sector

There are a number of differences between the domestic and non-domestic energy sectors which will affect considerations about data access and privacy in the non-domestic sector, including the variety of metering arrangements in place (for example, whether or not data is being accessed via the DCC).

The Government is seeking views on the approach to data access in the non-domestic sector, including how to enable non-domestic customers to access their own data and understand the implications of their choices.

More detail on potential arrangements in the non-domestic sector is set out in **Chapter 6**.

Full list of consultation questions

In all cases, respondents are asked to explain their answers fully and provide evidence to support their arguments where possible.

Chapter 2 – Consumer access to data

Consultation Question	
1.	Do you have any comments on the arrangements for consumer access to data through the in-home display, Home Area Network or supplier? Do you foresee any problems with any of these mechanisms? If so, how could any problems be overcome?
2.	Is there a need for any additional arrangements to enable consumers easily to access their own energy consumption data directly from their supplier, free of charge and in a common format?

Chapter 3 – Supplier access to data

Consultation Question	
3.	Do you have any comments on the overall balance and workability of the proposals for supplier access to data?
4.	Do you agree with the proposed approach to defining supplier regulated duties, and that suppliers should be able to access monthly (or less granular) energy consumption data for these purposes without customer consent? Would the proposed approach restrict suppliers from undertaking any essential activity, or present any other problems?
5.	Do you agree with the proposal to enable suppliers to access daily (or less granular) energy consumption data, and use this for any purpose except marketing, provided that the customer is made aware of this and given the opportunity to opt out? What would be the implications for consumers and competition of this approach?
6.	Do you agree with the proposal to require suppliers to obtain explicit (opt-in) consent from the customer in order to access half-hourly energy consumption data?
7.	Do you agree with the proposal to require suppliers to obtain explicit (opt-in) consent from the customer in order to use energy consumption data for marketing purposes? Do you agree with the proposed definition of marketing,

Consultation Question	
	and in particular, that free advice should be excluded from the proposed definition?
8.	Do you agree with the Government's proposed exceptions to the basic framework for supplier access to data – to accommodate theft detection and prevention, accurate billing, customer queries and trials? Are there any other important uses of energy consumption data that need to be covered in exceptions to the basic framework?
9.	Do you agree with the proposal to require suppliers to explain clearly to customers what energy consumption data will be accessed, for which purposes, and the choices that customers have about this, and to provide annual reminders to their customers about this?
10.	Do you agree with the proposed approach to the way in which suppliers should facilitate opt-out and opt-in choice mechanisms?
11.	Do you agree with the proposed use of licence conditions to implement requirements relating to supplier access to data? Would any of the detailed arrangements, or any additional measures, be more effectively set out elsewhere, for example in an industry code, a standalone code of practice or guidance?
12.	Do you agree that the licence conditions as drafted would effectively implement the proposed policy approach to supplier access to data? Do any specific areas of the draft licence conditions need amendment or clarification?
13.	Is there a need for any consequential changes to existing licence conditions or codes to ensure that the proposed requirements on suppliers work as intended?
14.	Do you have any comments on the proposed approach to timing of implementation of proposals relating to supplier access to data?

Chapter 4 – Network operator access to data

Consultation Question	
15.	Do you agree with the proposal to allow network operators to access half-hourly energy consumption data, without customer consent, for the purposes of developing and maintaining efficient, co-ordinated and economical systems for the distribution of electricity and gas, if they have had plans for aggregation approved? To what extent would this approach address potential consumer concerns about privacy in relation to network operator access to data?
16.	If network operators' plans for aggregation have not yet been submitted or approved, do you agree that the proposed framework for supplier access to data

Consultation Question	
	should also apply to network operators? Would any alternative approach be more effective?
17.	Do you agree with the proposed approach to implementation of requirements relating to network operator access to data? What would be the practical implications of the proposed approach to implementation, and how could any problems be overcome?
18.	Do you agree that the licence conditions as drafted (including the proposed amendment to supply licence condition 22) would effectively implement the proposed policy approach to network operator access to data? Do any specific areas of the draft licence conditions need amendment or clarification?
19.	Is there a need for any consequential changes to existing licence conditions or codes to ensure that the proposed requirements on network operators work as intended?
20.	Do you agree that technical data (such as electricity quality and voltage readings) which does not show energy consumption data should be outside the scope of the Government's data access and privacy framework?

Chapter 5 – Third party access to data

Consultation Question	
21.	Do you agree with the proposal to require third parties to take steps to verify that the request for third party services has come from the individual living in the premises in question?
22.	Do you agree that the Customer Identification Number (CIN) process would enable third parties adequately to demonstrate verification of the individual consumer? Which of the two CIN models described is preferable? Would any alternative approach be more effective?
23.	Do you agree with the proposal to require third parties wishing to access data via the DCC to self-certify that where it is required, customer consent has been properly obtained?
24.	Do you agree with the proposal to require third parties to provide annual reminders to customers from whom they are collecting data on an ongoing basis?
25.	Do you agree with the proposed use of the Smart Energy Code to set out requirements relating to third party access to data?

Consultation Question

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| 26. | Do you have any comments on the proposed option of the SEC Panel arranging an independent audit function to check third party compliance with data access requirements? Would any alternative approach be more effective? |
|-----|---|

Chapter 6 – Non-domestic sector

Consultation Question

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|-----|---|
| 27. | Is there a need for any specific arrangements to enable non-domestic customers to allow third parties to access their data? Should such arrangements apply only to opted-in smart meters or more widely? |
| 28. | What would be the advantages and disadvantages of applying the data access framework proposed for domestic customers equally to the non-domestic sector? Should this apply only to opted-in smart meters or more widely? |
| 29. | Is there a need for any additional obligations to ensure that network operators can gain access to non-domestic customers' energy consumption data and other data, even where meters are opted out of the DCC, or in the case of advanced meters? What would be the practical challenges in facilitating such access? |
| 30. | Is there a need for any form of information obligation on suppliers to ensure that non-domestic consumers are aware of the potential for particular choices to limit their ability to access their own data or share this with third parties? |

Chapter 1 - Introduction

Access to more detailed and more accurate energy consumption data from smart meters has the potential to deliver benefits for consumers, suppliers and the energy system more widely, and to stimulate innovation and competition in the developing energy services market.

In order to ensure consumers' interests are protected, the Government is developing a data access and privacy framework to provide clarity about the ways in which energy consumption data from smart meters can be accessed, by whom, for which purposes, and the choices that consumers should have about this.

Introduction to smart metering

- 1.1 The Government's vision is for every home and smaller businesses in Great Britain to have smart electricity and gas meters. Domestic consumers will also be offered an in-home display. The roll-out of smart meters will play an important role in Britain's transition to a low-carbon economy and help us meet some of the long-term challenges we face in ensuring an affordable, secure and sustainable energy supply.
- 1.2 Consumers will have real-time information on their energy consumption to help them control energy use, save money and reduce emissions. There will be an end to estimated billing and switching between suppliers will be smoother and faster which will be beneficial to many customers. New products and services will be supported in a vibrant, competitive, more efficient market in energy and energy management. Suppliers will have access to accurate data for billing and to improve their customer service. They will also be able to reduce costs, for example by reducing call centre traffic, removing the need for a site visit to read meters and better manage debt. Energy networks will have better information upon which to manage and plan current activities and the move towards smart grids which support sustainable energy supply.
- 1.3 Smart meters will be installed over two implementation phases; the Foundation Stage and mass roll-out. During the Foundation Stage, which began in April 2011, the Government is working with industry, consumer groups and other stakeholders to ensure all the necessary groundwork is completed for mass roll-out. Mass roll-out will start in 2014 and be completed in 2019. The Foundation Stage is crucial to the successful mass roll-out of smart meters. Some consumers will receive smart meters during the Foundation Stage, as the energy companies start up their programmes in preparation for the mass roll-out. The majority of consumers will receive their smart meters during the mass roll-out.

Development of a data access and privacy framework

The challenge

- 1.4 Smart meters will lead to a step change in the amount of data that will be available about energy consumption. Consumers will be able to access the information they need to understand and manage their energy use, save money on bills, and reduce carbon emissions. Smart metering energy consumption data will also enable the industry to operate

more efficiently and support the provision of new energy services to help consumers manage their energy use.

1.5 The Government is clear that its data access and privacy policy framework for the roll-out of smart meters needs to:

- Protect consumers' interests, in particular by addressing concerns that consumers may have about privacy;
- Enable proportionate access to data by authorised parties to ensure that benefits can be delivered; and
- Promote competition and innovation in the developing energy services market.

1.6 The Smart Metering Implementation Programme Response to Prospectus Consultation², published in March 2011, established several key principles to guide policy on data access and privacy, including that:

- The Government would follow international best practice in undertaking 'Privacy by Design'. This means that privacy issues would be considered and embedded into the overall design of the Programme from the start;
- Consumers should have a choice about how their smart metering data is used and by whom, except where it is required to fulfil regulated duties;
- The Government was minded to define regulated duties narrowly, precisely because consumers would not have a choice about allowing access to their data for these purposes; and
- Consumers should be able to share their consumption data easily with other parties, should they wish to.

Call for Evidence

1.7 In a Call for Evidence in Autumn 2011, the Government sought views and evidence about the level of data access that was required by suppliers, network operators and third parties for different purposes³. The Call for Evidence also asked questions about the ways in which consumer and third party access to data should work in practice.

1.8 Non-confidential responses to the Call for Evidence have been published on the DECC website⁴. A summary of responses received is included at Annex B. Some of the key, common themes emerging from responses included:

- Calls for a proportionate response, that protects consumers and enables benefits to be delivered;
- An emphasis on the importance of clear, simple information to consumers about the choices they have, and ensuring that choices can be exercised easily;
- The need for a level playing field between suppliers and third parties, to avoid giving suppliers unfair competitive advantage;

² Smart Metering Implementation Programme. Response to Prospectus Consultation, Supporting Document 1 of 5: Data Access and Privacy <http://www.decc.gov.uk/assets/decc/Consultations/smart-meter-imp-prospectus/1477-data-access-privacy.pdf> (March 2011)

³ Smart Metering Implementation Programme. A call for evidence on data access and privacy http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (August 2011)

⁴ Non-confidential responses to the Call for Evidence are available at http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx

- The need for flexibility in the data access and privacy framework to accommodate future changes in the energy market (for example, on settlement);
- The need to continue learning from trials, tests and experience of smart metering throughout the Foundation Stage and beyond;
- A general view that whilst some privacy-enhancing technologies (such as aggregation and anonymisation techniques) were being developed, it was too early to be prescriptive about such technologies at this stage.

1.9 The Government has analysed economic evidence provided by stakeholders about the potential benefits that could be delivered from enabling different parties to access different levels of energy consumption data. Updated Impact Assessments for the Smart Metering Implementation Programme as a whole have been published alongside this consultation document⁵.

1.10 In addition to analysing responses to the Call for Evidence, the Government has reviewed other literature and research on smart metering data access and privacy to develop the evidence base. The Government has also held discussions on its developing policy with a range of different interest groups. This has included focussed workshops and meetings with suppliers, network operators, energy services companies, consumer groups, privacy groups and academics. The Government has also met regularly with Ofgem and the Information Commissioner's Office, the independent regulator of the Data Protection Act 1998.

EU and international developments

1.11 The Government has followed wider EU and international developments on smart metering data access and privacy and sought to learn lessons from experience in other countries. These developments include:

- Opinions of the Article 29 Data Protection Working Party, including Opinions on smart metering and the definition of consent⁶, which are precursors to the European Commission's Recommendation to prepare for the roll-out of smart metering systems (see later in this chapter);
- Proposed reform of the 1995 European Data Protection Directive (see later in this chapter);
- Recommendations of the European Regulators Group for Electricity and Gas (EREG) on regulatory aspects of smart metering⁷, and of the European Task Force Smart Grids⁸;
- Developments in individual EU Member States, where there are a range of approaches, from countries that allow network operators to have unrestricted access to data with more

⁵ DECC, Smart meter roll-out for the domestic sector (GB): Impact Assessment, and Smart meter roll-out for the non-domestic sector (GB): Impact Assessment
http://www.decc.gov.uk/en/content/cms/tackling/smart_meters/smart_meters.aspx (April 2012)

⁶ Article 29 Data Protection Working Party, Opinion 12/2011 on smart metering
http://idpc.gov.mt/dbfile.aspx/WP_183.pdf (April 2011) and Opinion 15/2011 on the definition of consent
http://ec.europa.eu/justice/data-protection/article-29/documentation/opinion-recommendation/files/2011/wp187_en.pdf (July 2011);

⁷ European Regulators Group for Electricity and Gas, Final Guidelines of Good Practice on Regulatory Aspects of Smart Metering for Electricity and Gas http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/CUSTOMERS/Smart%20metering/CD/E10-RMF-29-05a_GGP_SM_EoC_8-Feb-2011.pdf (February 2011)

⁸ Task Force Smart Grids, Expert Group 2: Regulatory Recommendations for Data Safety, Data Handling and Data Protection http://ec.europa.eu/energy/gas_electricity/smartgrids/doc/expert_group2.pdf (February 2011)

limited data passed to suppliers, to those where readings to monitor energy usage are taken only every two months unless consent for more frequent readings is given;

- Developments in the USA, where recently authorities in a number of states (for example, the California Public Utilities Commission) have set out detailed rules around data access and privacy, and where the Green Button initiative aims to give consumers access to their own energy usage information in a downloadable, easy-to-use electronic format⁹; and
- Experience in other countries, including Canada (and its approach to Privacy by Design), and Australia.

1.12 The Government will continue to monitor such developments and would welcome any additional information that stakeholders may have about approaches to data access and privacy in other countries.

Evidence of consumer concern

1.13 It is difficult to gauge precisely the level of consumer concern about data access and privacy in respect of smart metering. Research suggests that compared with other issues (such as cost, usability and reliability of equipment) privacy and use of data do not feature particularly prominently in most consumers' lists of concerns about smart metering¹⁰. Suppliers installing early smart meters have pointed to very low levels of concern about privacy amongst their customers, and very low opt-out rates from the provision of half-hourly energy consumption data.

1.14 On the other hand, research for Which? showed that, given a choice, more than seven in ten members of the public (71%) would prefer suppliers to access their smart metering data weekly or less often¹¹. Consumer Focus research has shown that even where they are relatively tolerant about data sharing, consumers want transparency, control about whether their data is collected or shared, and the ability to change their minds¹². Evidence from Ofgem's Consumer First Panel has pointed to the importance to consumers of simplicity, clarity and the avoidance of extra "noise and confusion" in their lives – with a particular concern around unsolicited marketing¹³. Experience in the Netherlands has shown that underestimating potential concerns about privacy can undermine public confidence in smart metering in general. There is also evidence from other sectors that consumers are becoming increasingly aware of and concerned about data protection¹⁴. There is general consensus amongst stakeholders that even if consumer concern about smart metering privacy is relatively low at present, the potential for it to become an issue should not be underestimated.

Privacy Charter

⁹ More information on the Green Button initiative is available at <http://www.whitehouse.gov/blog/2011/11/21/empowering-customers-green-button>

¹⁰ See, for example, FDS International Report for Ofgem on Consumers' views of smart metering <http://www.decc.gov.uk/assets/decc/consultations/smart-meter-imp-prospectus/227-consumer-views-smart-metering.pdf> (July 2010)

¹¹ Energy 'Omnibus' Research – Smart Meters, for Which? http://www.westminsterforumprojects.co.uk/forums/slides/GeorginaNelson_May11.pdf (May 2011)

¹² See, for example, Consumer Focus research Private Lives: a people's inquiry into personal information http://www.demos.co.uk/files/Private_Lives_-_web.pdf (2010)

¹³ Ofgem Consumer First Panel Year 3, Report from the third set of workshops, Smart metering data privacy issues <http://www.ofgem.gov.uk/Sustainability/Cp/CF/Documents1/Panel%20report%202011.pdf> (June 2011)

¹⁴ See, for example, Report on the Findings of the Information Commissioner's Office Annual Track 2011: Individuals http://www.ico.gov.uk/about_us/research/information_rights.aspx (October 2011).

- 1.15 In the Response to Prospectus Consultation, 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 have about this. The Charter is not intended to take the place of regulatory requirements where these are appropriate. Instead, the Charter will need to reflect any regulatory framework that is put in place – proposals for which are set out in this consultation document. The Government will look to suppliers to develop the Charter and ensure that it is supported by consumer groups and other industry parties. The Government has said that it will review progress made and decide whether any formal obligation is needed on suppliers to deliver a Charter.
- 1.16 Ahead of the development of the Privacy Charter, the Energy Retail Association has developed a set of privacy commitments¹⁵. These commitments inform consumers about the steps the Big Six energy suppliers will take now, during the Foundation Stage and in advance of the Government's policy decisions, to make sure that consumers are aware how and why information generated from smart meters is used, and the choices consumers have in sharing this information with their energy supplier.

Privacy Impact Assessment

- 1.17 In line with best practice, the Government has been developing a Privacy Impact Assessment to cover the range of potential data protection and privacy risks across the end-to-end smart metering system and to explain the ways in which these risks will be addressed. The Privacy Impact Assessment will take account of proposals set out in this consultation document, as well as developments across the Smart Metering Implementation Programme more widely. The Government intends to discuss a draft of the Privacy Impact Assessment with key stakeholder groups before it is published.

Security

- 1.18 In order to ensure the ongoing security of smart meter systems the Government is taking a 'secure by design' approach, in which security concerns are considered and addressed at every stage throughout the development lifecycle. To support this approach, the Government has produced security requirements to mitigate, within an agreed tolerance, the anticipated risks that the end-to-end smart metering system will introduce. These requirements provide for key security controls in areas such as the encryption of sensitive data, checks on the validity of critical commands sent within the system, and the tamper resistance of metering equipment (amongst other areas). In addition, the Government is developing an assurance regime that will enable security arrangements to be reviewed on an ongoing basis in order to maintain the security of smart metering systems in both the Foundation Stage and mass roll-out.

Compatibility with legal framework

Data Protection Act

- 1.19 The Data Protection Act 1998 establishes a framework of rights and duties which are designed to safeguard personal data. The Government's policy on data access and privacy in respect of smart metering is designed to address more specific questions about the

¹⁵ The ERA's privacy commitments are available at <http://www.energy-retail.org.uk/smartmeters/smart-meter-policy-work/>

choices consumers should have about smart metering, and the levels of energy consumption data that it is appropriate for suppliers and others to access to carry out essential functions connected to the provision of energy. The Information Commissioner's Office has supported this approach, suggesting that sector-specific provisions, that complement the Data Protection Act, might be appropriate in the case of smart metering.

- 1.20 The regime that the Government is proposing to put in place may impose tighter restrictions on the collection and use of energy consumption data than the Data Protection Act would on its own. The Government's proposed regime would, for example, limit the circumstances under which suppliers could process energy consumption data without consent, thereby specifying what will amount to lawful conduct in this regard, in the context of smart metering.
- 1.21 The Data Protection Act would continue to apply in conjunction with any smart metering regime that the Government put in place. Suppliers and other data users would continue to have to comply with relevant requirements under the Act (for example, obligations to register with the Information Commissioner's Office and inform it about personal data being processed, and to comply with the eight data protection principles). Consumers would also retain their rights under the Act (including rights to access information held about them, to object to processing that is causing them distress, and to prevent processing for direct marketing).
- 1.22 Personal data are defined in the Data Protection Act as "*...data which relate to a living individual who can be identified from those data, or from those data and other information which is in the possession of, or is likely to come into the possession of, the data controller*". The Government's view is that energy consumption data from smart meters should be considered to be personal data for the purposes of the Act. This view is supported by the Information Commissioner's Office and Opinion 12/2011 of the Article 29 European Data Protection Working Party¹⁶.
- 1.23 The proposals in this consultation document focus on the framework for access to smart metering energy consumption data, which have been identified by consumer groups as the primary area of concern. A range of parties may wish to access other types of smart metering data, such as technical data required by network operators (see Chapter 4). Such data may still constitute personal data according to the Data Protection Act, and in these cases, the Data Protection Act would apply.
- 1.24 It is the legal responsibility of all industry participants to ensure that they comply with the Data Protection Act (and any other relevant legislation) to the extent that it applies to them. Under the Data Protection Act, data controllers must ensure that any processing of personal data for which they are responsible complies with the Act. Generally speaking, suppliers, network operators and third parties accessing energy consumption data are likely to be data controllers, with the Data and Communications Company (DCC) potentially acting as a data processor on their behalf, although this will depend on the exact nature of the activity being undertaken and the contractual basis for it. In any case, the Government believes it appropriate that the DCC should handle energy consumption data in line with the principles of the Act, and in a way which does not prevent others from fulfilling their own obligations under the Act. Chapter 3 sets out more detail on the DCC's role in data access.

16 Article 29 Data Protection Working Party Opinion 12/2011 on Smart Metering
http://idpc.gov.mt/dbfile.aspx/WP_183.pdf (April 2011)

Data Protection Regulation

1.25 The EU is proposing a comprehensive reform of the 1995 European Data Protection Directive¹⁷. The proposed Data Protection Regulation (which would be directly applicable and supersede certain provisions of the Data Protection Act were it to come into force) includes a number of elements that could have implications for smart metering data access and privacy. Negotiations across Member States on the EU's proposals are likely to continue over the coming months. The Government will keep track of the proposals as they develop.

Commission Recommendation

1.26 In March 2012 the European Commission adopted a Recommendation to prepare for the roll-out of smart metering systems¹⁸. Amongst other things, the Recommendation addresses data protection issues, including development of Privacy Impact Assessments, use of privacy-enhancing technologies, minimisation of data collection, and storage of data. The Government will continue to consider the proposals in this consultation document in light of the Commission's Recommendation.

Human Rights Act

1.27 The Government's Impact Assessment of the smart meter roll-out includes an assessment of compatibility with the Human Rights Act¹⁹.

Structure of this document

1.28 This consultation document seeks views on the Government's proposed approach to smart metering data access and privacy. The central issues this document addresses are:

- How to ensure that domestic consumers are able easily to access their own smart metering energy consumption data. This is covered in **Chapter 2**.
- What access energy suppliers should have to domestic consumers' smart metering energy consumption data, for which purposes, and what choices consumers should have about this. This is covered in **Chapter 3**.
- What access network operators should have to domestic consumers' smart metering energy consumption data, for which purposes, and what choices consumers should have about this. This is covered in **Chapter 4**.
- How to ensure that domestic consumers are able easily to share their own smart metering energy consumption data with third parties (such as energy services companies and switching sites), should they choose to. This is covered in **Chapter 5**.
- What the arrangements should be for access to smart metering energy consumption data in the non-domestic sector. This is covered in **Chapter 6**.

1.29 Consultation questions on specific aspects of the Government's proposals are included within each of these chapters. A full list of consultation questions precedes this chapter.

¹⁷ Details of the EU's proposed reforms are available online at http://ec.europa.eu/justice/newsroom/data-protection/news/120125_en.htm (January 2012)

¹⁸ European Commission Recommendation on preparations for the roll-out of smart metering systems http://ec.europa.eu/energy/gas_electricity/smartgrids/smartgrids_en.htm (March 2012)

¹⁹ DECC, Smart meter roll-out for the domestic sector (GB): Impact Assessment http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

1.30 Also included with this consultation document are:

- draft licence conditions setting out obligations on suppliers and network operators at **Annex A**; and
- a summary of responses received to the Government's Call for Evidence on data access and privacy at **Annex B**.

Next steps

1.31 The Government will consider responses received to this consultation document. Subject to responses received, and ongoing engagement with a range of stakeholders, the Government intends to prepare a response to consultation, and prepare any necessary regulations for Parliamentary scrutiny, later in the year.

Chapter 2 – Consumer access to data

Consistent with the midata initiative²⁰, the Government is clear that consumers should be able easily to access their own smart metering energy consumption data, and share it with third parties, should they choose to. This will enable consumers to use their data to reduce energy consumption and save money on bills. Research highlights that consumers are increasingly aware that their personal data has a commercial value, that they want to have control over such data, and that they would consider sharing their data if it is clear that they will derive benefit from this²¹.

This chapter describes the three basic ways in which domestic consumers will be able to access and use their own smart metering energy consumption data. Chapter 5 explains the routes by which domestic consumers would be able to share their data with third parties, should they choose to.

Access through the in-home display (IHD)

- 2.1 Suppliers will be required to offer domestic customers an in-home display (IHD) on installation of a smart meter. This will enable domestic consumers to see information about their energy consumption displayed in near real time. The Government's consultation on the Consumer Engagement Strategy explains how direct feedback via the IHD can play a key role in helping consumers understand their energy use and reduce consumption²².
- 2.2 Minimum requirements for IHDs will be set out in the Smart Metering Equipment Technical Specifications (SMETS), and are likely to include, amongst other things, a requirement that the IHD must be capable of displaying information on the 'current' tariff and comparative consumption information (for example, showing electricity or gas consumption this month, compared with last month). There will also be requirements designed to protect the security of the smart metering system including the IHD.

Access through the Home Area Network (HAN)

- 2.3 Consumers will be able to access data that is stored on their smart meter, should they choose to. The Smart Metering Equipment Technical Specifications will require that smart meters must be capable of storing 13 months' worth of consumption data, at half-hourly consumption intervals. SMETS will also require that the smart metering equipment is capable of sharing consumer information across a secure communication link to a consumer

²⁰ More information about midata is available online at <http://www.bis.gov.uk/policies/consumer-issues/personal-data>

²¹ See, for example, Consumer Focus research Private Lives: a people's inquiry into personal information http://www.demos.co.uk/files/Private_Lives_-_web.pdf (2010) and Accenture, Revealing the Values of the New Energy Consumer http://www.accenture.com/SiteCollectionDocuments/PDF/Resources/Accenture_Revealing_Values_New_Energy_Consumer.pdf (2011)

²² DECC, Smart Metering Implementation Programme - Consumer Engagement Strategy: Consultation document http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

device. The current expectation is that consumers would be able to securely connect additional devices to the Home Area Network to capture this data.

- 2.4 From a privacy perspective, it will be important to ensure that only individuals living at the premises in question are able to access data via this route – and not, for example, someone on a laptop outside the premises who can join that HAN. SMETS will set out the security requirements for the smart metering equipment.
- 2.5 It will also be important to ensure that when people move home, there are checks in place to prevent the new resident from accessing data about the previous resident, and that when people change supplier, the new supplier is not able to access data from the period before they became the registered supplier (unless the consumer gives the new supplier permission). SMETS will include requirements for capability to restrict access to personal data on the HAN and user interfaces. As part of its access control checks, the Data and Communications Company (DCC) would check that the supplier requesting data is the registered supplier for the meter point in question.
- 2.6 The Call for Evidence on data access and privacy sought views on consumer access to data via the HAN²³. The Government will continue to consider some of the issues raised in responses (for example, around communications hub functionality) through the SMETS development process and HAN trial.

Access through the supplier

- 2.7 Basic information about energy consumption will be included in bills from suppliers²⁴. Some suppliers may choose to send customers more detailed information or advice about their energy consumption, either alongside bills or in separate communications, although consumers would have a choice about the level of data that can be used for this (see Chapter 3). The Government's consultation on the Consumer Engagement Strategy explains the key role that indirect feedback such as this can play in helping consumers to understand their energy use and reduce consumption²⁵.
- 2.8 Consumers will also be able to contact their supplier to ask them specific questions about their energy usage (or any other aspect of their smart meter). Some suppliers may choose to develop online portals for consumers to use for this purpose, although it will be important for suppliers to have alternative methods for consumers who are unable to access the internet. As is standard practice in many different sectors currently, suppliers would be expected to have their own checks in place to ensure that they only share relevant information with the account holder.
- 2.9 Through the midata project, the Government is working with leading businesses and consumer groups across a range of sectors to give individuals more access to, and control over, the data that companies hold on them²⁶. The aim is to enable consumers to view, access and use their personal and transaction data in a way that is portable and safe. Making such information available in standardised format will also help to encourage

²³ A summary of responses to the Call for Evidence is provided at Annex B.

²⁴ The provision of information in bills is also being considered as part of Ofgem's Retail Market Review. See <http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Pages/rmr.aspx>

²⁵ DECC, Smart Metering Implementation Programme - Consumer Engagement Strategy: Consultation document http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

²⁶ More information about midata is available online at <http://www.bis.gov.uk/policies/consumer-issues/personal-data>

innovation in the energy services market. The Big Six energy suppliers have signed up to the Government's vision for midata and the TACT (Transparency, Access, Control and Transfer) approach²⁷.

2.10 Under the Data Protection Act, consumers have a right to submit a subject access request to their supplier. Under these requests, data controllers are obliged to tell individuals whether their personal data is being processed and, if so, to provide them with a copy of that data along with certain other information. Subject access requests must be responded to within 40 days, but information is typically provided in paper format and for this reason is not readily reusable²⁸. Another key issue for consumers is knowing that data is being held in the first place, and this is why Transparency is the first stage in the midata programme.

2.11 Beyond the principles of the midata initiative and the requirements in the Data Protection Act, the Government is interested in views about whether there should be any specific obligations on suppliers to enable consumers to request and obtain from their supplier their energy consumption data, free of charge and in a common format.

Consultation Question

- | | |
|-----------|--|
| 1. | Do you have any comments on the arrangements for consumer access to data through the in-home display, Home Area Network or supplier? Do you foresee any problems with any of these mechanisms? If so, how could any problems be overcome? |
|-----------|--|

Consultation Question

- | | |
|-----------|--|
| 2. | Is there a need for any additional arrangements to enable consumers easily to access their own energy consumption data directly from their supplier, free of charge and in a common format? |
|-----------|--|

²⁷ More information is available at <http://www.bis.gov.uk/news/topstories/2011/Nov/midata>

²⁸ Guidance from the Information Commissioner's Office on Subject Access Requests is available at http://www.ico.gov.uk/for_organisations/data_protection/subject_access_requests.aspx

Chapter 3 - Supplier access to data

In line with EU recommendations²⁹, the Government has been clear that consumers should have a choice about how their smart metering data is used and by whom, except where this is required to fulfil regulated duties.

This chapter sets out the Government's proposals on the level of access that suppliers should have to domestic consumers' energy consumption data, for which purposes, and the choices that domestic consumers should have about this.

Overview of approach

3.1 The Government is clear that its framework for supplier access to data needs to be:

- balanced – so that it protects consumers, enables delivery of benefits and facilitates competition in the developing energy services market;
- simple – such that it can be easily understood by consumers, implemented by industry and effectively enforced; and
- flexible – to take account of future developments and wider regulatory changes.

3.2 In developing a workable framework, the Government has considered a range of issues, including: the appropriateness of different consumer choice mechanisms (opt-in and opt-out); the extent to which the choice mechanism should depend on the granularity of data that is being collected (for example, consumption data that relates to a monthly, daily or half-hourly period); and how prescriptive to be about regulated duties and any other uses of data where consumers would not have a choice. The Data Protection Act would continue to apply alongside any data access and privacy framework that the Government put in place for smart metering.

3.3 In addition to these strategic considerations, the Government has analysed a range of potential uses of energy consumption data by suppliers, to develop a basic framework, and to consider whether exceptions to that basic framework would be justified in particular cases. The basic framework proposed would allow suppliers to access:

- **Monthly (or less granular) energy consumption data, without customer consent, for billing and for the purposes of fulfilling regulated duties;**
- **Daily (or less granular) energy consumption data, with clear opportunity for the customer to opt out; and**
- **Half-hourly energy consumption data only if the customer opts in.**

3.4 The Government's detailed analysis of different data uses and exceptions to the basic framework follows below. The Government's policy proposals, rationale and proposed approach to implementation are set out in full later in this Chapter.

²⁹ European Regulators Group for Electricity and Gas, Final Guidelines of Good Practice on Regulatory Aspects of Smart Metering for Electricity and Gas http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/CUSTOMERS/Smart%20metering/CD/E10-RMF-29-05a_GGP_SM_EoC_8-Feb-2011.pdf (February 2011)

Analysis of potential data usage by suppliers

Billing

Background

- 3.5 Suppliers need to access energy consumption data to ensure that they are able to bill their customers accurately. Currently, suppliers rely on meter readings taken manually either by the consumer, or by representatives of the energy supplier on a visit to the property. Such readings may be taken roughly every quarter, or less frequently. Where actual meter readings are not available, bills are issued based on estimates of energy consumption for the period. A major benefit of smart metering – for consumers and suppliers – is that the availability of actual meter readings to suppliers will bring an end to estimated billing.
- 3.6 Around 14% of the customer base currently uses pre-payment. At the moment, meter readings from those on pre-payment can be taken each time the customer tops up the account, in addition to other scheduled readings which may be taken by suppliers. This enables the supplier to reconcile the amount paid with the amount of energy consumed. Suppliers may want to continue doing this in the future. These arrangements would be explained to pre-payment customers.
- 3.7 With smart metering, there are likely to be other ways in which tariffs are set and customers are billed. For example, smart meters will be able to measure the energy used during different time-of-use periods by recording to different time-of-use registers. To generate a bill for a time-of-use customer a supplier would need to read all active registers at the end of each billing period. Any conditions around access to energy consumption data would be made clear in terms and conditions at the point at which customers chose to move onto such tariffs. (Access to energy consumption data for time-of-use purposes is discussed more fully later in this chapter).
- 3.8 Some suppliers have also suggested that, for the purposes of accurate billing, it may be necessary to take ad hoc readings of consumption at the point at which a consumer changed tariff.

Government position

- 3.9 The Government's view is that monthly consumption data will suffice for billing in the majority of cases, and that suppliers should be able to access data at this level without obtaining customer consent.
- 3.10 The Government can see the case for enabling suppliers to access daily energy consumption data on an ad hoc basis, without customer consent, for the purposes of accurate billing when a consumer changes tariff. The Government also recognises that its policy framework should be able to accommodate access to consumption data relating to different time periods if required for the purposes of time-of-use tariffs to which the consumer has signed up, and to accommodate more regular readings from pre-payment meters as top-ups are made.

Detection and prevention of theft

Background

3.11 Suppliers are required by licence to “take all reasonable steps” to detect and prevent theft of electricity³⁰. There is currently no equivalent obligation for gas, although there is an obligation on licensees to perform gas safety inspections every two years, which can help in detecting tampering³¹. Ofgem is consulting on introducing a new licence condition for gas, to establish requirements to detect and prevent theft and investigate suspected theft³². Ofgem is also undertaking a wider review of theft management – including consideration of the incentives to pro-actively detect and prevent theft.

3.12 Currently, theft of energy is detected through a combination of triggers, including tip-offs, meter inspections, suspicious consumer behaviour (for example, refusing to allow meter readings to be taken), tamper alerts, and high-level analysis of consumption data. Costs of theft are currently added to all consumers’ bills, and so reducing theft would be of benefit to all consumers.

Evidence

3.13 There was clear consensus in responses to the Call for Evidence on data access and privacy from consumer groups and suppliers that suppliers should not need customer consent in order to access data for the purpose of detecting and preventing theft. Tamper alerts alone were seen as unreliable, as they could be triggered simply by the customer knocking the meter, and theft may occur by bypass without any meter interference.

3.14 The general view from suppliers was that daily energy consumption data would be appropriate for the purposes of detecting and preventing theft – many agreed that half-hourly data would not be necessary. However, others have suggested that in detecting theft, a change in the trend of energy consumption over time is more important than any individual fluctuation on a single day (which could be attributed to other things), so even daily data may not be necessary. The Information Commissioner’s Office has said that it would want to see clear justification if granular consumption data were to be collected from all customers all the time for the purposes of detecting and preventing theft. The ICO suggested that more intrusive investigation of usage might only be appropriate once a trigger had been hit and there were grounds to suspect theft.

3.15 The Impact Assessment of the smart meter roll-out for the domestic sector assumes £236 million present value benefit up to 2030 from reduced theft. There were claims from some suppliers in the Call for Evidence that additional savings, above and beyond those assumed in the Impact Assessment, could be delivered through access to daily energy consumption data, although until specific pilots have been conducted in this area and smart meters are more widely installed, it is hard to verify these higher figures precisely.

Government position

3.16 The Government believes it would be inappropriate to give consumers choice about whether their data should be used for the purposes of detecting and preventing theft (as there is a high risk that those committing theft would refuse access to their data), and can see how access to better consumption data will help to meet the existing licence obligation

³⁰ Electricity Supply Licence condition 12.1.

³¹ Gas Supply Licence condition 12.8

³² Ofgem, Tackling gas theft: The way forward

[http://www.ofgem.gov.uk/Markets/RetMkts/Compl/Theft/Documents1/Tackling%20gas%20theft%20decision\(1\).pdf](http://www.ofgem.gov.uk/Markets/RetMkts/Compl/Theft/Documents1/Tackling%20gas%20theft%20decision(1).pdf)
(March 2012)

relating to theft of electricity (and the anticipated future obligation in respect of gas). However, suppliers should still make clear to consumers that detection and prevention of theft is one of a range of uses to which their data could be put.

- 3.17 The Government's view is that monthly energy consumption data should suffice in the majority of cases for the purposes of detecting and preventing theft, but believes that it would be appropriate to enable suppliers to access more granular (up to daily) energy consumption data from certain customers, without the need for consent, where suppliers have reasonable suspicion that theft is being committed. This data should be accessed for no longer than is necessary to establish whether or not theft is being committed. Without this exception to the basic framework, there is a risk that customers stealing energy would opt out of their daily data being accessed.
- 3.18 The Government recognises that its policy framework for data access and privacy should be able to accommodate future changes to the regulatory regime on theft.

Settlement

Background

- 3.19 Wholesale market settlement is the process that reconciles the amount of energy that an electricity supplier or gas shipper has arranged to be put on to a distribution network and the amount that has (or is estimated to have) been used by its customers. Where an electricity supplier or a gas shipper is not able to match its allocated amount of energy with its energy purchases for each settlement period, it will be required to pay charges to reflect the costs incurred by the System Operator in balancing the system. The rules that support electricity settlement arrangements are set out in the Balancing and Settlement Code. In gas, they are set out in the Uniform Network Codes; separately for large gas transporters and Independent Gas Transporters.
- 3.20 Electricity is currently settled on a half-hourly basis. Larger industrial customers already have half-hourly meter readings. For domestic and smaller industrial customers, half-hourly figures are currently estimated from annual consumption totals using typical consumer profiles provided by Elexon. The estimates can then be refined by reconciling them against actual meter readings.
- 3.21 Gas is currently settled on a daily basis. Larger industrial customers are settled using an actual meter reading. Domestic and smaller industrial gas customers are settled using estimates of consumption over the coming year based on an Annual Quantity (AQ) of usage, and these are unable to be reconciled backwards against actual meter readings as happens with electricity.
- 3.22 Industry participants have already recognised the potential for smart metering to improve the accuracy of the gas and electricity settlement arrangements. The industry is considering the case for moving to greater use of half-hourly meter readings for electricity settlement in future. Industry-led Project Nexus is looking at reforming the process for gas, to enable all sites to be settled on the basis of a daily meter reading and, where daily meter readings are not used, to enable reconciliation when a meter reading is submitted³³.

³³ More information on proposed reforms to the settlement process is given in Ofgem's Promoting Smarter Energy Markets consultation, Chapter 4

3.23 There is also an important link between settlement and time-of-use tariffs, in that there will be more of an incentive on suppliers to develop such tariffs if their actions to shift their customers' load are recognised in the settlement process.

Evidence

3.24 It is clear that some level of energy consumption data is required by suppliers in order to meet the existing licence condition (through the Balancing and Settlement Code) on settlement. There was general consensus in the Call for Evidence that settlement of domestic customers did not currently require half-hourly data. Broad support was expressed for industry's work on a move away from profiling to actual half-hourly settlement in future, and it was felt that use of data for settlement purposes should be determined by results of this work. The same principle should apply to Project Nexus work on gas.

3.25 There are no assumptions about the benefits that could be derived specifically from improvements to settlement in the Programme's Impact Assessment. Under the current system, more granular (than quarterly) energy consumption data would arguably enable more frequent reconciliation for electricity – leading to a better understanding of expected imbalance charges earlier in the process. But there is currently no evidence about precisely what the benefits of monthly data – or even more granular (e.g. daily or half-hourly) energy consumption data - might be in the current system.

Government position

3.26 The Government's view is that monthly energy consumption data will enable suppliers to meet their current licence obligations in relation to settlement, and that suppliers should be able to access this data from their customers for this purpose without customer consent.

3.27 The Government would want to ensure that its framework was able to accommodate any future change to the settlement rules. In light of any decision on a change to more frequent settlement, which would require significant regulatory changes, the position on use of half-hourly data for settlement purposes should be reviewed. Any such review should happen in consultation with relevant parties, taking account of available evidence about privacy concerns, the coherence of the overall policy framework for data access, and any other implications for the smart metering system.

Wholesale hedging

Background

3.28 Wholesale hedging is a commercial activity where suppliers purchase gas and electricity in advance, based on forecasts of future demand. The aim is to smooth out volatility and spread risk to reduce exposure to high costs. There is currently no licence obligation on suppliers in relation to hedging.

Evidence

3.29 There are no assumptions about the benefits that could be derived specifically from improvements to wholesale hedging in the Programme's Impact Assessment. However, the

Government would expect that, as in other areas, lower costs for suppliers from more accurate demand forecasting and improved hedging strategies should flow down to consumers.

- 3.30 One supplier suggested in the Call for Evidence that there would be no incremental benefit to suppliers from collecting daily or half-hourly energy consumption data for this purpose. However, others felt that sub-daily energy consumption data would be necessary to optimise risk management through hedging and minimise cost exposure. It has been suggested that hedging against the price of energy normally relies on a range of important variants other than energy consumption data (for example, weather, oil price, overall competitiveness of the company, customer base etc.), and that having detailed consumption data may therefore be of limited extra benefit. There is little evidence of consumer concern about their data being used specifically for this purpose; and there are unlikely to be competition issues, in the sense that energy services companies would not need to hedge. Some respondents suggested that data could be aggregated for the purposes of hedging, whereas others felt that aggregated data would have limited value.

Government position

- 3.31 The Government considers it appropriate to give consumers the chance to object to their data being used for the purpose of wholesale hedging, as it is not something which suppliers are required to do. Under the proposed framework, suppliers would be able to access daily data for this purpose if they explained that they were doing so and allowed consumers to opt out.

Time-of-use tariffs

Background

- 3.32 Time-of-use tariffs reflect more accurately the cost of energy on particular days or at particular points within a day. The potential for time-of-use tariffs to lower system costs is seen as one of the key benefits enabled by smart metering – with benefits for suppliers (in terms of lower costs of purchasing energy), consumers (reducing energy bills) and the network more widely (by smoothing out peak demand and enabling demand to be managed to match more intermittent supply from renewable sources).
- 3.33 There are currently no licence obligations on suppliers in relation to the provision of time-of-use tariffs. There are, however, several licence conditions to protect consumers in relation to their tariff decisions. For example, suppliers must provide complete, accurate information when marketing tariffs³⁴. Ofgem's consultation document on promoting smarter energy markets considers, amongst other things, the potential opportunities and risks around wider offer and uptake of time-of-use tariffs from the platform of smart metering³⁵.

Evidence

- 3.34 There are around four million domestic electricity consumers who already have some form of time-of-use tariff, such as Economy 7. However, the general sense from the Call for

³⁴ Standard Licence Condition 25 of the gas and electricity supply licences.

³⁵ Ofgem's Promoting Smarter Energy Markets consultation, 1.13 and 3.5
<http://www.ofgem.gov.uk/Markets/sm/strategy/Documents1/Smarter%20Markets%20Strategy%20-%20Consultation%20document.pdf> (December 2011)

Evidence was that the market for more sophisticated time-of-use tariffs is still developing³⁶, that consumer take-up is currently relatively low, and that work is ongoing to understand precisely what the benefits might be. For example, Consumer Focus is involved in two research projects on time-of-use tariffs and is co-sponsoring Sustainability First's demand response project³⁷.

- 3.35 Time-of-use tariffs are optional, and there was general consensus in the Call for Evidence that they may not be appropriate for all consumers. Where a customer opts for a time-of-use tariff, then the supplier would be able to access the level of data required for the purposes of billing and monitoring. Whilst bills could be based on cumulative consumption information in tariff registers, consumers would actively be opting in to these tariffs and suppliers could therefore, if they wished, make access to half-hourly data a condition of the product.
- 3.36 A key issue is around use of data for the purposes of designing and marketing time-of-use tariffs. Consumer groups have expressed concern about enabling default access to half-hourly data for the purposes of bringing customers onto time of use. Questions have been raised about what the incentives would be for suppliers to offer genuinely better tariffs to customers (there could be winners and losers), and it was felt that enabling default access to data would be a missed opportunity to engage customers proactively on the benefits of such services. Some respondents to the Call for Evidence suggested that other sources (such as Elexon consumption profiles, anonymous periodic samples, or data from existing time-of-use customers) could be used to design time-of-use tariffs.
- 3.37 The Impact Assessment of the smart meter roll-out for the domestic sector estimates £820 million present value benefits from electricity demand shift due to the uptake of time-of-use tariffs. By shifting a fraction of electricity demand to cheaper off-peak times, the tariffs are expected to bring about short-term marginal cost savings to generation and longer term savings in the form of avoided generation and network capacity investment. This figure also includes benefits from the avoided purchases of EU Emissions Trading System allowances as a result of time-of-use from the domestic roll-out. Direct benefits to consumers from moving onto time-of-use (for example, in terms of bill savings) are not considered in the Impact Assessment.

Government position

- 3.38 The Government notes that the market for more sophisticated time-of-use tariffs is still developing, and that work is ongoing to understand how the market might develop and the benefits that could be delivered. The Government feels it would be disproportionate and unnecessary at this stage to enable half-hourly data to be collected from all customers to develop time-of-use tariffs, and recognises concerns expressed about use of half-hourly data to target customers with time-of-use tariffs. Giving the customer's existing supplier default access to half-hourly data would also mean that they had competitive advantage over other suppliers or market participants who may wish to offer or compare quotes for time-of-use tariffs.
- 3.39 Under the Government's proposed framework, suppliers would need explicit (opt-in) consent from the consumer in order to access their half-hourly energy consumption data for time-of-use purposes, or to use their energy consumption data to market products and

³⁶ Indeed, for more sophisticated tariffs, smart meters will be a key enabler.

³⁷ Sustainability First GB Electricity Demand Project <http://www.sustainabilityfirst.org.uk/gbelec.html>

services. However, over the longer term, particularly if the rules on settlement change such that all domestic customers need to be settled on a half-hourly basis and there are wider moves to time-of-use tariffs, then the case for enabling access to half-hourly data could be reviewed.

Consumer debt management

Background

- 3.40 Licence conditions on gas and electricity suppliers set out requirements related to consumer debt management, including: ascertaining ability to pay; offering certain services where the supplier has reason to believe that the customer is having or will have difficulty paying the bill; and providing debt management advice to customers in certain circumstances³⁸. Ofgem guidance sets out what suppliers are expected to do to comply with these requirements³⁹.
- 3.41 Suppliers currently use a range of sources – including visits, telephone conversations, information on billing and referrals from advice agencies – to discharge these obligations. Suppliers have argued that energy consumption data from smart meters would enable them to fulfil these obligations better, improving their ability to identify customers in payment difficulty and help ensure that debt levels are not building up.

Evidence

- 3.42 The Programme's Impact Assessment assumes significant (over £1 billion present value) benefit from improved debt handling up to 2030. Consumers will be more aware of energy consumption, and the costs of energy, which may help them to avoid large energy bills and therefore the risk of debt arising. Likewise, more frequent and accurate consumption data could enable suppliers to identify customers at risk of building up debt sooner; they may then be able to offer alternative and more convenient payment arrangements to the customer, such as pre-payment or monthly plans.
- 3.43 Some suppliers have explained that a large proportion (up to 80%) of bad debt is currently caused by 'occupier debt' and change of tenancy events – in other words, not knowing when someone started using energy in a property, or when they left, and disputes over the final bill. This suggests that the ability to take a single, ad hoc reading to establish the final bill could be a big benefit, although it would still depend on the supplier being aware of change of tenancy.
- 3.44 There was a lack of consensus in responses to the Call for Evidence about the need for customers to give consent for their data to be used to manage debt, and about whether data could just be collected from certain customers (such as those repaying debt), or collected only if certain triggers were hit. There were also differing views about the level of data required.
- 3.45 There is a lack of evidence about how exactly suppliers would in practice use energy consumption data positively to help customers in debt. Consumer representatives have argued that there is a risk that customers could be unfairly penalised as a result of energy

³⁸ See for example Standard Licence Conditions 27.8, 27.5 and 14.9.

³⁹ See, for example,

<http://www.ofgem.gov.uk/Sustainability/SocAction/Publications/Documents1/Debt%20Review%20Report.pdf>

companies using energy consumption data to make inaccurate assumptions about any debt and ability to pay - for example, by requiring customers to pay a security deposit or use pre-payment, or by screening them out from special offers.

Government position

- 3.46 The Government can see how energy consumption data could be used by suppliers to help discharge some elements of their obligations relating to debt management, and believes that suppliers should be able to access a basic level of data without customer consent for these specific purposes. However, the Government also believes it appropriate to give consumers an element of choice about the advice and support that suppliers may wish to offer on the basis of more detailed energy consumption data.
- 3.47 Under the proposed framework, suppliers would be able to access monthly energy consumption data without consent for the purposes of fulfilling any statutory requirement or licence obligation, and daily energy consumption data unless the consumer opted out.
- 3.48 The Government can see the case for allowing suppliers to access daily energy consumption data on an ad hoc basis, without customer consent, for the purposes of accurate billing and resolving billing issues associated with change of tenancy, change of supplier and change of tariff events. Such readings may also need to be taken on a retrospective basis if, say, the supplier is only notified about change of tenancy after the event, and SMETS will require meters to be able to retain records of daily consumption for a period of 14 days. Half-hourly data could be collected with the customer's explicit consent if needed, for example to resolve issues concerning usage more than 14 days ago. The Government would be interested in views on the extent to which the proposed exception to the basic framework would enable suppliers to resolve issues around accurate billing.

Protecting vulnerable consumers

Background

- 3.49 Suppliers currently have a number of obligations to identify, protect and meet the needs of customers, and certain categories of vulnerable consumers in particular. These include the proposed licence obligation to establish an Installation Code of Practice for smart metering, as well as licence obligations to: maintain a Priority Services Register; avoid disconnection of vulnerable gas and electricity customers who are having difficulty paying their bill; ascertain whether the customer falls within these categories prior to disconnection; and provide on request information about bills/accounts to vulnerable customers⁴⁰.
- 3.50 Reference is also made in Ofgem's Spring Package Guidance to suppliers monitoring, where technically feasible, whether a customer is self-disconnecting where they are using a pre-payment meter⁴¹. In the Energy Retail Association Safety Net, the Big Six energy suppliers make various voluntary commitments to protect vulnerable consumers – including never knowingly to disconnect a vulnerable customer, and to offer a range of repayment options for vulnerable consumers to manage any debt⁴².

⁴⁰ See, for example, Standard Licence Conditions 27.9-27.11, 28.1 and 26.2.

⁴¹ See <http://www.ofgem.gov.uk/Sustainability/SocAction/Publications/Documents1/Modification%20Direction.pdf>

⁴² A vulnerable customer is defined by the Energy Retail Association as one who is "for reasons of age, health, disability or severe financial insecurity... unable to safeguard their personal welfare or the personal welfare of other members of the household"

Evidence

- 3.51 There are no assumptions about the benefits that could be derived specifically from protecting vulnerable consumers in the Programme’s Impact Assessment. No evidence was provided in the Call for Evidence about the monetary benefits that could be delivered by using energy consumption data to assist vulnerable consumers.
- 3.52 There was consensus in the Call for Evidence that the very process of identifying and managing vulnerable consumers was sensitive, and that privacy concerns were likely to be greater here. It was felt that energy consumption data alone would not be sufficient to identify vulnerable consumers.
- 3.53 Consumer groups have argued that smart metering data could be used to help protect vulnerable consumers, for example by monitoring self-disconnection by those on pre-payment tariffs. Given that customers on pre-payment are more likely to be on low incomes and have debt issues, there may be more of a case for more frequent monitoring of consumption data for these particular customers.

Government position

- 3.54 The Government is not persuaded that energy consumption data is needed to fulfil existing licence obligations in relation to protecting vulnerable consumers. However, energy consumption data might help suppliers to identify repeated incidences of self-disconnection or energy “rationing” and consider whether they need to take further steps to assist the customer. Energy consumption data may also help suppliers to meet commitments they have made about helping vulnerable consumers. Under the proposed framework, suppliers would be able to use monthly energy consumption data without customer consent insofar as this was necessary to fulfil any statutory requirement or licence obligation.
- 3.55 However, the Government believes it appropriate to give consumers an element of choice about the advice and support that suppliers may wish to offer vulnerable consumers on the basis of more detailed energy consumption data. Under the proposed framework, suppliers would be able to access daily energy consumption data for the purpose of protecting vulnerable consumers, should they choose to – for example by monitoring self-disconnection of customers on pre-payment – provided that such customers were made aware that their data was being collected for this purpose, and that the customer was given the chance to opt out.

Feedback on consumption and energy efficiency advice*Background*

- 3.56 The Government’s consultation on the Consumer Engagement Strategy acknowledges the important role that tailored indirect feedback and energy efficiency advice can have in supporting behaviour change⁴³. This might involve the provision of graphs and other information in bills about energy consumption, comparisons with neighbours’ consumption (provided it did not reveal personal data), and suggestions about what to do to reduce consumption. However, at this stage there is no licence obligation on suppliers to provide

⁴³ DECC, Smart Metering Implementation Programme - Consumer Engagement Strategy: Consultation document http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

this beyond the existing broad obligation to maintain, and in certain circumstances provide, general energy efficiency information⁴⁴.

Evidence

3.57 Early smart metering trials and a body of literature point to the critical role that regular, tailored feedback can play in achieving energy savings, above and beyond 'direct' feedback through in-home displays and standard billing⁴⁵. The Programme's Impact Assessment assumes £4.4 billion present value domestic consumer benefits from energy saving – over a quarter of the total benefits expected from the domestic roll-out of smart meters. The Government's consultation on the Consumer Engagement Strategy considers the role that different interventions, including indirect feedback and energy efficiency advice, could play in helping to deliver these benefits⁴⁶.

3.58 Responses from suppliers and energy services providers to the Call for Evidence suggested that to be effective, energy efficiency advice needed to be tailored to the individual customer and based on half-hourly energy consumption data. Some suppliers are concerned that if consumers do not see examples of detailed, tailored energy efficiency advice from day one (for which they claim half-hourly data is required on an opt-out basis), then it will be very difficult to engage them in smart metering at all, and they argue an opportunity will be lost. Some claims were made in response to the Call for Evidence about the additional savings that could be achieved through the use of daily or half-hourly data, compared with monthly data. While these include logical arguments, the evidence is not yet sufficiently strong to draw conclusions about the scale of benefits that could be delivered through supplier access to more granular data.

3.59 Some responses to the Call for Evidence queried what the incentive would be for suppliers to help customers save money, and suggested that third parties would be better placed to deliver independent energy efficiency advice. One consumer group argued that there was much that could be done by suppliers without default access to half-hourly energy consumption data, for example by combining energy consumption data with additional information about a customer. Another suggestion has been that if suppliers were to be allowed access to energy consumption data by default, then consumers should be guaranteed to receive some benefit in return. Some evidence has also been put forward to suggest that customers who had been provided with basic energy efficiency advice were more likely to be interested in additional, more detailed advice⁴⁷, and behavioural insight theory suggests that a consumer is more likely to act on information that they have asked for.

Government position

3.60 Given its importance to behaviour change and the delivery of benefits, the longer-term approach to the provision of feedback on energy consumption and the provision of energy efficiency advice will be considered more thoroughly in the context of the Consumer Engagement Strategy⁴⁸. As part of its consultation on that Strategy, the Government has

⁴⁴ Standard Licence Conditions 14.9 and 31.2.

⁴⁵ See for example the Sarah Darby study for Defra, the Energy Demand Research Project (EDRP), ESMIG studies, and early trials run by British Gas.

⁴⁶ DECC, Smart Metering Implementation Programme - Consumer Engagement Strategy: Consultation document http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

⁴⁷ See, for example, work by Green Energy Options <http://www.greenenergyoptions.co.uk/knowledge-hub/research>

⁴⁸ DECC, Smart Metering Implementation Programme - Consumer Engagement Strategy: Consultation document http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

proposed carrying out further analysis on whether there is a case for adjusting policy mechanisms to provide additional incentives for suppliers to provide feedback and advice in ways enabled by smart meters. The Government notes that the energy efficiency advice market is still developing and that trials are underway to improve the evidence base in this area.

3.61 In advance of any decisions made in light of further work through the Consumer Engagement Strategy, the Government's proposed framework would enable suppliers to provide feedback on consumption and energy efficiency advice based on daily energy consumption data, provided that consumers were given the opportunity to opt out of this, and suppliers would be required to obtain explicit (opt-in) consent in order to access half-hourly data for this purpose. One advantage of this approach is that it would put the onus on suppliers to demonstrate to consumers the additional benefits that could be realised if consumers allowed access to their half-hourly data. The Government would welcome views on this approach, and in particular on the potential impact on consumers and competition of allowing suppliers access to daily energy consumption data, unless the consumer opts out.

Trials

Evidence

3.62 A clear recommendation from responses to the Call for Evidence was that the Government should remain open to learning throughout the Foundation Stage and beyond, as more evidence becomes available about potential benefits and levels of consumer concern in relation to smart metering. Some suppliers and network operators are already conducting trials on the basis of half-hourly energy consumption data, and the Government would not wish to prevent data being used for these purposes⁴⁹. Furthermore, for some trials it is important to be able to test effects when consumers have participated on an opt-out basis – opting-in involves an element of self-selection which can skew results.

Government position

3.63 The Government can see the case for enabling the use of energy consumption data for the purposes of trials, and that in certain cases requiring customers to opt in to trials could distort results. However, if half-hourly energy consumption data were to be used, then the Government's view is that consumers should have the opportunity to object (i.e. opt out), and that such trials should be approved by DECC or Ofgem, to give consumers reassurance.

3.64 It would be important to establish some clear criteria for consideration and approval of proposals for trials, for the purposes of clarity and consistency, although the aim would be to avoid an unduly onerous process. For example, proposals for trials might be required to meet certain basic criteria such as:

- Having a clear and well-defined scope and duration; and
- Being necessary for the purposes of furthering evidence in relation to the benefits that can be delivered from smart metering.

⁴⁹ For example, the Customer Led Network Revolution is currently conducting trials using half-hourly consumption data in 13,500 homes <http://www.networkrevolution.co.uk/default.aspx>. British Gas is also running trials of personalised energy efficiency advice in 10,000 homes, based on half-hourly data. The Low Carbon Networks Fund was set up by Ofgem to test and anticipate how the networks will need to change in future, and will allocate £500 million to projects by 2015 <http://www.ofgem.gov.uk/networks/elecdist/lcnf/pages/lcnf.aspx>

3.65 Further work would also be needed to clarify the respective roles of DECC and Ofgem in this process.

3.66 Consistent with the wider framework for access to data, the Government would not consider it necessary to approve trials or research conducted on the basis of less granular (i.e. daily or monthly) data that was obtained, provided that consumers had been given opportunity to opt out of their data being used for such purposes.

Other uses of data

3.67 Some suppliers have noted the importance of energy consumption data in helping with management of the smart metering system. For example, it has been suggested that daily meter readings would help suppliers to check that meters and the communications system were working properly so that any problems could be addressed early. It has also been suggested that access to daily energy consumption data would help generally to improve customer service and the quality of supplier operations.

Government position

3.68 Under the proposed framework, suppliers would be able to access daily energy consumption data and use this for meter management and any other purposes, apart from marketing, provided that they explained this to the customer and gave the customer the chance to opt-out.

Minimisation, aggregation and anonymisation of data

Evidence

3.69 The Call for Evidence sought views on the viability of technologies to aggregate, anonymise and minimise collection of data, which could help to address privacy concerns. Whilst some suggestions were made about technologies that were under development, several respondents expressed caution about mandating an approach in this area, at least until further work had been undertaken to understand consumer concerns, complexities, and costs and benefits of different options.

3.70 The European Commission has issued a Communication supporting the development and use of privacy-enhancing technologies to minimise the processing of personal data and the use of anonymous or pseudonymous data wherever possible⁵⁰. The Commission's Recommendation on preparations for the roll-out of smart metering systems also states that Member States should take all necessary measures to impose, as much as possible, use of data rendered anonymous in such a way that the individual is no longer identifiable⁵¹.

Government position

3.71 Data controllers will need to comply with the Data Protection Act and other relevant legislation, and this consultation document sets out specific proposals on the levels of access that suppliers, network operators and third parties should have to energy consumption data,

⁵⁰ Communication from the Commission to the European Parliament and the Council on Promoting Data Protection by Privacy Enhancing Technologies (PETs)
http://eur-lex.europa.eu/LexUriServ/site/en/com/2007/com2007_0228en01.pdf (May 2007)

⁵¹ European Commission Recommendation on preparations for the roll-out of smart metering systems
http://ec.europa.eu/energy/gas_electricity/smartgrids/smartgrids_en.htm (March 2012)

for which purposes, and the choices that consumers should have about this. The Government notes ongoing developments in the field of privacy-enhancing technologies, but feels that for smart metering it would be premature to mandate the use of any particular privacy-enhancing technology at this stage. However, consistent with the principles of Privacy by Design, and European Commission recommendations, the Government believes that parties wishing to access energy consumption data should wherever possible take steps to avoid or mitigate potential privacy concerns by:

- considering carefully whether data needs to be collected at all, and whether it needs to be collected from all customers; and
- aggregating or anonymising meter readings where it is not necessary to have personal data.

3.72 The Government will continue to monitor developments in this area. The issue of aggregation of data for network purposes is discussed separately in Chapter 4.

Policy proposals

Summary of proposals

3.73 In light of the analysis described above, the Government has developed a package of proposals that it believes constitute a balanced, workable framework. The proposed framework links the level of consumer choice to the level of data being accessed, and gives consumers control about how their data is used, except for where this is required for billing or to fulfil regulated duties.

3.74 In summary, the Government’s proposals for supplier access to data are as follows:

Basic framework:

- Allow suppliers to access monthly (or less granular) energy consumption data⁵², without customer consent, for billing and for the purposes of fulfilling any statutory requirement or licence obligation;
- Allow suppliers to access daily (or less granular) energy consumption data for any purpose except marketing, with clear opportunity for the customer to opt out; and
- Require that suppliers must receive explicit (opt-in) consent from the customer in order to access half-hourly energy consumption data, or to use energy consumption data for marketing purposes.

Exceptions to the basic framework:

- Allow suppliers to access daily energy consumption data on an ad hoc basis, without customer consent, where the supplier has reasonable suspicion that theft is being committed, or for the purposes of accurate billing (for example, at change of tenancy/change of supplier/change of tariff events) and addressing customer queries;
- Allow suppliers to access half-hourly energy consumption data for use in approved trials, with clear opportunity for the consumer to opt out;
- For pre-payment customers, allow suppliers to access more regular readings as top-ups are made, provided this has been explained to the customer.

⁵² For clarity, “monthly/daily/half-hourly energy consumption data” means energy consumption data relating to a period of one month/one day/half an hour. This may be different from the frequency with which meter readings are taken (for example, if seven sets of daily energy consumption data were collected at the end of each week).

Rationale

- 3.75 The Government has considered a variety of alternative models for supplier access to data. One potential option would be only to permit suppliers to access monthly consumption data for regulated duties, and require suppliers to obtain explicit (i.e. opt-in) consent for anything else. However, assuming low opt-in rates, there is a risk that this approach would unnecessarily restrict the level of benefits that could be delivered. At the other end of the spectrum, suppliers could be permitted to access half-hourly data for a range of purposes, unless the consumer objected. The main risks here would be that suppliers obtained unfair competitive advantage over other market participants (such as energy services companies), and that it did not give consumers sufficient control and choice about their more detailed data, with potential risks for the reputation of the Programme and delivery of the roll-out.
- 3.76 The Government believes that the framework proposed above strikes a sensible balance between protecting consumers' interests, facilitating competition, and enabling suppliers to access data to deliver benefits.
- 3.77 From a consumer perspective, the sense is that it is the potential availability of half-hourly data, which could reveal more about patterns of behaviour, that prompts the greatest concern, and the potential for concern is likely to be less with the collection of daily (or less granular) data, apart from where data would be used for marketing purposes. For example, research for Which? suggests that, in general, people's willingness to share data with their supplier would decline as the granularity of data accessed increases⁵³. Nevertheless, there is general consensus amongst stakeholders that even where consumers are relatively tolerant about collection of data, they want transparency about the arrangements, choice, and the ability to change their minds⁵⁴.
- 3.78 The proposed framework also takes account of competition issues and the need to ensure that suppliers are not given unfair advantage in newly emerging markets for energy services. Whilst the framework would allow suppliers to access daily energy consumption data assuming consumers did not opt out, views from stakeholders suggest that third party market participants (such as energy services companies providing energy efficiency diagnostics) are most interested in half-hourly or more granular data – for which explicit (opt-in) consent would be required by both suppliers and third parties. The Government's proposed framework provides an additional protection in the sense that even if suppliers used daily energy consumption data to develop products and services, they would not be able to market those products and services to their customers unless those customers had agreed.
- 3.79 The Government believes that the proposed framework for data access and privacy would enable the benefits assumed in the Programme's Impact Assessment to be realised. Indeed, several responses to the Call for Evidence suggested that supplier access to daily data could deliver greater benefits than those assumed in the Impact Assessment, for example in the areas of energy efficiency advice, and theft prevention and detection. Whilst the Government does not have sufficient evidence to validate the specific assumptions behind these claims, it accepts that there are logical arguments as to how daily energy consumption data could deliver greater benefits than monthly data. Under the proposed

⁵³ Energy 'Omnibus' Research – Smart Meters, for Which?

http://www.westminsterforumprojects.co.uk/forums/slides/GeorginaNelson_May11.pdf (May 2011)

⁵⁴ See, for example, Consumer Focus research Private Lives: a people's inquiry into personal information http://www.demos.co.uk/files/Private_Lives_-_web.pdf (2010)

framework, suppliers could be expected to access daily data in a strong majority of cases, assuming there were a low rate of consumer opt-out, and subject to compliance with other relevant legislation such as the Data Protection Act⁵⁵. This daily data could be used, for example, to provide energy efficiency advice. Under the proposed framework, suppliers would also have access to daily data, without customers being able to opt out, where suppliers had reason to suspect theft and for the purposes of accurate billing (helping to address debt issues).

- 3.80 Committing to keep the framework under review and remaining open to learning throughout the Foundation Stage and beyond is central to the Government's proposals. If, over time, further evidence emerges about consumer concerns, benefits that can be derived from access to different levels of data, or competition issues, then consideration can be given to whether any adjustments to the framework are needed. In order to augment the evidence base and hear from consumers directly, the Government intends to undertake specific research through the consultation period to test the proposed policy on supplier access to data with consumers.
- 3.81 The Government would be interested in consultees' views on its proposed framework. In particular, the Government would welcome any additional evidence that might be available about the potential implications for consumers or competition of enabling suppliers to access daily energy consumption data, unless the consumer opts out.

Definition of supplier regulated duties

- 3.82 The Government has been clear that consumers should have a choice about how their smart metering data is used and by whom, except where it is required to fulfil regulated duties. In light of the analysis described above, the Government does not consider it necessary to limit regulated duties to a specific list. This is because the proposed framework would limit the level of data that can be accessed for those purposes to monthly data (about which there is less consumer concern), and because the Government wishes to avoid unintentionally prohibiting suppliers from using monthly energy consumption data for other legitimate, regulatory purposes. Instead, the Government proposes that suppliers should be able to use monthly energy consumption data, without customer consent, for billing and for the purposes of fulfilling any statutory requirement or licence obligation (including compliance with any code underpinned by licence).
- 3.83 In addition to requirements under the Data Protection Act, the Government proposes to introduce a requirement on suppliers to explain to consumers what any energy consumption data from smart meters is being used for. The Government's expectation is that use of monthly energy consumption data for regulated duty purposes would include (but not be restricted to) billing, settlement, detection and prevention of theft, and debt management.
- 3.84 The Government considers that, should suppliers wish to do so, they should be able to use monthly energy consumption data for other, non-regulated duty purposes, provided that they explain this to the consumer and give the consumer the chance to opt out. Without this measure, then there is a risk that suppliers would need to access more granular than monthly data to undertake other activities that did not constitute regulated duties, when monthly data

⁵⁵ For example, responses to the Call for Evidence pointed to high participation rates (typically up to around 90%) for opt-out schemes in comparable areas. The role of opt outs or "defaults" in delivering change is also highlighted in work by the Cabinet Office's Behavioural Insight's Team, Behaviour Change and Energy Use <http://www.cabinetoffice.gov.uk/sites/default/files/resources/behaviour-change-and-energy-use.pdf> (July 2011)

might otherwise have sufficed. The Government would also want to ensure that access to energy consumption data covering a period of a month or more could not in itself be used to calculate consumption relating to a period of less than one month (for example, by accessing monthly data each week/day as a way of revealing weekly/daily consumption totals).

Definition of marketing

3.85 The Government's proposed framework would allow suppliers to access daily energy consumption data from smart meters for any purpose except marketing, unless the consumer opts out. Suppliers would need explicit (opt-in) consent from consumers in order to use their data for marketing purposes.

3.86 It is important that in order to give such discretion to suppliers about the use of daily data, the definition of marketing is clear. Without a clear definition, there would also be a risk that consumers opted out of the use of their daily data in principle because they were concerned about receiving unwanted marketing information – which may not be in either consumers' or suppliers' interests.

3.87 Energy suppliers will currently have arrangements in place to determine in general whether or not individual customers are willing to receive direct marketing material, in line with provisions in the Data Protection Act that give consumers the right to opt-out of receiving such material⁵⁶. The Data Protection Act will continue to apply, but the Government believes that additional, specific protections are appropriate in the case of smart metering, given consumer and competition concerns, and the fact that smart metering creates a new opportunity for suppliers to target customers with marketing material.

3.88 The Government proposes that, in line with the policy approach taken to the Installation Code of Practice, the key factor in determining whether an activity constitutes marketing should be whether it involves information about branded products and services, or specific customer propositions⁵⁷. The definition would not include generic energy efficiency advice, or information about products and services for which there is no direct charge to the individual consumer (for example, offers under the Energy Company Obligation (ECO)), although the Government would be interested in views on this point. The approach in the ICOP focuses only on face-to-face marketing, whereas the approach in relation to use of energy consumption data for marketing purposes would need to apply to other forms of communication, such as written material and email.

Consultation Question

3.	Do you have any comments on the overall balance and workability of the proposals for supplier access to data?
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⁵⁶ Section 11(3) of the Data Protection Act defines direct marketing as "*the communication (by whatever means) of any advertising or marketing material which is directed to particular individuals*".

⁵⁷ DECC, Licence conditions for a code of practice for the installation of smart electricity and gas meters: Government response to consultation

http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012). The approach taken to the Installation Code of Practice is also consistent with the definition of sales and marketing in supply licence condition 25.

Consultation Question

4. Do you agree with the proposed approach to defining supplier regulated duties, and that suppliers should be able to access monthly (or less granular) energy consumption data for these purposes without customer consent? Would the proposed approach restrict suppliers from undertaking any essential activity, or present any other problems?

Consultation Question

5. Do you agree with the proposal to enable suppliers to access daily (or less granular) energy consumption data, and use this for any purpose except marketing, provided that the customer is made aware of this and given the opportunity to opt out? What would be the implications for consumers and competition of this approach?

Consultation Question

6. Do you agree with the proposal to require suppliers to obtain explicit (opt-in) consent from the customer in order to access half-hourly energy consumption data?

Consultation Question

7. Do you agree with the proposal to require suppliers to obtain explicit (opt-in) consent from the customer in order to use energy consumption data for marketing purposes? Do you agree with the proposed definition of marketing, and in particular, that free advice should be excluded from the proposed definition?

Consultation Question

8. Do you agree with the Government's proposed exceptions to the basic framework for supplier access to data – to accommodate theft detection and prevention, accurate billing, customer queries and trials? Are there any other important uses of energy consumption data that need to be covered in exceptions to the basic framework?

Consumer experience

Consumer message

3.89 The Government believes that the proposed framework for supplier access to data can be communicated clearly and simply to consumers. The basic message would be that **consumers have a choice about whether their energy consumption data is accessed by suppliers, except for monthly data which will be read for billing and regulatory purposes, and other ad hoc readings which may be taken to enable accurate billing in particular circumstances, address queries or investigate suspected theft.**

3.90 For suppliers who wished to access daily energy consumption data, the fuller message to consumers might run as follows:

- *Your supplier will be able to access your daily energy consumption data and use this for any purpose except marketing. Your supplier could use your data to improve their customer service, run their business more efficiently, and develop new products and services. Your supplier will let you know if they access this data and exactly what they are using it for.*
- *If you would prefer, you can limit your supplier to accessing monthly data, which they could only use for billing and regulatory purposes. They would also be able to take ad hoc readings to address queries and ensure they bill you accurately, or where they suspect theft of energy.*
- *Your supplier must get your explicit (opt-in) consent to access your half-hourly consumption data, or to use any data for marketing purposes.*

3.91 The messages suggested above are for illustrative purposes. Suppliers will be responsible for explaining clearly to their own customers what data will be accessed, for which purposes, and what choices those customers have. The Government believes that this explanation should be given as early as possible, either prior to or at the point of installation of the smart meter, so that the consumer has the chance to consider their options before energy consumption data is collected.

3.92 In order to ensure that consumers remain aware of the choices they have made previously (for example, if they have opted in to the collection of half-hourly data), and that they can change their minds, the Government also proposes to require suppliers to remind their customers annually (i.e. one year from the point at which choice was last exercised) about the data that is being collected and the choices that the consumer has.

3.93 In addition to these proposed requirements, there are general requirements relating to transparency on all data controllers under the Data Protection Act (for example, requirements about information that customers should be given about how their personal data shall be processed). The Consumer Protection from Unfair Trading Regulations 2008 require suppliers not to mislead customers by acts (including providing misleading information) or omissions (including by withholding relevant information). Individual communications with consumers would also be supported by a more general, industry-wide Privacy Charter (see Chapter 1).

Consultation Question

9.	Do you agree with the proposal to require suppliers to explain clearly to
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customers what energy consumption data will be accessed, for which purposes, and the choices that customers have about this, and to provide annual reminders to their customers about this?

Choice mechanisms

- 3.94 A clear message in response to the Call for Evidence was that choice should be presented clearly to consumers, that consumers should be easily able to exercise that choice, and that decisions made by consumers should be respected. The Government would be interested in views about how the different choice mechanisms (opt out and opt in) would be presented to consumers in practice, and how that choice would be exercised.
- 3.95 For opt out, the Government's view is that for the purposes of this framework, the customer should be given clear information in advance about what data will be collected, for which purposes, and given clear opportunity to object. The customer could object at any time. Provided that the customer has raised no objection (either verbally or in writing), then that data could be accessed. Suppliers should be required to maintain records to demonstrate that they have met such requirements.
- 3.96 It is important to note that whilst the Government is proposing that opt out would be an appropriate choice mechanism in respect of a certain level of energy consumption data under its framework, data controllers would also have to comply with the Data Protection Act and the conditions it imposes on the processing of personal data.
- 3.97 By contrast, the Government's view is that opt-in for the purposes of the data access and privacy framework means explicit consent. 'Explicit consent' is not defined in the Data Protection Act 1998, but the EU's proposals for a Data Protection Regulation include a draft definition of 'explicit' consent, which states that "*consent should be given explicitly by any appropriate method enabling a freely given specific and informed indication of the data subject's wishes, either by a statement or by a clear affirmative action by the data subject, ensuring that individuals are aware that they give their consent to the processing of personal data, including by ticking a box when visiting an Internet website or by any other statement or conduct which clearly indicates in this context the data subject's acceptance of the proposed processing of their personal data. Silence or inactivity should therefore not constitute consent*"⁵⁸.
- 3.98 The Government has considered how opt-in consent should be obtained in the carrying out of marketing activities at the installation visit. The Government proposed in its consultation on the Installation Code of Practice that opt-in consent had to be given in writing⁵⁹. However, in response to the consultation suppliers argued that a written consent regime would be akin to a ban, because of the very low response rates that could be expected, that oral consent could provide appropriate protection, and that oral consent is an accepted form of consent in other industries. As a result, the Government's position set out in response to the consultation is that prior consent should be secured by any appropriate

⁵⁸ Details of the EU's proposed reforms are available online at http://ec.europa.eu/justice/newsroom/data-protection/news/120125_en.htm (January 2012)

⁵⁹ DECC, Consultation on Licence conditions for a Code of Practice for the installation of smart electricity and gas meters <http://www.decc.gov.uk/assets/decc/11/consultation/smart-metering-imp-prog/2545-smip-licence-conditions-consultation.pdf> (August 2011)

method that allows a freely given, specific indication of the customer's wishes, and that suppliers should maintain records that allow verification of their compliance with this requirement⁶⁰.

3.99 The Government proposes adopting these same principles for the purposes of obtaining explicit (opt-in) consent under the data access and privacy policy framework. However, whilst consent itself could be given by any appropriate method, the Government believes it would still be necessary for consumers to have had prior information in writing about the use of their data and their choices, as explained above.

Consultation Question

10.	Do you agree with the proposed approach to the way in which suppliers should facilitate opt-out and opt-in choice mechanisms?
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Switching supplier

3.100 A key benefit of smart metering is that over time it should make switching between suppliers quicker and easier, and the Government is taking steps to ensure inter-operability of smart metering equipment. In line with existing legislation and working practices, the Government expects that when switching to a new supplier, the consumer will be given the opportunity by the new supplier to reconsider the choices it has about the levels of data that the supplier can access.

Implementation

Regulatory framework and governance

Evidence

3.101 A range of views were expressed in response to the Call for Evidence about how any policy framework in relation to supplier access to data should be implemented. Suppliers have generally argued that any requirements should be set out in the Smart Energy Code (SEC), because this would offer appropriate levels of enforcement (the SEC will be backed by licence), flexibility, change control procedures, and a level-playing field in the sense that all market participants (suppliers and authorised third parties) would be signatories. Some suppliers also noted existing requirements under the Data Protection Act, and questioned the need for anything additional over and above these.

3.102 However, other respondents, such as consumer groups, supported sector-specific legislation and use of licence conditions. They felt that existing data protection legislation was too generic and that there was a need for the Government to provide clarity about the levels of data that it would be appropriate for suppliers to access, and for which purposes. Privacy groups also highlighted that issues about smart metering privacy and consumer choice went wider than the Data Protection Act and engaged some more fundamental issues, such as those covered in Article 8 of the European Convention on Human Rights.

⁶⁰ DECC, Licence conditions for a code of practice for the installation of smart electricity and gas meters: Government response to consultation

http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

3.103 There is general consensus amongst stakeholders that the framework for data access and privacy needs to remain flexible to accommodate future changes (for example, in relation to rules on settlement and theft, or developments in the time-of-use market). The Foundation Stage will be an opportunity to continue learning about benefits and concerns associated with smart metering data access and privacy, and the framework should be flexible such that it can be amended in light of this experience.

Government position

3.104 On balance, having considered the options, the Government proposes to implement its policy on supplier access to data through licence conditions (draft licence conditions are at Annex A). The Government believes that this offers maximum protection and reassurance to consumers, and the most robust level of enforcement. There are transparent and well-understood processes, focussed around consumer and competition interests, for modifying licence conditions over time. Ofgem will be well-placed to ensure that the licence conditions are able to keep step with wider market developments and regulatory changes (for example on settlement and theft), and could be expected to consider privacy issues and the smart metering data access and privacy framework when making any changes.

3.105 In terms of the other options considered, the Smart Energy Code (SEC) will set out contractual rules between the Data and Communications Company (DCC) and its users. The SEC is not intended to be a consumer protection tool, and the Government does not consider it an appropriate means of implementing policy relating to core consumer rights and the supply of energy. Issues around consumer choice and supplier access to data apply whether or not the DCC is used, and the Government does not consider it necessary or appropriate to wait for the Smart Energy Code to be available before it can implement its data access and privacy framework in respect of suppliers. Subject to this consultation, the SEC may be an appropriate place for more detailed aspects of the wider data access and privacy policy framework, and Chapter 5 considers the role the SEC might play in the framework for third party access to data.

3.106 The Government does not consider a voluntarist approach to implementation – for example, through voluntary codes of practice or guidance - to be robust enough. Another option would be to require the industry to develop codes of practice or guidance on data access and privacy, which could be signed off by the Government or Ofgem. Whilst this would give suppliers some ownership of the process, there would be a risk that consensus could not be reached across the industry, or with consumer groups, potentially leading to delays and a need for the Government to intervene in any case.

3.107 Other approaches, such as use of designated code backed by licence, arguably may offer greater flexibility than licence conditions if, for example, changes needed to be made to detailed requirements. On balance, the Government believes that changes to the data access and privacy regime would be important enough to warrant proper scrutiny, and would be likely to be triggered by wider changes to the regulatory framework (for example, on settlement or theft) which would themselves require changes to be made to licence. However, the Government recognises that there may be arguments for detailed aspects of the requirements to be set out elsewhere, underpinned by licence.

3.108 Ofgem would be responsible for enforcing the licence obligations in line with its existing enforcement guidelines⁶¹. Ofgem does not deal with individual consumer disputes, and as now consumers would be expected to follow their supplier's complaint procedures with the ability to take their complaint to the Energy Ombudsman if it was not resolved to their satisfaction. The Data Protection Act would also continue to apply, and Ofgem would work with the Information Commissioner's Office to ensure clarity of roles and responsibilities, as appropriate to the final framework for smart metering data access and privacy.

3.109 The Government would be interested in views on its proposed approach to implementation and use of licence conditions, including on whether any of the detailed arrangements, or any additional measures, would be more effectively set out elsewhere, for example in an industry code, a standalone code of practice or guidance.

Consultation Question

11. Do you agree with the proposed use of licence conditions to implement requirements relating to supplier access to data? Would any of the detailed arrangements, or any additional measures, be more effectively set out elsewhere, for example in an industry code, a standalone code of practice or guidance?

Consultation Question

12. Do you agree that the licence conditions as drafted would effectively implement the proposed policy approach to supplier access to data? Do any specific areas of the draft licence conditions need amendment or clarification?

Consultation Question

13. Is there a need for any consequential changes to existing licence conditions or codes to ensure that the proposed requirements on suppliers work as intended?

Role of the Data and Communications Company

3.110 Once it is established, the Data and Communications Company (DCC) will perform standard checks of parties wishing to access data from smart meters, including that they are signatories of the Smart Energy Code, and where appropriate, the registered supplier for the meter point in question. However, the DCC is not expected to play any pro-active role in determining what data suppliers can access. Instead, in submitting any access request to the DCC, suppliers would effectively be confirming (or 'self-certifying') to the DCC that they had the necessary permission to access the data, where this was required. Under the proposals set out above, rules about what data suppliers could access, under what conditions, would be set out in licence, and this would be regulated by Ofgem.

⁶¹ More information on enforcement by Ofgem is available at <http://www.ofgem.gov.uk/About%20us/enforcement/Pages/Enforcement.aspx>

3.111 There will also be high-level obligations on the DCC to protect the physical integrity of the smart metering system and handle confidential information appropriately. These draft obligations on the DCC are set out in the Government’s consultation document on the draft DCC licence⁶². Whatever the specific classification of roles under the Data Protection Act, the Government believes it may be helpful to require the DCC in the Smart Energy Code to handle energy consumption data in line with the principles of the Act, and in a way which does not prevent others from fulfilling their own obligations under the Act.

Timing

3.112 The Government intends to implement its proposed framework in relation to supplier access to data as soon as possible. This is important to give consumers reassurance about the protections in place for them, ahead of mass roll-out of smart meters, and to give the industry clarity about the expectations on them.

3.113 The Government intends to amend licence conditions using powers in the Energy Act 2008. According to current timetables, and subject to responses to this consultation, the earliest date for introduction of such draft licence conditions to Parliament would be Autumn 2012. Subject to Parliamentary scrutiny, the new licence conditions could take effect from late 2012.

3.114 The Government’s view is that the data access and privacy regime should apply consistently to suppliers in the domestic sector, to ensure a level playing field in the industry and consistency in the protections afforded to consumers. The Government proposes that the regime should apply to all smart meters installed from the point at which the regime comes into force, but not apply retrospectively to smart meters that have already been installed.

3.115 Ahead of the Government’s data access and privacy regime coming into force, existing data protection legislation, such as the Data Protection Act, will continue to apply. In addition, Ofgem set out in the Spring Package that they will protect customers’ interests by enforcing consumer protection law where appropriate⁶³.

Consultation Question

14. Do you have any comments on the proposed approach to timing of implementation of proposals relating to supplier access to data?

⁶² DECC, Smart Metering Implementation Programme: Consultation on the Draft DCC Licence and Licence Application Regulations http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

⁶³ Ofgem, Smart Metering Spring Package - Addressing Consumer Protection Issues <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=Smart%20Metering%20Spring%20Package%20-%20Addressing%20Consumer%20Protection%20Issues.pdf&refer=Sustainability/SocAction/Publications> (February 2011)

Chapter 4 – Network operator access to data

Electricity and gas distribution network operators have obligations relating to the planning, building and operation of networks. It is important that they do this cost effectively. Smart meter data may help network operators fulfil these obligations, maintain continuity of supply and respond to the changing requirements of smart grids, increased distributed generation and electrification of heat and transport.

This chapter sets out the Government’s proposals in relation to network operator access to domestic consumers’ smart metering energy consumption data.

Analysis of data usage by network operators

Background

- 4.1 Electricity distribution network operators are required by statute to “develop and maintain an efficient, co-ordinated and economical system of electricity distribution”. Equivalent obligations apply to gas network operators⁶⁴.
- 4.2 The Energy Networks Association (ENA) has said that network operators would want to be able to access half-hourly electricity and gas consumption data from all properties but that this could be aggregated to mitigate privacy concerns⁶⁵. Network operators might need half-hourly energy consumption data specific to each household in future, for example to manage customers with electric vehicles or micro-generation, but this was not required at the current time. Where information about these types of customer was currently needed, it could be provided to network operators through existing notification procedures (such as the Electricity and Safety Quality and Continuity Regulations 2002).
- 4.3 Network operators have explained that they also expect to be able to access other types of technical data - including data on “reactive energy” (i.e. power component of electrical energy), system quality (for example, voltage levels and loss of supply data), meter events (for example, physical tamper attempts and interferences) and meter configuration – but that this technical data does not show the customer’s energy consumption data.

Evidence

- 4.4 There was general consensus in responses to the Call for Evidence that, in principle, data flows to network operators for the purposes of fulfilling their regulatory obligations should not

⁶⁴ Electricity Act 1989, s.9(1)(a), Gas Act 1986 s.9(1)

⁶⁵ Energy Networks Association Privacy Impact Assessment: Use of Smart Metering data by Network Operators http://www.energynetworks.org/modx/assets/files/news/consultation-responses/Consultation%20responses%202011/ENA%20Privacy%20Impact%20Assessment%20Use%20of%20Privacy%20Impact%20Assessment%20Use%20of%20Smart%20Metering%20data%20by%20Network%20Operators_Oct%202011.pdf (October 2011)

be restricted, and that energy consumption data used by network operators could and should be aggregated. There are arguments that consumers are generally likely to be less concerned about network operator use of data, because network operators are price-controlled and not operating in a fully competitive market, because network operators are unlikely to contact individual consumers directly, and because data could be aggregated.

- 4.5 On the other hand, whilst there may be a case for network operator access to granular data in the longer term - as heating and transport electrify and the smart grid develops - it is unclear how significant the benefits would be in the short term before smart meters are deployed in sufficient number. The Energy Networks Association has estimated potential benefits that could be delivered through greater access to data, for example through reduced electricity network costs and improved customer service efficiency. The Government is continuing to work together with the ENA to develop the evidence base on network benefits of the roll-out.
- 4.6 In addition, whilst aggregation of data would remove any potential privacy concerns (because individuals could not be identified from it), there are still questions about how aggregation would be achieved in practice, and to what level data would be aggregated, with the assumption being that, for the time being at least, individual data may still need to be collected and retained for some period before being aggregated. As noted in Chapter 3, privacy-enhancing technologies are being considered which might address this, but they are not currently sufficiently developed. Allowing network operators automatic access to half-hourly data would also detract from the message around consumer choice established in the framework for suppliers, especially as consumers are not always clear about the difference between network operators and suppliers.

Policy proposals

Approval of plans for aggregation

- 4.7 The Government can see the case for allowing network operators to access half-hourly energy consumption data without customer consent for the purposes of developing and maintaining efficient, co-ordinated and economical systems for the distribution of electricity and gas in the longer term, provided that privacy concerns are appropriately addressed.
- 4.8 Before such access to data is granted, the Government therefore proposes that network operators should be required to develop more detailed plans to explain what level of data would be accessed, for which purposes, and how privacy concerns would be addressed, and submit these plans for approval. In developing their plans, network operators would be encouraged to consider a full range of options, which might include anonymisation or aggregation of data, use of sampling and other possible approaches⁶⁶. Further work would be carried out on the arrangements for approval, including the respective roles of DECC and Ofgem in this process.

Access without approved plans

- 4.9 Assuming this approach were adopted, the question would be what access to energy consumption data network operators should have if plans for aggregation had not been submitted or approved. One option would be that network operators should be entitled to access the same levels of data, with the same levels of consumer choice, as is proposed for

⁶⁶ For ease, such plans are hereafter referred to as “plans for aggregation”.

suppliers in Chapter 3. Under this framework, network operators would be able to access monthly consumption data from all domestic premises, without customer consent, for the purpose of developing and maintaining efficient, co-ordinated and economical systems for the distribution of electricity and gas.

- 4.10 If, in advance of having plans for aggregation approved, monthly data was not sufficient and network operators wished to access daily or half-hourly energy consumption data from individual premises, then under the proposed framework network operators would be required to give customers choice over the data they accessed, in the same way as suppliers would. The Government recognises, however, that this would present some important practical issues for network operators and suppliers, which would need consideration, and the Government would welcome views on whether there are any alternative approaches that would be more appropriate. Initial thinking on implementation of the Government's proposed option is set out below.
- 4.11 It is assumed that network operators will wish to access energy consumption data directly via the DCC, when the DCC is available, and the proposals in this chapter are geared towards this. During the Foundation Stage, before the DCC is available, it is assumed that network operators would continue to access any consumption data that was required via suppliers, as they do currently. During the Foundation Stage, network operators could therefore have access to the same levels of consumption data as suppliers, depending on what arrangements suppliers have in place with consumers about this.
- 4.12 The Government understands that network operators wish to access the same levels of consumption data for both electricity and gas, but would be interested in views on whether there are any differences in data requirements for electricity and gas, recognising that the developments on smart grids, for example, are specific to electricity.

Consultation Question

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| 15. | Do you agree with the proposal to allow network operators to access half-hourly energy consumption data, without customer consent, for the purposes of developing and maintaining efficient, co-ordinated and economical systems for the distribution of electricity and gas, if they have had plans for aggregation approved? To what extent would this approach address potential consumer concerns about privacy in relation to network operator access to data? |
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Consultation Question

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| 16. | If network operators' plans for aggregation have not yet been submitted or approved, do you agree that the proposed framework for supplier access to data should also apply to network operators? Would any alternative approach be more effective? |
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Implementation

- 4.13 In the same way as for suppliers (see Chapter 3), the Government proposes using licence conditions to implement the regulatory framework for network operator access to data. However, in addition, it may be appropriate to reflect some of the proposed requirements in relation to network operator access to data in other documents.
- 4.14 In particular, in parallel with licence conditions, it may be necessary to establish rights for network operators to access energy consumption data from consumers. For electricity consumption data, such arrangements could be set out in the National Terms of Connection. For gas consumption data, such arrangements might be able to be delivered through an amendment to supply licence condition 22, although the Government recognises that there may be some issues with this approach, for example in relation to deemed contracts (when a customer moves into a property and does not have an explicit contract with the supplier). The Government recognises that taking different approaches in respect of electricity and gas may not be an ideal solution, but considers that this might be necessary given the different regulatory frameworks and notes that the requirements of network operators for more granular data may vary between the two sectors.

Approval of plans for aggregation

- 4.15 To avoid having to revisit licence conditions, if and when plans for aggregation are approved, the Government considers it appropriate to set out in licence conditions now that, subject to those plans being approved, network operators could have access to half-hourly data. Draft licence conditions are included at Annex A.

Access without approved plans

- 4.16 In line with the approach set out above, this consultation document also includes, on a contingency basis, draft licence conditions to cover circumstances in which network operators have not yet had plans for aggregation approved. This includes a draft licence condition to enable network operators to access monthly data without customer consent.
- 4.17 Network operators generally do not have direct relationships with individual consumers. Instead, any necessary communications with individual consumers about network issues are generally delivered by suppliers, on behalf of network operators. There was consensus in responses to the Call for Evidence that this arrangement should continue. In the short term, in order to ensure a smooth consumer experience, the Government agrees. However, the Government notes that, in the longer term, network operators may develop more individual customer relationships (for example, in relation to the connection of electric vehicles).
- 4.18 If a network operator had not had plans for aggregation approved, but wished to access daily or half-hourly data from individual consumers, then the Government proposes that suppliers should be responsible for procuring the right to access such data from consumers on behalf of the network operators. The Government recognises that this approach may present important practical issues for network operators and suppliers, which would need to be considered in more detail, and the Government would welcome views on this. Under the proposed approach, in order to access daily or half-hourly data where plans for aggregation had not been approved, the network operator would be dependent on individual consumer choice, and the approach might involve:

- the network operator communicating to the relevant supplier what level of data it wished to access;
- the supplier including such information in its own communications with customers about data access; and
- the supplier informing the network operator about any choices that the consumer had made.

4.19 One important implication of this would be that network operators might need to start maintaining records of what choices individual customers had made about access to data, which they might not be accustomed to doing. There may also be issues in terms of ensuring that network operators were appropriately informed about change of tenancy events.

4.20 The Government is aware that there are a number of references in licences and codes to the rights of parties to access data, and would consider in light of responses to this consultation whether any consequential changes to these documents would be needed.

Consultation Question

17. Do you agree with the proposed approach to implementation of requirements relating to network operator access to data? What would be the practical implications of the proposed approach to implementation, and how could any problems be overcome?

Consultation Question

18. Do you agree that the licence conditions as drafted (including the proposed amendment to supply licence condition 22) would effectively implement the proposed policy approach to network operator access to data? Do any specific areas of the draft licence conditions need amendment or clarification?

Consultation Question

19. Is there a need for any consequential changes to existing licence conditions or codes to ensure that the proposed requirements on network operators work as intended?

Technical data

4.21 The proposals described in this chapter would apply to energy consumption data accessed by network operators. However, as set out above, network operators may wish to access other technical data from smart meters (such as electricity quality or voltage readings) which does not show energy consumption data. It is proposed that technical data such as this would be outside the scope of the Government's policy framework for data access and privacy. However, where such data constituted personal data according to the Data Protection Act, then the Data Protection Act would apply.

Consultation Question

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| 20. | Do you agree that technical data (such as electricity quality and voltage readings) which does not show energy consumption data should be outside the scope of the Government's data access and privacy framework? |
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Chapter 5 – Third party access to data

The ability for domestic consumers to share their energy consumption data with third parties will help to deliver benefits and be important in promoting innovation and competition in the developing energy services market. The Government wishes to ensure that there are appropriate arrangements in place to facilitate third parties' transactions with consumers and with the Data and Communications Company (DCC), and that consumers are properly protected.

This chapter sets out the Government's proposals in relation to third party access to domestic consumers' smart metering energy consumption data.

Introduction

5.1 The term 'third party' generally refers to non-licensed parties, such as energy services companies and switching sites. However, suppliers wishing to provide services to a customer for whom they are not currently the registered supplier (for example, for a tariff quote) should also be considered to be a 'third party'. From a competition point of view, it will also be important for consumers to enable third parties to access data without the registered supplier's involvement.

Access direct from the individual

5.2 If they have already accessed it themselves (through one of the routes described in Chapter 2), consumers could send their own energy consumption data directly to third parties. For example, an individual could send their data to a third party in electronic format, having accessed it via the Home Area Network (HAN).

5.3 Such arrangements would be governed by contract between the consumer and third party - for example, an individual would agree to terms and conditions when signing up for a particular service - and would be outwith the smart metering regulatory regime. Third parties would be bound by relevant legislation such as the Data Protection Act. The Government does not consider it necessary or appropriate to introduce any other specific measures in respect of these transactions.

5.4 However, the Government is conscious that data captured via the HAN which is sent on to third parties could include more granular near real-time data, which could allow appliance-level use to be identified and which prompts the greatest privacy concerns. Whilst consumers would explicitly have to agree to the collection of this information (for example, they would need to acquire an additional device to enable this), it is important that consumers are clear about what is involved. The Government is therefore discussing this issue with manufacturers of relevant devices to encourage good practice.

Access via the DCC

5.5 Consumers may also wish to give third parties consent to access their data remotely, via the Data and Communications Company (DCC), once it is available – for example, if they are unable, or do not wish, to access their own data themselves. Whether the DCC is used will

also depend on whether the third party offers its service on this basis. In practice, the consumer would not need to know about the DCC's role: the consumer would simply be giving the third party permission to access data remotely.

5.6 Once it is established, the DCC will perform standard checks of third parties seeking to access data from smart meters, including that such parties are signatories of the Smart Energy Code. However, the DCC is not expected to play any pro-active role in determining what data third parties can access.

5.7 The Government believes that this raises three key issues in terms of consumer protection:

- Verification of the individual consumer;
- Verification that consumer consent has been properly obtained; and
- Consumer awareness of 'active' consents.

Verification of the individual consumer

5.8 The Government's view is that in order to provide appropriate protection to consumers, third parties should have to take steps to verify that the request for third party services has in fact come from the individual living in the premises in question (and not from someone else purporting to be that person). Such verification checks are commonplace in other sectors, such as online banking. Ideally, the third party should be able to verify that the request came from the named party on the contract, but balancing risk and practicality, the Government has worked on the basis that checking it is someone in the household (i.e. someone who has access to the meter point) is a good enough proxy.

5.9 This issue does not apply to suppliers acting on behalf of their own customers because suppliers will already have their own means of verifying that the customer is who they say they are, and the DCC will check that the supplier is the registered supplier for the meter point in question. However, it would apply to suppliers acting on behalf of consumers for whom they were not currently the registered supplier.

5.10 Verification of the individual could be carried out in a number of ways. The Government has for some time been discussing a particular approach - the Customer Identification Number (CIN) model – with stakeholders. On receipt of the request for data access from a third party, the DCC would generate a four-digit CIN and send it to the consumer's meter (and possibly also in-home display (IHD)). The consumer would send this CIN on to the third party (for example, via entering it on a website), who in turn would send it back to the DCC. Once the loop had been completed, the DCC could grant access to the third party. Capability to display a CIN is being built into the Smart Metering Equipment Technical Specifications (SMETS), on a contingency basis.

5.11 An alternative option would be for the DCC, on request by the third party, to generate and send a CIN to both the consumer and the third party. The consumer would be asked by the third party to send the CIN it had received on to the third party, who would check that it matched the CIN it had itself been sent. The third party would be required to keep records to demonstrate that it was matching CINs properly.

5.12 In both cases, the CIN process would serve as a way of establishing and authenticating the relationship between a customer and third party. Once that initial relationship had been established, then it would not be necessary for the same company to run the CIN process again in respect of any new or additional services being offered to the same customer. This would be consistent with the approach in respect of licensed suppliers, where the fact that a

supplier is established as the registered supplier for a meter point serves as sufficient authentication of the relationship between the supplier and the consumer for the DCC to release data. The responsibility would be with the third party to confirm to the DCC whether or not a CIN process was needed in respect of the particular data access request being made. There would need to be some process in place to check that third parties were using CIN where they needed to (see below).

- 5.13 The disadvantage of these approaches is that they arguably stifle spontaneity, in the sense that consumers could not immediately enable third parties to access their data, but would need to wait for the CIN process to have been completed, although this should be a relatively quick process. It also sets a higher bar for third party access, compared with supplier access, although not in cases where suppliers are engaging with consumers for whom they are not currently the registered supplier. There may also be practical issues, in that consumers would need to be in the home to read the CIN from the meter/IHD, and in that there may be circumstances in which individuals did not have an IHD or could not access the meter. Consideration would also need to be given to how the process would work for other parties, such as landlords and carers, who may not be in the premises but who may need to enable third party access to the data relating to the premises.

Government position

- 5.14 The Government proposes to require that before accessing energy consumption data from consumers, third parties must have taken steps to verify that the request for their services has in fact come from the individual living in the premises in question. The Government believes it is right to proceed in this way so that robust reassurance can be given to consumers about how their data will be protected in the initial stages of mass roll-out.
- 5.15 The Government believes that one of the Customer Identification Number models described above would enable verification of the individual to be demonstrated, and can see the merits in mandating that such an approach should be taken. However, the Government recognises that there may be practical issues with the CIN models described that could inhibit take-up of third party services, and that there may be other approaches which could be used to demonstrate verification of the individual. The Government would welcome views on the potential approaches that could be adopted.

Consultation Question

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| 21. | Do you agree with the proposal to require third parties to take steps to verify that the request for third party services has come from the individual living in the premises in question? |
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Consultation Question

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| 22. | Do you agree that the Customer Identification Number (CIN) process would enable third parties adequately to demonstrate verification of the individual consumer? Which of the two CIN models described is preferable? Would any alternative approach be more effective? |
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Verification that consumer consent has been properly obtained

- 5.16 The Customer Identification Number process would be a robust check, but in going through this process, it is important that consumers are aware of what they are agreeing to so that they make choices about allowing access to their data on an informed basis. The responsibility should be on the third party to ensure that it has made clear to customers what data will be collected, for which purposes, over what period of time, and that records are kept where consent is given.
- 5.17 In submitting data access requests to the DCC, the Government therefore proposes that third parties should be required in the Smart Energy Code to confirm (or ‘self-certify’) that they had obtained the necessary consent properly from the consumer. If this approach were adopted, then there may need to be some retrospective audit to check that consents were being obtained properly (see below). The equivalent arrangements for suppliers are described in Chapter 3.
- 5.18 An alternative option that has previously been considered was that the DCC could maintain a ‘permissions register’, where individual consumers would be able to review, add or delete any permissions that they had given, for example through a website. However, this was not considered to be viable initially – any such register would need to be linked to the meter registration database which would not be part of the DCC until a few years after the start of roll-out.

Consultation Question

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| 23. | Do you agree with the proposal to require third parties wishing to access data via the DCC to self-certify that where it is required, customer consent has been properly obtained? |
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Consumer awareness of ‘active’ consents

- 5.19 It will be important to ensure that consumers remain aware of decisions they may have made previously about who can access their data, for which purposes, where that data is being accessed on an ongoing basis. The Government therefore proposes to require third parties to provide annual reminders to consumers about the data that they are accessing, and how consumers can change the arrangements if they wish to. Annual reminders would not be necessary where access to data had been granted on a one-off basis (for example, for the purposes of a single tariff price comparison), or where the arrangement to access the customer’s data lasted for less than a year. The Government is proposing to introduce equivalent measures on suppliers through modifications to licence conditions (see Chapter 3).

Consultation Question

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| 24. | Do you agree with the proposal to require third parties to provide annual reminders to customers from whom they are collecting data on an ongoing basis? |
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Implementation and enforcement

5.20 The Government proposes that the requirements set out above on DCC users acting as third parties should be set out in the Smart Energy Code (SEC). In summary, these requirements include:

- requirement on third parties to take steps to verify that the request for third party services has come from the individual living in the premises in question;
- requirement that third parties wishing to access data via the DCC are implicitly self-certifying that where it is required, customer consent has been properly obtained; and
- requirement on third parties to provide annual reminders to customers from whom they are collecting data on an ongoing basis.

5.21 For those parties who are not licensed, it is the Government's view that the SEC is the only route for applying formal obligations, and all third parties (and others) requesting access to data via the DCC will need to be signatories to the Code. Licensed parties acting as third parties would be required to comply with the same SEC arrangements as other third parties. There would need to be remedies under the Code – for example, loss of access to DCC services – to incentivise compliance and deter third parties from retrieving data which they do not have permission to access.

5.22 Use of the Smart Energy Code to implement data access requirements on third parties would be different from the proposed approach to use of licence conditions on suppliers. However, there are important differences in the roles, responsibilities, and potential data access requirements of suppliers and third parties. The proposed licence conditions on suppliers address fundamental questions about the level of choice and protection that consumers should have in their relationship with their energy supplier, and suppliers are required to undertake certain activities (such as billing and settlement) which will depend on access to data. These broader considerations do not apply to third parties, who are not licensed and would necessarily need to obtain explicit (opt-in) consent from the customer to establish a relationship, deliver a service or access any data.

5.23 This consultation document seeks views on the proposed requirements on third parties in relation to data access in principle. In parallel, the Government is consulting on other high-level content for the Smart Energy Code, including governance arrangements⁶⁷. Governance arrangements would cover the way in which any modifications to the code could be made (for example, if alternative options for verification of the individual were proposed by industry). The detailed drafting of any measures for inclusion in the Code would be subject to a separate consultation later in 2012.

Consultation Question

25.	Do you agree with the proposed use of the Smart Energy Code to set out requirements relating to third party access to data?
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5.24 Given that the DCC will not be checking whether the requirements described above are being met, it may be necessary to put in place audit arrangements to drive compliance by

⁶⁷ Consultation on the Scope, Governance and Content of the Smart Energy Code
http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

third parties. Suppliers would be subject to separate regulatory scrutiny on equivalent licence obligations by Ofgem.

- 5.25 One option is that the SEC Panel could be charged with appointing an independent auditor to conduct an audit on a random sampling basis. The auditor could check that:
- the third party was taking appropriate steps to verify the individual, for example through use of the CIN process, where this was needed;
 - the third party had the appropriate consent in place at the time that the request to access data was made to the DCC; and that
 - the third party was sending annual notifications to consumers.
- 5.26 In order to enable the auditor to perform its checks, third parties could be required in the Smart Energy Code to keep a record of verification checks that had been made and consents that had been obtained for an appropriate period. (Suppliers would be required by licence to keep similar records). The DCC would maintain a log of all access requests for a period to be determined, which could provide the basis for audit. The cost implications for SEC signatories of any such audit arrangements would need to be considered in further detail.
- 5.27 An alternative option would be to require third parties to audit themselves independently and submit reports to the SEC Panel for scrutiny, but this may not be sufficiently robust. The Government would welcome views on these or any alternative approaches that could be adopted.
- 5.28 The Government will consider in due course the potential need for more stringent arrangements and checks if third parties wished to offer load control services (for example, remotely turning appliances on and off). At this stage, and until that further work is complete, third parties would not be able to offer load control services via the DCC.

Consultation Question

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| 26. | Do you have any comments on the proposed option of the SEC Panel arranging an independent audit function to check third party compliance with data access requirements? Would any alternative approach be more effective? |
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- 5.29 More widely, the Information Commissioner's Office will regulate third party compliance with the Data Protection Act. It would remain open to the ICO to consider whether it wished to make the SEC Panel aware of any serious or repeated breaches of the Data Protection Act by a particular company, in order that the SEC Panel could take this into account, where appropriate, in any decisions it made about accession to SEC and use of DCC services. There may be merit in the development of some form of Memorandum of Understanding between the ICO and the SEC Panel to cover this and similar issues.

Government and other uses of data

- 5.30 The Government may wish to have access to some smart metering data for the purposes of statistical analysis, monitoring and evaluation of the Smart Metering Implementation Programme. This may include analysis of monthly energy consumption data, although this would be reported on an aggregated basis (i.e. without identifying individual households). The Government intends to consult later this year on its proposed information needs, and

how such information would be collected, used and published at different stages of the Programme. Any such uses of smart metering data will also be considered in the context of the Government's broader transparency and Open Data agenda⁶⁸.

5.31 Smart meter data potentially offers more detailed information about energy usage than had previously been available, and this may lead to increased requests for access to personal data from law enforcement agencies (such as the police). Data controllers should ensure they have procedures in place to deal with such requests and ensure appropriate safeguards are established before disclosure of data. Data controllers should take care to verify that the request is from an appropriate authority and be satisfied that the disclosure of the data is necessary for the purposes of crime prevention or detection, or the apprehension or prosecution of offenders.

⁶⁸ More information on the Open Data initiative is available at <http://www.cabinetoffice.gov.uk/news/making-open-data-real-consultation-summary-responses>

Chapter 6 – Non-domestic sector

The variety of current and future metering arrangements in the non-domestic market arguably makes considerations about data access and privacy more complex than in the domestic sector. However, similar issues around privacy (or commercial confidentiality), delivery of benefits, and promoting competition will be important in the non-domestic sector, and data access will be important for a similar range of parties, including non-domestic consumers themselves, suppliers, network operators and third parties.

This chapter considers potential arrangements for smart metering data access and privacy in the non-domestic sector.

Background

6.1 The Government's proposals for smart metering include the provision of smart meters to smaller non-domestic sites. These consist of around 2.1 million electricity sites in profile classes 3-4 and around 1.5 million gas sites with gas consumption under 732 MWh per year. As set out in the Government Response to the roll-out consultation, suppliers will be required to take all reasonable steps to install compliant smart meters at these premises by the end of 2019, except where advanced meters have already been installed by 2014 (or where there are contractual arrangements in place by 2014 to do so)⁶⁹.

6.2 Separately the Government has already made provision for the installation of advanced meters in larger non-domestic premises by 2014⁷⁰. These meters must have half-hourly electricity and hourly gas data capability, and suppliers are required to provide consumers with timely access to their own consumption data on request.

6.3 As for domestic customers, considerations about data access and privacy for non-domestic customers involve balancing potential concerns around privacy or commercial confidentiality, with promoting competition and delivering Programme benefits. However, there are a number of factors which might point to the balance being struck in a different way for non-domestic customers:

- The Data Protection Act is generally unlikely to apply in respect of non-domestic customers, except for some smaller non-domestic customers (for example, sole traders)⁷¹;
- Privacy concerns are likely to be lower in the non-domestic sector⁷², although there may be some concerns – particularly amongst larger organisations - about commercial

⁶⁹ DECC, Government Response to the Consultation on draft licence conditions and technical specifications for the roll-out of gas and electricity smart metering equipment http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (April 2012)

⁷⁰ Larger non-domestic electricity sites are defined as those within profile classes 5-8 and gas sites as those with consumption above 732 MWh per annum.

⁷¹ The Data Protection Act defines "personal data" as that which relates to a "living individual".

⁷² For example, responses to the Call for Evidence pointed out that many non-domestic customers are already used to publishing "green statistics"

confidentiality, and non-domestic customers will still expect their data to be handled securely;

- There is an existing market for energy services in the non-domestic sector – although this market is often based around the provision of metering services as well as analysis of data;
- Significant benefits are anticipated in the non-domestic sector, and in particular the expected proportion of benefits attributable to energy savings is higher than in the domestic sector. As there is no requirement for non-domestic suppliers to provide an in-home display, such savings may be driven more through indirect feedback and advice, such as energy profiles and reports. Such services are already offered in this market, although the services offered to micro-businesses may be different from those offered at present to larger customers;
- The Government decision not to oblige suppliers of small non-domestic customers to use DCC services for their smart meters, and the presence of a significant number of ‘advanced’ meters in the sector, presents issues of parity, for example in terms of whether and how third party access might be facilitated;
- There is no restriction on suppliers charging for more detailed data associated with metering services (recognising that in this sector there is often a separate charge for metering already).

Non-domestic customer and third party access to data

6.4 Chapters 2 and 5 set out the arrangements in place to enable domestic customers to access their own energy consumption data, and share this data with third parties, should they choose to. Similarly, the Government wishes to ensure that non-domestic customers are able easily to access their own energy consumption data and share it with third parties, should they choose to. However, there are several issues which will affect the extent to which such arrangements would work in the non-domestic sector.

6.5 In order to ensure that all advanced meter customers have full access to their own consumption data, the Government Response to the roll-out consultation sets out the decision to include the same requirements in relation to advanced meters for smaller non-domestic customers as apply in relation to larger customers. The roll-out licence condition includes requirements that advanced meters installed under the permitted exceptions to the roll-out obligation must be able to provide half-hourly electricity data and hourly gas data, and that customers should, on request, have timely access to that data. Any charging arrangements around that data provision will be a contractual matter. The Government is not currently proposing further rules in respect of access to data from these meters given that these meters are being treated as exempt from the roll-out obligation and also may have more limited capability. However, the Government would welcome views on whether there is anything more that should be done in this space to ensure non-domestic customers have adequate access to consumption data.

6.6 In respect of compliant smart meters that are opted into the DCC, it is envisaged that the same basic arrangements would apply as in the domestic sector, with non-domestic consumers being able to access their data locally over the HAN (albeit with an IHD not provided as standard) or to enable third parties to access their data via the DCC. For access to data via the DCC, it is envisaged that similar arrangements could be applied in terms of use of a Customer Identification Number (CIN) for a third party to verify the identity of the individual. However, the Government would welcome views on whether this is necessary in the non-domestic sector, and on whether there may be particular problems with applying this

arrangement in the context where the bill payer may often be located away from the premises.

6.7 For smart meters that are opted out of the DCC, it is envisaged that non-domestic consumers would still be able to access their data locally over the HAN. However, there would be practical challenges in providing third party access remotely, including carrying out the necessary checks on third parties, given that this would require suppliers to provide something akin to a DCC service themselves (including, for example, the potential audit arrangements set out in Chapter 5). However, the ability for consumers to provide third parties with access to their data is seen as important in driving innovation in energy services and it is also important that suppliers do not have a perverse incentive to opt out of the DCC if this avoided the need to provide third party access. The Government would welcome views on whether it would be practical and proportionate as an alternative to require suppliers opting out of the DCC to make arrangements to provide information which they hold to third parties where the customer requests the supplier to do so.

Consultation Question

27. Is there a need for any specific arrangements to enable non-domestic customers to allow third parties to access their data? Should such arrangements apply only to opted-in smart meters or more widely?

Supplier access to non-domestic customers' data

6.8 The Government has considered the extent to which it would be appropriate for its proposed framework for supplier access to energy consumption data from domestic customers – as set out in Chapter 3 - to apply in respect of the non-domestic sector.

6.9 On the one hand, in the absence of protections under the Data Protection Act for many non-domestic customers, there may be a case for sector-specific provisions to ensure that the position is clear. For micro-businesses, many of the same competition considerations may apply as for domestic customers, and hence there are arguments for applying the same rules across the domestic and non-domestic sectors.

6.10 On the other hand, given that privacy concerns are lower in the non-domestic sector, and that access to granular data is likely to be more important in this sector to enable provision of indirect feedback and potentially time-of-use tariffs, there may be a case for a more permissive framework (for example, a framework that allowed non-domestic suppliers to access half-hourly data, unless the customer objected).

6.11 There is also a question as to whether the approach taken should apply only in respect of smaller non-domestic sites that use the DCC, or apply to other non-domestic sites as well. Where non-domestic customers are using advanced meters (and in some cases where they are using smart meters opted out of the DCC) this is likely to be on the basis of a specific contract for metering services which would include arrangements for access to data.

6.12 Given that advanced meters are exempt from the roll-out obligation and part of an existing landscape of metering arrangements, it would not seem appropriate to restrict supplier access to data from these meters. However, there would then be a concern that restricting supplier access to data from non-domestic customers using SMETS-compliant meters could

create perverse incentives on suppliers to install advanced rather than smart meters. Similarly, if a more restrictive approach were to apply to meters that are opted in to the DCC, then this could create a perverse incentive on suppliers to opt out of the DCC. Ensuring that consumers are clear about the implications of the different options for metering in the non-domestic market will be important, and this is discussed further below.

- 6.13 The Government recognises that these arguments are finely balanced, and would welcome views from consultees on the possible approaches that could be taken.

Consultation Question

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| 28. | What would be the advantages and disadvantages of applying the data access framework proposed for domestic customers equally to the non-domestic sector? Should this apply only to opted-in smart meters or more widely? |
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Network operator access to non-domestic customers' data

- 6.14 Similar issues arise in relation to access to data by network operators. For smart meters opted in to the DCC the access arrangements are assumed to be the same as for domestic customers, with network operators able to access a range of information via the DCC. As discussed above, the privacy concerns are likely to be less apparent in this sector and the Government would welcome views on whether it is necessary to apply the same restrictions on network access to energy consumption data as proposed for the domestic sector.

- 6.15 For smart meters opted out of the DCC it is assumed that in making or agreeing to the opt-out arrangements, the supplier would ensure that it was able to discharge any obligations it had to provide access to data to network operators. Over time, as network operators' data needs become clearer, these obligations might be expected to evolve, and ultimately the Government might expect network operators to be able to access the full range of alerts and technical data, as well as consumption data, even where meters were opted out of the DCC. The Government would welcome views on whether there is any case in the short term for imposing other specific obligations on suppliers to ensure that network operators have access to energy consumption data or any other data that they may need.

- 6.16 For advanced meters, as discussed above, the functionality may be more limited and these meters are exempt from the roll-out obligation. On this basis it is unlikely to be practicable to provide network operators with the full range of data that a smart meter could provide. However, the existing obligations on suppliers to provide consumption data to network operators should enable them to access at least basic information for planning and other purposes, and network operators could have access to more detailed data by contractual agreement with the supplier.

Consultation Question

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| 29. | Is there a need for any additional obligations to ensure that network operators can gain access to non-domestic customers' energy consumption data and other data, even where meters are opted out of the DCC, or in the case of advanced meters? What would be the practical challenges in facilitating such access? |
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Building consumer understanding of the options

6.17 The Government wishes to ensure that non-domestic customers understand properly the choices they have about smart metering, and the implications that such choices might have on their ability to access their own data or to share it with third parties. Given the complexities of the arrangements in the non-domestic sector, the Government considers that there may be a risk of customer confusion or of customers making ill-informed choices. As part of its Consumer Engagement Strategy, the Government will look to make general information available to non-domestic consumers about the arrangements for smart metering through a range of channels.

6.18 The Government would also be interested in views on whether there is a need for any form of obligation on suppliers to provide information to non-domestic consumers about the implications of smart metering choices, particularly the choices between advanced and smart metering, and between opting into, or out of, the DCC.

Consultation Question

30.	Is there a need for any form of information obligation on suppliers to ensure that non-domestic consumers are aware of the potential for particular choices to limit their ability to access their own data or share this with third parties?
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Implementation

6.19 Once decisions around the policy approach to data access and privacy in the non-domestic sector have been taken, in light of this consultation, the Government will consider options for implementation. Subject to this consultation, the Government would propose to vary licence conditions proposed for the domestic sector (provided in Annex A), to suit the non-domestic sector, as appropriate. This would include consideration about whether any such licence conditions should apply only to opted-in smart meters, or more widely.

Annex A – Draft licence conditions

Draft Electricity Supply Licence Condition

Condition [XX]: Smart Metering - Matters Relating To Obtaining And Using Consumption Data

Application

- 1 This Condition applies in respect of each Domestic Premises (the **relevant premises**):
 - (a) to which electricity is supplied through a Electricity Meter which forms part of a Smart Metering System; and
 - (b) in respect of which the quantity of electricity supplied is measured by that Electricity Meter.

PART A: PROHIBITION ON OBTAINING AND USING CONSUMPTION DATA

Prohibition on obtaining consumption data

- 2 The licensee must not, in respect of any relevant premises, obtain:
 - (a) any Electricity Consumption Data which relates to a period of less than one month; or
 - (b) any data which would allow the licensee to calculate Electricity Consumption Data in respect of a period of less than one month.
- 3 Paragraph 2 is subject to paragraphs 6 and 9.

Prohibition on use of consumption data

- 4 The licensee must not use Electricity Consumption Data obtained in respect of any relevant premises other than for any of the following purposes:
 - (a) calculating and sending a Bill to the Domestic Customer;
 - (b) complying with a relevant condition or a relevant requirement;
 - (c) where the requirements of paragraph 7 are met, the purposes set out in the Notice given to the Domestic Customer under paragraph 7(a);
 - (d) where the requirements of paragraph 8 are met, the purposes for which the data was obtained in accordance with paragraph 8;
 - (e) where the requirements of paragraph 10 are met, the purposes set out in the Notice given to the Domestic Customer under paragraph 10(a);

- (f) where the requirements of paragraph 11 are met, the purposes for which it was obtained in accordance with paragraph 11.

5 Paragraph 4 is subject to paragraph 12.

PART B: EXCEPTIONS TO PROHIBITION ON OBTAINING CONSUMPTION DATA

Consumption data for periods of less than one month

6 Paragraph 2 does not apply where:

- (a) the Electricity Consumption Data that is obtained or can be calculated relates to a period of less than one month but not less than one day; and
- (b) the requirements of either paragraph 7 or 8 are met.

7 The requirements of this paragraph are that:

- (a) the licensee has given at least [14] days advance Notice to the Domestic Customer at the relevant premises informing the Domestic Customer:
 - (i) that the licensee intends to obtain Electricity Consumption Data in respect of any one or more periods of a length referred to in paragraph 6(a);
 - (ii) of the purposes (which purposes must not include Marketing) for which the licensee may use that Electricity Consumption Data; and
 - (iii) that the Domestic Customer may at any time object to the licensee obtaining that Electricity Consumption Data; and
- (b) the Domestic Customer has not objected to the licensee obtaining that Electricity Consumption Data.

8 The requirements of this paragraph are that one of the following applies:

- (a) the licensee has reasonable grounds to suspect that there is an occurrence of theft or abstraction of electricity at the relevant premises and it obtains the Electricity Consumption Data for the purposes of investigating that suspected theft or abstraction;
- (b) the licensee obtains the Electricity Consumption Data for the purposes of:
 - (i) verifying the quantity of electricity supplied to the relevant premises since the last date in respect of which the licensee obtained Electricity Consumption Data for the purposes of sending a Bill to the Domestic Customer (the **Billing Date**); and

- (ii) calculating and sending an accurate and up to date Bill (including a final Bill) to the Domestic Customer in respect of the Charges for the Supply of Electricity to the relevant premises since the Billing Date; or
- (c) the licensee obtains the Electricity Consumption Data for the purposes of responding to an enquiry from or a complaint made by, or on behalf of, the Domestic Customer at the relevant premises and relating to the supply of electricity by the licensee to the relevant premises.

Consumption data for periods of less than a day

9 Paragraph 2 does not apply where:

- (a) the Electricity Consumption Data that is obtained or can be calculated relates to a period of less than a day; and
- (b) the requirements of either paragraph 10 or 11 are met.

10 The requirements of this paragraph are that:

- (a) the licensee has given Notice to the Domestic Customer at the relevant premises informing the Domestic Customer:
 - (i) that the licensee intends to obtain Electricity Consumption Data in respect of a period of less than one day;
 - (ii) of the purposes for which the licensee may use that Electricity Consumption Data;
 - (iii) that the licensee requires the Domestic Customer's consent to obtain that Electricity Consumption Data; and
 - (iv) that where the Domestic Customer gives consent he may withdraw it at any time; and
- (b) the Domestic Customer has given his explicit consent to the licensee obtaining that Electricity Consumption Data and such consent has not been withdrawn.

11 The requirements of this paragraph are that:

- (a) the [Secretary of State [or] the Authority] has approved proposals submitted by the licensee for obtaining Electricity Consumption Data which relates to a period of less than one day in respect of a particular category of relevant premises (as specified in the proposal) on a trial basis (the Trial);
- (b) the relevant premises fall within that category;

- (c) the licensee has given at least [14] days advance Notice to the Domestic Customer at the relevant premises informing the Domestic Customer of the nature of the Trial and that he may at any time object to being included in the Trial; and
- (d) the Domestic Customer has not objected to being included in the Trial.

PART C: EXCEPTIONS TO PROHIBITION ON USE OF CONSUMPTION DATA

- 12 The licensee may use Electricity Consumption Data for purposes other than the purposes in paragraph 4 where:
- (a) it has given at least [14] days advance Notice informing the Domestic Customer that it intends to use Electricity Consumption Data for the purposes specified in the Notice; and
 - (b) the requirements of paragraph 13 are met.
- 13 The requirements of this paragraph are that:
- (a) where the Electricity Consumption Data relates to any period of less than a day, the Domestic Customer has given explicit consent for that Electricity Consumption Data to be used for the purposes specified in the Notice;
 - (b) where the Notice given under paragraph 12(a) specifies that the licensee intends to use Electricity Consumption Data for Marketing, the Domestic Customer has given explicit consent for the Electricity Consumption Data to be used for Marketing; and
 - (c) in all other cases, the Domestic Customer has not objected to the Electricity Consumption Data being used for the purposes specified in the Notice.

Maintaining records and informing customers

- 14 The licensee must, in respect of each of its Domestic Customers at relevant premises, at all times maintain an accurate and up to date record of:
- (a) the date of any Notice sent to the Domestic Customer under this Condition and of the information contained in it;
 - (b) the nature of the Domestic Customer's response (if any) to that Notice;
 - (c) the time periods (by reference to length) in respect of which the licensee obtains or may obtain Electricity Consumption Data; and
 - (d) where the licensee obtains Electricity Consumption Data by virtue of paragraph 6, a statement setting out which requirements of paragraph 8 are met and the reasons why such requirements are met in the circumstances of the case.

- 15 The licensee must at least once in each year inform the Domestic Customer of:
- (a) the time periods (by reference to length) in respect of which the licensee obtains or may obtain Electricity Consumption Data;
 - (b) the purposes for which that Electricity Consumption Data is, or may be, used by the licensee; and
 - (c) the Domestic Customer’s right, if any, to object or withdraw consent (as the case may be) to the licensee obtaining or using (as the case may be) that Electricity Consumption Data.

Interpretation and Definitions

16 In this Condition, any reference to ‘obtain’ shall be read as incorporating a reference to the licensee requesting any other person to obtain on its behalf and ‘obtaining’ and ‘obtained’ shall be construed accordingly.

17 For the purposes of this Condition:

Electricity Consumption Data	means, in respect of a relevant premises, the quantity of electricity measured by the Electricity Meter as having been supplied to the relevant premises.
Marketing	<p>means:</p> <ul style="list-style-type: none"> (a) any activities of the licensee or its Representatives which are directed at or incidental to identifying and communicating with Domestic Customers for the purpose of promoting the provision of goods or services by any person and includes entering into contracts for the provision of goods or services with such customers; (b) disclosing Electricity Consumption Data to any other person for the purposes of that person undertaking activities which are directed at or incidental to identifying and communicating with Domestic Customers for the purpose of promoting the provision of goods or services by any person, including the entering into contracts for the provision of goods or services with such customers, <p>but for these purposes ‘goods or services’ shall be taken to exclude [(i) the supply of electricity by the</p>

	licensee, and (ii)] any goods or services which are to be provided free of charge.
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Draft Gas Supply Licence Condition

Condition [XX]: Smart Metering - Matters Relating To Obtaining And Using Consumption Data

Application

- 1 This Condition applies in respect of each Domestic Premises (the relevant premises):
 - (a) to which gas is supplied through a Gas Meter which forms part of a Smart Metering System;
and
 - (b) in respect of which the quantity of gas supplied is measured by that Gas Meter.

PART A: PROHIBITION ON OBTAINING AND USING CONSUMPTION DATA

Prohibition on obtaining consumption data

- 2 The licensee must not, in respect of any relevant premises, obtain:
 - (a) any Gas Consumption Data which relates to a period of less than one month; or
 - (b) any data which would allow the licensee to calculate Gas Consumption Data in respect of a period of less than one month.
- 3 Paragraph 2 is subject to paragraphs 6 and 9.

Prohibition on use of consumption data

- 4 The licensee must not use Gas Consumption Data obtained in respect of any relevant premises other than for any of the following purposes:
 - (a) calculating and sending a Bill to the Domestic Customer;
 - (b) complying with a relevant condition or a relevant requirement;
 - (c) where the requirements of paragraph 7 are met, the purposes set out in the Notice given to the Domestic Customer under paragraph 7(a);
 - (d) where the requirements of paragraph 8 are met, the purposes for which the data was obtained in accordance with paragraph 8;
 - (e) where the requirements of paragraph 10 are met, the purposes set out in the Notice given to the Domestic Customer under paragraph 10(a);
 - (f) where the requirements of paragraph 11 are met, the purposes for which it was obtained in accordance with paragraph 11.

5 Paragraph 4 is subject to paragraph 12.

PART B: EXCEPTIONS TO PROHIBITION ON OBTAINING CONSUMPTION DATA

Consumption data for periods of less than one month

6 Paragraph 2 does not apply where:

- (a) the Gas Consumption Data that is obtained or can be calculated relates to a period of less than one month but not less than one day; and
- (b) the requirements of either paragraph 7 or 8 are met.

7 The requirements of this paragraph are that:

- (a) the licensee has given at least [14] days advance Notice to the Domestic Customer at the relevant premises informing the Domestic Customer:
 - (i) that the licensee intends to obtain Gas Consumption Data in respect of any one or more periods of a length referred to in paragraph 6(a);
 - (ii) of the purposes (which purposes must not include Marketing) for which the licensee may use that Gas Consumption Data; and
 - (iii) that the Domestic Customer may at any time object to the licensee obtaining that Gas Consumption Data; and
- (b) the Domestic Customer has not objected to the licensee obtaining that Gas Consumption Data.

8 The requirements of this paragraph are that one of the following applies:

- (a) the licensee has reasonable grounds to suspect that there is an occurrence of theft of gas at the relevant premises and it obtains the Gas Consumption Data for the purposes of investigating that suspected theft;
- (b) the licensee obtains the Gas Consumption Data for the purposes of:
 - (i) verifying the quantity of gas supplied to the relevant premises since the last date in respect of which the licensee obtained Gas Consumption Data for the purposes of sending a Bill to the Domestic Customer (the **Billing Date**); and
 - (ii) calculating and sending an accurate and up to date Bill (including a final Bill) to the Domestic Customer in respect of the Charges for the Supply of Gas to the relevant premises since the Billing Date; or

- (c) the licensee obtains the Gas Consumption Data for the purposes of responding to an enquiry from or a complaint made by, or on behalf of, the Domestic Customer at the relevant premises and relating to the supply of gas by the licensee to the relevant premises.

Consumption data for periods of less than a day

9 Paragraph 2 does not apply where:

- (a) the Gas Consumption Data that is obtained or can be calculated relates to a period of less than a day; and
- (b) the requirements of either paragraph 10 or 11 are met.

10 The requirements of this paragraph are that:

- (a) the licensee has given Notice to the Domestic Customer at the relevant premises informing the Domestic Customer:
 - (i) that the licensee intends to obtain Gas Consumption Data in respect of a period of less than one day;
 - (ii) of the purposes for which the licensee may use that Gas Consumption Data;
 - (iii) that the licensee requires the Domestic Customer's consent to obtain that Gas Consumption Data; and
 - (iv) that where the Domestic Customer gives consent he may withdraw it at any time; and
- (b) the Domestic Customer has given his explicit consent to the licensee obtaining that Gas Consumption Data and such consent has not been withdrawn.

11 The requirements of this paragraph are that:

- (a) the [Secretary of State [or] the Authority] has approved proposals submitted by the licensee for obtaining Gas Consumption Data which relates to a period of less than one day in respect of a particular category of relevant premises (as specified in the proposal) on a trial basis (the Trial);
- (b) the relevant premises fall within that category;
- (c) the licensee has given at least [14] days advance Notice to the Domestic Customer at the relevant premises informing the Domestic Customer of the nature of the Trial and that he may at any time object to being included in the Trial; and
- (d) the Domestic Customer has not objected to being included in the Trial.

PART C: EXCEPTIONS TO PROHIBITION ON USE OF CONSUMPTION DATA

- 12 The licensee may use Gas Consumption Data for purposes other than the purposes in paragraph 4 where:
- (a) it has given at least [14] days advance Notice informing the Domestic Customer that it intends to use Gas Consumption Data for the purposes specified in the Notice; and
 - (b) the requirements of paragraph 13 are met.
- 13 The requirements of this paragraph are that:
- (a) where the Gas Consumption Data relates to any period of less than a day, the Domestic Customer has given explicit consent for that Gas Consumption Data to be used for the purposes specified in the Notice;
 - (b) where the Notice given under paragraph 12(a) specifies that the licensee intends to use Gas Consumption Data for Marketing, the Domestic Customer has given explicit consent for the Gas Consumption Data to be used for Marketing; and
 - (c) in all other cases, the Domestic Customer has not objected to the Gas Consumption Data being used for the purposes specified in the Notice.

Maintaining records and informing customers

- 14 The licensee must, in respect of each of its Domestic Customers at relevant premises, at all times maintain an accurate and up to date record of:
- (a) the date of any Notice sent to the Domestic Customer under this Condition and of the information contained in it;
 - (b) the nature of the Domestic Customer's response (if any) to that Notice;
 - (c) the time periods (by reference to length) in respect of which the licensee obtains or may obtain Gas Consumption Data; and
 - (d) where the licensee obtains Gas Consumption Data by virtue of paragraph 6, a statement setting out which requirements of paragraph 8 are met and the reasons why such requirements are met in the circumstances of the case.
- 15 The licensee must at least once in each year inform the Domestic Customer of:
- (a) the time periods (by reference to length) in respect of which the licensee obtains or may obtain Gas Consumption Data;
 - (b) the purposes for which that Gas Consumption Data is, or may be, used by the licensee; and

- (c) the Domestic Customer's right, if any, to object or withdraw consent (as the case may be) to the licensee obtaining or using (as the case may be) that Gas Consumption Data.

Interpretation and Definitions

16 In this Condition, any reference to 'obtain' shall be read as incorporating a reference to the licensee requesting any other person to obtain on its behalf and 'obtaining' and 'obtained' shall be construed accordingly.

17 For the purposes of this Condition:

<p>Gas Consumption Data</p>	<p>means, in respect of a relevant premises, the quantity of gas measured by the Gas Meter as having been supplied to the relevant premises.</p>
<p>Marketing</p>	<p>means:</p> <p>(c) any activities of the licensee or its Representatives which are directed at or incidental to identifying and communicating with Domestic Customers for the purpose of promoting the provision of goods or services by any person and includes entering into contracts for the provision of goods or services with such customers;</p> <p>(d) disclosing Gas Consumption Data to any other person for the purposes of that person undertaking activities which are directed at or incidental to identifying and communicating with Domestic Customers for the purpose of promoting the provision of goods or services by any person, including the entering into contracts for the provision of goods or services with such customers,</p> <p>but for these purposes 'goods or services' shall be taken to exclude [(i) the supply of gas by the licensee, and (ii)] any goods or services which are to be provided free of charge.</p>

Amendments to Condition 22 [Duty to offer and supply under Domestic Supply Contract]

22.4 A Domestic Supply Contract must:

- (a) be in Writing;
- (b) include all the terms and conditions for the supply of gas, including:
 - (i) a term separately identifying the Charges for the Supply of Gas and the charge for any other good or service to be provided; and
 - (ii) a term reflecting the provisions of standard condition 24 (Termination of Domestic Supply Contracts) in relation to the ending of the contract in the circumstances set out there; and
- (c) include a term which provides the Relevant Gas Transporter with a right, where a Smart Metering System is installed at Domestic Premises, to obtain Gas Consumption Data.

22.5 No Change

22.6 No Change

22.7 No Change

22.8 No Change

22.9 No Change

22.10 For the purposes of this condition:

“Gas Consumption Data” means, in respect of a Domestic Customer at a Domestic Premises, the quantity of gas measured by the Gas Meter as having been supplied to the Domestic Premises from time to time.

NB: Definition of Gas Consumption Data is included in this paragraph for illustrative purposes. If as presently envisaged the term is used in more than one condition of the licence it will ultimately sit in Condition 1.

“Historic Consumption Data” means:

- (a) except where a Domestic Customer has held his Domestic Supply Contract for less than 12 months, the quantity of gas supplied to the Domestic Customer’s Domestic Premises during the previous 12 months; or

- (b) where the Domestic Customer has held his Domestic Contract for less than 12 months, the quantity of gas supplied to the Domestic Customer's Domestic Premises during the duration of the Domestic Contract.

Draft Electricity Distribution Licence Condition

Condition [XX]: Smart Metering – Matters Relating to Obtaining and Using Consumption Data

Application

- 1 This Condition applies in respect of each Domestic Premises (the relevant premises):
 - (a) to which electricity is supplied through a Electricity Meter which forms part of a Smart Metering System; and
 - (b) in respect of which the quantity of electricity supplied is measured by that Electricity Meter.

PART A: PROHIBITION ON OBTAINING AND USING CONSUMPTION DATA

Prohibition on obtaining consumption data

- 2 The licensee must not, in respect of any relevant premises, obtain:
 - (a) any Electricity Consumption Data which relates to a period of less than one month; or
 - (b) any data which would allow the licensee to calculate Electricity Consumption Data in respect of a period of less than one month.

- 3 Paragraph 2 is subject to paragraphs 5 and 8.

Prohibition on use of consumption data

- 4 The licensee must not use Electricity Consumption Data obtained in respect of any relevant premises other than for the purpose of complying with a relevant condition or a relevant requirement.

PART B: EXCEPTIONS TO PROHIBITION ON OBTAINING CONSUMPTION DATA

Consumption data for periods of less than one month

- 5 Paragraph 2 does not apply where:
 - (a) the Electricity Consumption Data that is obtained or can be calculated relates to a period of less than one month but not less than one day; and
 - (b) the requirements of either paragraph 6, 7 or 11 are met.
- 6 The requirements of this paragraph are that:
 - (a) the Licensee has given at least [14] days advance Notice to the Domestic Customer at the relevant premises informing the Domestic Customer that:

- (i) the licensee intends to obtain Electricity Consumption Data in respect of any one or more periods of a length referred to in paragraph 5(a); and
 - (ii) the Domestic Customer may at any time object to the Licensee obtaining that Electricity Consumption Data; and
- (b) the Domestic Customer has not objected to the Licensee obtaining that Electricity Consumption Data.

7 The requirements of this paragraph are that the licensee has reasonable grounds to suspect that there is an occurrence of theft or abstraction of electricity at the relevant premises and it obtains the Electricity Consumption Data for the purposes of investigating that suspected theft or abstraction.

Consumption data for periods of less than a day

8 Paragraph 2 does not apply where:

- (a) the Electricity Consumption Data that is obtained or can be calculated relates to a period of less than a day; and
- (b) the requirements of either paragraph 9, 10 or 11 are met.

9 The requirements of this paragraph are that:

- (a) the Licensee has given Notice to the Domestic Customer at the relevant premises informing the Domestic Customer that:
 - (i) the licensee intends to obtain Electricity Consumption Data in respect of a period of less than one day;
 - (ii) the licensee requires the Domestic Customer's consent to obtain that Electricity Consumption Data; and
 - (iii) where the Domestic Customer gives consent he may withdraw it at any time; and
- (b) the Domestic Customer has given explicit consent to the licensee obtaining that Electricity Consumption Data and such consent has not been withdrawn.

10 The requirements of this paragraph are that:

- (a) the [Secretary of State or the Authority] has approved proposals submitted by the licensee for obtaining Electricity Consumption Data which relates to a period of less than one day in respect of a particular category of relevant premises (as specified in the proposal) on a trial basis (the Trial);
- (b) the relevant premises fall within that category;

- (c) the licensee has given at least [14] days advance Notice to the Domestic Customer at the relevant premises informing the Domestic Customer of the nature of the Trial and that he may at any time object to being included in the Trial; and
- (d) the Domestic Customer has not objected to being included in the Trial.

Aggregated consumption data

11 The requirements of this paragraph are that:

- (a) the Licensee has demonstrated to the satisfaction of the [Secretary of State or the Authority] that it can implement practices, procedures and systems which will ensure that the Electricity Consumption Data is collated, maintained and used in such manner as will ensure that it is not possible for any person to identify a Domestic Customer at any relevant premises in respect of which the Electricity Consumption Data was obtained; and
- (b) the [Secretary of State or the Authority] has given [his/its] consent to the Licensee to obtain that Electricity Consumption Data.

Interpretation and Definitions

12 In this Condition, any reference to ‘obtain’ shall be read as incorporating a reference to the licensee requesting any other person to obtain on its behalf and ‘obtaining’ and ‘obtained’ shall be construed accordingly.

13 For the purposes of this Condition:

Electricity Consumption Data	means, in respect of a relevant premises, the quantity of electricity measured by the Electricity Meter as having been supplied to the relevant premises.
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Draft Gas Transporters (Distribution) Licence Condition

Condition [XX]: Smart Metering - Matters Relating to Obtaining and Using Consumption Data

Application

- 1 This Condition applies in respect of each Domestic Premises (the **relevant premises**):
- (a) to which gas is supplied through a Gas Meter which forms part of a Smart Metering System; and
 - (b) in respect of which the quantity of gas supplied is measured by that Gas Meter.

PART A: PROHIBITION ON OBTAINING AND USING CONSUMPTION DATA

Prohibition on obtaining consumption data

- 2 The licensee must not, in respect of any relevant premises, obtain:
- (a) any Gas Consumption Data which relates to a period of less than one month; or
 - (b) any data which would allow the licensee to calculate Gas Consumption Data in respect of a period of less than one month.
- 3 Paragraph 2 is subject to paragraphs 5 and 8.

Prohibition on use of consumption data

- 4 The licensee must not use Gas Consumption Data obtained in respect of any relevant premises other than for the purpose of complying with a relevant condition or a relevant requirement.

PART B: EXCEPTIONS TO PROHIBITION ON OBTAINING CONSUMPTION DATA

Consumption data for periods of less than one month

- 5 Paragraph 2 does not apply where:
- (a) the Gas Consumption Data that is obtained or can be calculated relates to a period of less than one month but not less than one day; and
 - (b) the requirements of either paragraph 6, 7 or 11 are met.
- 6 The requirements of this paragraph are that:
- (a) the Licensee has given at least [14] days advance Notice to the Domestic Customer at the relevant premises informing the Domestic Customer that:
 - (i) the licensee intends to obtain Gas Consumption Data in respect of any one or more periods of a length referred to in paragraph 5(a); and

(ii) the Domestic Customer may at any time object to the Licensee obtaining that Gas Consumption Data; and

(b) the Domestic Customer has not objected to the Licensee obtaining that Gas Consumption Data.

7 The requirements of this paragraph are that the licensee has reasonable grounds to suspect that there is an occurrence of theft of gas at the relevant premises and it obtains the Gas Consumption Data for the purposes of investigating that suspected theft.

Consumption data for periods of less than a day

8 Paragraph 2 does not apply where:

(a) the Gas Consumption Data that is obtained or can be calculated relates to a period of less than a day; and

(b) the requirements of either paragraph 9, 10 or 11 are met.

9 The requirements of this paragraph are that:

(a) the Licensee has given Notice to the Domestic Customer at the relevant premises informing the Domestic Customer that:

(i) the licensee intends to obtain Gas Consumption Data in respect of a period of less than one day;

(ii) the licensee requires the Domestic Customer's consent to obtain that Gas Consumption Data; and

(iii) where the Domestic Customer gives consent he may withdraw it at any time; and

(b) the Domestic Customer has given explicit consent to the licensee obtaining that Gas Consumption Data and such consent has not been withdrawn.

10 The requirements of this paragraph are that:

(a) the [Secretary of State or the Authority] has approved proposals submitted by the licensee for obtaining Gas Consumption Data which relates to a period of less than one day in respect of a particular category of relevant premises (as specified in the proposal) on a trial basis (the Trial);

(b) the relevant premises fall within that category;

(c) the licensee has given at least [14] days advance Notice to the Domestic Customer at the relevant premises informing the Domestic Customer of the nature of the Trial and that he may at any time object to being included in the Trial; and

(d) the Domestic Customer has not objected to being included in the Trial.

Aggregated consumption data

11 The requirements of this paragraph are that:

- (a) the Licensee has demonstrated to the satisfaction of the [Secretary of State or the Authority] that it can implement practices, procedures and systems which will ensure that the Gas Consumption Data is collated, maintained and used in such manner as will ensure that it is not possible for any person to identify a Domestic Customer at any relevant premises in respect of which the Gas Consumption Data was obtained; and
- (b) the [Secretary of State or the Authority] has given [his/its] consent to the Licensee to obtain that Gas Consumption Data.

Interpretation and Definitions

12 In this Condition, any reference to 'obtain' shall be read as incorporating a reference to the licensee requesting any other person to obtain on its behalf and 'obtaining' and 'obtained' shall be construed accordingly.

13 For the purposes of this Condition:

Gas Consumption Data	means, in respect of a relevant premises, the quantity of gas measured by the Gas Meter as having been supplied to the relevant premises.
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Annex B - Summary of responses to Call for Evidence

Overview

The Government's Call for Evidence on data access and privacy ran from August to October 2011⁷³. Stakeholders and members of the public were invited to submit evidence and comments. In total, 45 responses were received from a range of stakeholder groups. Respondents can be categorised roughly as follows:

- 12 responses from energy suppliers;
- 10 responses from technical solutions and communications organisations;
- 8 responses from energy services companies (such as energy management companies and energy consultants);
- 4 responses from network operators;
- 3 responses from consumer or campaign groups;
- 3 responses from trade associations;
- 3 responses from academics or professional institutions; and
- 2 responses from regulators.

Non-confidential responses to the Call for Evidence have been published on the DECC website⁷⁴.

Question-by-question summary

Question 1: Please submit any further evidence, such as surveys or consumer research, regarding privacy issues and smart metering. In particular is there evidence available about the effects of the availability and aggregation levels of more granular data (for example daily)?

The general view from responses was that consumers were currently not particularly concerned about the use of their energy consumption data, or at least that consumers had not yet formed any particular views on the issue. Experience from suppliers involved in smart meter trials was that rather than having major concerns about privacy, customers above all wanted help understanding bills, reducing their energy costs and simplicity.

However, consumer groups argued that low reported levels of concern could be due to a lack of consumer awareness about smart metering data access and privacy, rather than taken as a positive indication that there were no concerns. Most network operators cited the Energy Network Association's Privacy Impact Assessment⁷⁵ and felt that in general consumers

⁷³ Smart Metering Implementation Programme. A call for evidence on data access and privacy http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx (August 2011)

⁷⁴ Non-confidential responses to the Call for Evidence are available at http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx

⁷⁵ Energy Networks Association Privacy Impact Assessment: Use of Smart Metering data by Network Operators <http://www.energynetworks.org/modx/assets/files/news/consultation-responses/Consultation%20responses%202011/ENA%20Privacy%20Impact%20Assessment%20Use%20of%20Pri>

understood and supported the fact that network operators needed energy consumption data to support efficient running of their systems.

Some respondents pointed to evidence and literature in support of their arguments, and some explained that they had undertaken research and focus groups with customers to understand their attitudes. For example, one supplier's survey found that only 6% of customers with smart meters would object to the collection of half-hourly data. Consumer Focus research found that consumers have varying degrees of tolerance towards data sharing, and that even where they are relatively tolerant they still want transparency, choice and control⁷⁶. Use of data for marketing purposes and passing details on to third parties was marked out as a particular area of consumer concern. However, rather than pointing to any new evidence per se, most respondents gave an opinion about privacy issues and smart metering based on experience in the market.

A majority of suppliers thought that more granular (daily and half-hourly) levels of data would be needed to realise the full range of benefits. In general they argued that more granular data would enable greater insights, more targeted support for consumers, innovation and cost savings. Some suppliers pointed to international experience, where granular data is being accessed and benefits are being seen. For example, reference was made to one company's work in the USA, where energy efficiency advice based on monthly energy consumption data was delivering 1.5 – 3.5% average consumer energy savings, and where it was estimated that access to daily and sub-daily data could increase effectiveness by over 50%.

There seemed to be a general view from suppliers and technical solutions companies that half-hourly data could not be disaggregated to identify individual appliances and devices, and that this should help to allay some consumers' concerns.

Question 2: To what extent would different rules for access to data between suppliers and third parties be expected to impact on the development of an energy services market (in terms of product and tariff innovation and / or entry to the energy market by third parties)? What are the particular data uses to which these concerns apply?

There was general consensus amongst respondents that there should be a 'level playing field' between established players (such as energy suppliers and network operators) and new market entrants (such as third party energy services companies). There was recognition that a market that restricted third party access to data could stifle innovation and restrict benefits to consumers. However, it was also noted that these groups had different responsibilities: suppliers and network operators had licence obligations to meet, whereas third parties did not. Some suppliers and academics felt that that ease of access to data may need to be different for suppliers and third parties, to ensure that rights of access were governed properly and risks of unlawful access were mitigated.

A few respondents across the range of stakeholder groups suggested that a particularly important area was the use of data for the provision of valued added services. It was pointed out that energy suppliers would, under the Data Protection Act, need to have gained appropriate consent to offer customers additional products and services, and argued that this therefore created a level playing field with other industry participants.

[vacy%20Impact%20Assessment%20Use%20of%20Smart%20Metering%20data%20by%20Network%20Operators_Oct%202011.pdf](#) (October 2011)

⁷⁶ Consumer Focus, Private Lives: an inquiry into personal information http://www.demos.co.uk/files/Private_Lives_-_web.pdf (2010)

A few academic and supplier respondents suggested that opt-in consent could be used to create a level playing field, although most industry respondents felt that opt-out was preferable because it would lead to higher consumer participation rates and realise greater benefits. One consumer group pointed out that many third parties relied on economies of scale to operate effectively, and argued against suppliers having default access to granular data.

In terms of enforcement, the majority of respondents across stakeholder groups agreed that all organisations that required access to data needed to be an accredited signatory to the Smart Energy Code (SEC). Consumer groups felt it important to ensure that any SEC accreditation process would not be too onerous for new entrants.

It was also noted that the smart metering infrastructure was being paid for primarily by suppliers, with the suggestion being that this provided third parties with a market advantage.

Question 3: Are there any data uses, apart from those set out below, where the arrangements for access to data could have an impact on the benefits of the programme. How does this analysis differ for the gas market?

Overall, it was felt that the Call for Evidence provided a reasonably good summary of the potential uses to which energy consumption data could be put, and from the majority of respondents there was little mention of other potential uses.

However, some of the additional areas that were mentioned included use of data for:

- Management of the smart metering system (for example, monitoring data flows to check that meters were working properly and rectify problems arising);
- Understanding future network and supply management needs, for example through smart grid trials such as the Customer Led Network Revolution programme;
- Improving customer services and the quality of supplier operations (for example, by lowering inbound call volumes from customers);
- Advising customers about the quality of their supply and the time spent off supply; and
- Supporting price comparison services.

Some industry and consumer group respondents mentioned that use could also be made of very granular or real-time data (for example, use of real-time data to support load control in a future smart grid context), although this was caveated with recognition that such granular data could be seen as particularly privacy-sensitive, and any use and retention of such data should be managed appropriately. Another suggestion from technical solution respondents was that a distinction could be made between data used for 'operational purposes' and potentially more sensitive data.

One main theme arising from a majority of respondents was that in general, gas networks and suppliers did not generally need the same granularity or frequency of data as electricity suppliers and networks, due to the way that gas is settled in the wholesale markets.

Question 4: What types of energy services and energy advice could be provided by the market (by suppliers and / or ESCOs / potential new entrants) that require access to specific levels of data?

What level of data granularity (frequency, time-lag) are needed to provide such services and what is the potential impact of these services in terms of percentage energy savings?

Please provide empirical examples and explain the basis of any assumptions and distinguish between gas and electricity.

The most prominent examples that were given were use of data for the provision of energy efficiency advice and time-of-use tariffs.

Suppliers' estimates of the levels of energy savings that could be delivered through energy efficiency advice to consumers ranged from 1.5% to 15%. There were fewer specific suggestions about likely levels of consumer 'buy-in' to energy efficiency advice, although suppliers generally felt that if specific consent had to be obtained before any advice could be given, then response rates would be low. Moreover, it was suggested that if consumers were engaged effectively in smart metering, other initiatives like the Green Deal would also start to see increased consumer take-up.

The general opinion amongst suppliers and technical solution respondents was that to be effective, energy efficiency advice needed to be specific and based on half-hourly energy consumption data. Others pointed to evidence showing that the more tailored and immediate the feedback was, the more effective it would be. One supplier cited examples from the USA where customers had reacted badly to high-level, out of date data.

Suppliers also generally felt that half-hourly data would be necessary for time-of-use tariffs. Others felt that requirements about the granularity of data should mirror the development of the market.

Question 5: Should theft management be considered a regulated duty for which suppliers should have access to a certain level of smart metering data? What level of data would be required and how would this be used to manage theft? Please provide practical examples.

And

Question 6: Does data need to be collected from all customers all of the time, for theft management, or could there be a trigger for accessing more detailed data (for example where theft is suspected)?

The large majority of respondents said that theft management should be a regulated duty, and that daily energy consumption data would be sufficient in order to detect theft - many agreed that half-hourly data would be unnecessary. One over-arching point was that in terms of detection, tamper alerts as a sole means of detection were seen as unreliable.

Most respondents were unable to give definitive projections on theft savings that could be delivered through access to daily energy consumption data, as detection rates were currently so low that it made accurate forecasting impossible.

Most supplier respondents said that data would need to be accessed from all customers all the time in order for detection to take place. However, consumer groups, some suppliers and technical solutions respondents felt that data should only be accessed when an appropriate 'flag' had been raised, for example if there were a tamper alert combined with an additional trigger (such as suspicious behaviour or tip-off). Some also felt that use of data for the purposes of detecting theft could be construed as particularly 'sensitive'. Some respondents stated that sampling might be negotiable middle ground between the two extremes.

One respondent suggested that accurate consumption data could be used to develop profiles for an industry-led fraud/theft detection system, like the one currently used in the insurance industry.

Most suppliers and technical solution respondents agreed that in terms of infrastructure, theft beyond the meter (i.e. at feeder level or sub-station level) was harder to detect and neither consumer suspicion nor tamper alerts could adequately detect this problem.

Question 7: What level of take-up of time-of-use tariffs could be expected under different scenarios for access to data? What information is needed to design time-of-use tariffs? In particular would sample or anonymised data be sufficient?

A common theme arising from supplier responses was that without the use of half-hourly data for time-of-use purposes and demand management, one of the main benefits of the Smart Metering Implementation Programme would not be delivered. On the other hand, one consumer group strongly opposed the idea that half-hourly data was needed, and argued that informed agreement from the consumer should be necessary to access half-hourly data. There was general agreement that time-of-use tariffs may not be suitable for all consumers.

Some supplier respondents cited their own research into time-of-use, and it was pointed out that in the USA the California Public Utilities Commission had ordered all utilities to provide time-of-use as a standard service to consumers. Most suppliers quoted their own current levels of take up of time-of-use, which were felt to be relatively low, in part because consumers were not aware of the benefits.

There was some discussion of the levels of data that would be needed to develop time-of-use tariffs in the first place, with some arguing that half-hourly data would be needed from individual households, and others suggesting that sampling could be used periodically to develop tariffs. Academics stated that too much emphasis was being placed on the use of socio-economic data when profiling, and along with technical solutions respondents advised that anonymised or aggregated data could be used both to develop and apply time-of-use tariffs.

Question 8: Do you agree that individual half-hourly data is not currently required for suppliers to meet their obligations in relation to settlement? Over what timescale are any changes to settlement likely to take place and what might the implications be in terms of data requirements?

A majority of respondents from across stakeholder groups stated that half-hourly data was not currently required for settlement purposes. There was broad support across stakeholder groups for the work in hand to reform the settlement process, and it was felt that it would be prudent to wait until the reforms had been completed before deciding what level of data was needed. If there was a move to half-hourly settlement, then some respondents commented that half-hourly data should be collected, but only for that purpose and handled accordingly. It was suggested that settlement in the gas market would not require as granular data as in the electricity market.

There was a split between respondents as to whether data could be aggregated for settlement purposes, and various suggestions about the way in which such aggregation could take place.

Question 9: How far would aggregated or sample data provide suppliers with what they need in the area of wholesale hedging? Please provide examples of how the data would be used and where possible quantify potential benefits and costs.

Most respondents from across stakeholder groups proposed aggregation and anonymisation of data for wholesale hedging purposes, possibly at postcode-level. It was also suggested that

sampling could take place with a big enough sample. Some felt that if the market moves to more regular settlement and hedging then there needs to be a shift in data access to match it. One supplier queried how consumers would benefit from hedging in the short term.

Question 10: What level of data would be required and how would this be used to manage debt? Please provide practical examples.

And

Question 11: How would suppliers envisage using daily data to support debt management and what evidence do they have to support claims of additional savings that could be achieved with access to daily data as opposed to less frequent data?

There was some inconsistency in views about the level of data required to carry out debt management. Most felt that daily data would be sufficient, but others suggested access to half-hourly, three-hourly, weekly or monthly data would be appropriate. Some respondents advocating use of half-hourly data said that this would enable them not only to identify vulnerable customers, but also to offer more tailored advice to those customers, and forecast consumption of pre-payment customers more accurately.

There was also some disagreement about whether data for debt management purposes should be collected with or without consumer consent, or whether it could be taken on a case-by-case basis if a trigger was hit. One consumer group said that an opt-in choice mechanism should be used if data more granular than weekly was required, and in principle supported the interventionist approach, but felt this should be carried out in partnership with the consumer.

Some technical solutions respondents said that the act of identifying customers in debt would in itself be intrusive, so appropriate controls would need to be established.

In describing how benefits could be delivered, suppliers explained that data could be used to predict more accurately what a customer would consume going forwards (and so ensure payment instalments were more accurate and reflective of consumption). Others suggested that it would facilitate the switching of certain customers identified onto bad debt charge management systems, improve overall consumer confidence in bill accuracy, and reduce billing disputes with new tenants.

Question 12: How could smart metering data be used to identify and protect vulnerable consumers? Should such activity be considered a regulated duty and are any licence changes needed to create particular duties on suppliers in this area?

Generally a small majority of supplier respondents felt that there was currently a regulated duty to identify and manage vulnerable consumers. However, some supplier and technical solutions respondents commented that such activity should not be a regulated duty. Avoiding disconnection of vulnerable consumers was stated as a particular concern.

It was widely agreed by suppliers and some technical solutions respondents that energy consumption data on its own might not be sufficient to identify potentially vulnerable customers. Consumption data may need to be combined with other information (such as credit reports) for this purpose. Most technical solutions respondents agreed that the very process of identifying vulnerable customers was in itself intrusive and so privacy concerns would need to be addressed. Few respondents suggested an appropriate level of data for these purposes, but some suppliers' preference would be to have daily data to help identify vulnerable customers.

One academic suggested that once a vulnerable consumer had been identified, then they would need to be approached by way of opt in, so that further smart meter data could be captured. Consumer groups generally thought that suppliers needed to be more proactive, to monitor self disconnection, debt build up and infrequent top ups of pre-payment meters. One consumer group suggested that consumers could be made more aware of their payment/balance status to help budgeting (for example, by displaying more information on their IHDs).

Question 13: Do you consider that use of data by network companies to support them in maintaining an efficient and economic network should be considered a regulated duty?

And

Question 14: Do you agree with the requirement for such data to be anonymised or aggregated wherever possible, and how should this be monitored?

The vast majority of respondents across stakeholder groups recognised that network operators are currently regulated to deliver an efficient and economic network, and there was agreement that use of data by network operators for these purposes should be a regulated duty.

Benefits could be delivered through, for example, fault management, improved network planning, customer self-disconnection status updates, and facilitating micro-generation and electrification of heat and transport. Several supplier respondents stated that network operator costs accounted for 25% of customers' bills, and were therefore keen that operational systems were optimised to bring down these costs.

There was a clear majority amongst respondents from all stakeholder groups that data should be aggregated and/or anonymised, with a few respondents questioning who would actually carry out this process with the source data. A few responses from suppliers and network operators suggested that individual household level data was also needed to operate effectively. One consumer group was clear that further clarification was required around precisely what data was needed by network operators, for how long, in what format and for what purpose.

Some technical solutions respondents specified that any policy on network access to data would need to be flexible enough to cater for potential changes in the market caused by future energy mix variability.

Question 15: Would suppliers be expected to advise consumers of network company usage of data given network companies do not have a direct relationship with customers?

A clear majority of respondents from all stakeholder groups stated that the existing supplier – consumer relationship would be the best vehicle with which to inform consumers about network operator use of smart meter data. Suppliers could communicate such information in their existing contractual terms and conditions, privacy notices and the Privacy Charter. Consumers did not generally receive information direct from network operators, and doing so was likely to confuse them. However, a few technical solutions respondents said that there should be a direct commercial relationship between consumers and network operators.

A few respondents also noted that network operators would be bound to comply with requirements under the Data Protection Act where they were accessing personal data.

Question 16: Are there alternatives to a basic opt-in or opt-out approach to consumer choice such as some form of prompted choice? What are the practical and consumer

protection considerations in relation to different options (for example when and how)? From a consumer perspective what alternative approaches and vehicles (for example letter, email, phone) to seek customer consent are there?

And

Question 17: What evidence is there of likely take-up rates that could be achieved through different approaches to consumer choice?

The overwhelming theme from respondents from all stakeholder groups was that whichever specific choice mechanism was used, the choice should be presented to consumers in a clear, simple way that enabled them to make an informed decision. In particular, it would be important to be transparent about what data would be collected and how it would be used. Consumers' choices should be respected, and consumers should be able to change their minds easily at any point. It was suggested that the Government and industry had a role to play in educating and informing consumers about the benefits of smart metering more generally, before any choice was put to consumers.

There was general support for the model of consumers having choice about how their data was used, apart from where it was required for regulated duties. For non-regulated duties, several supplier respondents favoured the opt-out model, stressing that opt-in could seriously limit the amount of benefits that could be delivered by the Smart Metering Implementation Programme, pointing to practical experience of very low (typically around 0-5%) participation rates for opt-in schemes in other sectors and countries, compared with evidence of much higher participation rates (typically up to around 90%) for opt-out schemes. However, several other respondents noted that a lack of comparable evidence made differences in take-up rates for smart metering data uses difficult to quantify.

Some respondents argued that opt-out would be necessary for experimental design purposes – to ensure that the effects of smart metering could be robustly measured, and for future proofing – on the basis that in future it would be easier to revert from opt-out to opt-in, if necessary, rather than vice versa. Another comment was that opt-in would raise unnecessary and unjustified suspicions about smart metering and what the data would be used for.

Some evidence (for example, research by Ofgem's Consumer First Panel) was put forward to suggest that consumers were generally not overly concerned about privacy in respect of smart metering – the inference being that opt-out might therefore be more appropriate. On the other hand, an argument was made that a general lack of awareness about smart metering should point to opt-in. The main area of contention was around half-hourly data. There was no suggestion that anything other than opt-in should be used for access to sub-half-hourly data, real-time data or appliance-level data.

Some supplier respondents drew a distinction by arguing that opt-out was reasonable where use of the data had the potential to deliver benefits to the consumer, supplier or more widely, and that opt-in should apply to the consumer's right to decide whether to receive additional marketing or approaches about energy services or products.

Various methods for communicating choice were suggested, including: before, during and/or after the installation visit; by post, email, website, face-to-face, text or telephone; and with information presented in plain English and other formats where necessary.

Question 18: What current and future technical options exist for energy consumption data minimisation / privacy enhancing technologies? How might aggregated or

anonymised data be provided in practice? Would this imply additional services to be provided by DCC?

The general sense from responses was that whilst there were several potential technologies under development that could facilitate data minimisation, aggregation or anonymisation, none had been proven on a commercial scale in the UK market and all required further work. Supplier respondents expressed caution about mandating an approach in this area, at least until further work had been undertaken to understand consumer concerns, complexities, and costs and benefits of different options.

Examples of potential technologies that were suggested by technical solutions companies included homomorphic encryption, tokenisation, compression, heuristic generalisation and “local processing”. Alternatives to a centrally-mandated approach were proposed, including Security by Design (i.e. embedding security into processes from the start and taking proportionate measures to address risks), and Ofgem playing a role in ensuring that suppliers do not hold more information than is necessary.

Some supplier and technical solutions respondents felt that the DCC would be well-placed to perform an aggregation and anonymisation function, and that this might be most cost effective. However, other respondents from the same groups felt strongly that centrally storing or manipulating data in this way would raise more significant privacy concerns than any that consumers might have about privacy currently.

Question 19: What parts of the privacy policy framework do you think should be delivered by regulation and why?

And

Question 20: What is the most effective way to set out any sector specific protections around privacy (e.g. licence conditions or other alternatives)?

In general, suppliers did not believe that significant new sector-specific privacy regulation was required. They felt that existing legislation (in particular the Data Protection Act 1998) and licence conditions were sufficiently robust, and were committed to adhering to these. One comment was that additional licence obligations would run the risk of creating overlapping or conflicting requirements.

However, some smaller suppliers, consumer groups and technical solutions respondents felt that the data access and privacy policy framework should be delivered by regulation, for example through licence conditions, and that it would be important to set the framework during the Foundation Stage to ensure consistency and a level playing field for suppliers, and give consumers confidence.

There was general consensus amongst suppliers, networks and consumer groups that that the Smart Energy Code had an important role to play in the framework, in setting industry-specific rules about data collection and consumer choice, and that all market participants should be signatories to this. It was also felt that suppliers would need to make changes to their principle terms and conditions and Privacy Notices. Importance was attached to suppliers, third parties and others in the industry having a consistent approach to standards and messaging around privacy.

There was clear support for the concept of the Privacy Charter, through which industry would explain clearly to consumers how data from smart meters would be used, and what consumer choice in respect of this was.

Other consistent themes were that the data access and privacy policy framework needed to be flexible so that it could accommodate changes over time, that any intervention needed to be proportionate to the level of concern, and that any intervention in this area would need to be reconciled with the existing framework of the Data Protection Act.

Question 21: What practical options for authentication would provide the right balance between allowing easy access to consumer data in the home while providing the necessary privacy protection? Are there any other issues or options that the programme should be considering in developing the approach in this area?

There was general support from suppliers and some technical solutions respondents for the concept of a “bridging device” to link the smart meter Home Area Network (HAN) with a consumer HAN, onto which extra devices could be attached (or “paired”). A clear message was that these issues should continue to be explored in more detail with stakeholders through the Programme’s Data Access Group and Security Technical Expert Group. Several potential technical solutions were put forward by academics and technical solutions respondents for consumer authentication in the home, and the ways in which pairing could be achieved.

It was felt by a variety of respondents that suppliers should not be held responsible for any authentication process or use of additional devices in the home, particularly where the IHD was not provided by the supplier. There were mixed views about whether or not DCC might need to play a role, for example in generating or cross-checking authorisation codes.

General points made were that the solution should be based on tried and tested technology, that it should be consumer-friendly, and that the costs and benefits of different options should be assessed. The solution would also need to take account of the fact that some devices would be located outside premises, and there would need to be a process for dealing with forgotten or compromised credentials.

A separate suggestion was that suppliers should make websites or call centres available for domestic consumers to access their own data that way.

Question 22: Are there other issues that need to be considered to make using the HAN a viable route for access to data in the home, from either a process or consumer perspective?

Responses from a variety of stakeholder groups pointed to several general principles that would be key to making data access via the HAN viable, including cost and ease of use for the consumer (for example, simplicity in connecting extra devices to the system), usefulness and authoritative nature of the information accessed, confidence in security and privacy, and availability throughout premises. One consumer group also felt it would be important to consider how to cater for the non-technical consumer.

Other technical solutions respondents raised issues around change of supplier and change of tenancy events, the need for consistent standards for bridging devices, the need to maintain the integrity of the smart meter HAN, and strength, coverage and reliability of signal. Several respondents underlined the importance of the outstanding decision on HAN.

It was noted by one respondent that this route to consumer access of smart meter data created risks, including the risk of exposing consumer data to misuse and adding burdens to the network.

Question 23: What sort of arrangements would provide an appropriate balance between providing ease of access for consumers seeking to sign up to new services and adequate protection for consumers' data when accessed via DCC? Do you have any suggestions for alternative approaches?

Supplier and consumer groups stated that it would be important to make it as easy as possible for consumers to allow third parties to access their data, both in order to realise consumer benefits, but also to minimise barriers to entry in the market. Consumer groups specified that third parties could only access data as signatories to the Smart Energy Code and that such third parties should inform consumers annually if they are collecting data on an on-going basis and how to revoke consent.

There was general consensus amongst suppliers and network operators that the Smart Energy Code should establish rules for third party access to data via the DCC, and that all third parties must be signatories to the Code. Third parties would need to keep records of the consents they had received, for future auditing purposes, and consumers should also be able to revoke consent at any time. One suggestion was that there should be clear guidelines for all parties on retention or deletion of data after it had been used. Another comment was that consumers should be able to see on request records of all parties that had obtained access to their data via DCC.

It was noted that outside of DCC, third parties would be governed by their contracts with the consumer. One respondent proposed that independent records of such arrangements should be kept, in order to ensure access to data was curtailed on change of tenancy.

Question 24: Are there other issues or options that the programme should be thinking about for the Foundation Stage or for non-domestic customers to facilitate access to data?

Generally, most respondents across stakeholder groups felt that the non-domestic sector was different and should be handled separately from the domestic sector. For example, it was noted that there was no concept of inter-operability and no obligation to provide IHDs in the non-domestic sector.

A common concern was how suppliers would access data to fulfil specified duties in cases where their non-domestic customers had entered into separate contractual relationships with Metering Service Providers who had opted out of the DCC. Another comment was that many non-domestic customers were already used to publishing “green” statistics and so may be less concerned about privacy in respect of energy consumption data. Other suppliers felt that there should be a single, consistent approach to privacy across both the domestic and non-domestic sectors. One consumer group commented that it was important that micro and smaller non-domestic businesses were not charged to gain access to their data and that the data should be available in a versatile format.

In more specific comments, a view was expressed that third party access to data presented significant challenges during the Foundation Stage and so should be delayed until the DCC was established. Another respondent commented that suppliers should be allowed to access data as they saw fit during the Foundation Stage – provided they complied with all other legislative and

regulatory controls – arguing that competitive forces in the industry would drive suppliers to innovate and provide the most attractive offering.

Question 25: Do you have any suggestions as to how the Foundation Stage can be used to further learn about our approach to data access and privacy?

A clear theme in responses from all stakeholder groups was that the Foundation Stage should be used to test, trial and learn lessons. In particular, the Foundation Stage could be used to gather further evidence and feedback on the true extent of consumer concerns about privacy, and test different consent mechanisms, to prevent restrictive barriers being put up unnecessarily.

The need for flexibility in the data access and privacy framework also came across strongly from responses. One suggestion was that a basic framework should be put in place now, which could evolve over time. Comment was made that introducing complexity into the system too early would be counter-productive.

More generally, it was felt by some suppliers that a wider independent or Government programme was needed to inform and engage with consumers about the benefits of smart metering, and reassure them about privacy and security issues. It was felt that agreement on a Privacy Charter early on in the Foundation Stage could help build trust. Consumer groups also urged the Government to check the compatibility of any legislative proposals against EU obligations.

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