

## Engage Consulting Limited Briefing Note

# Department of Energy & Climate Change Smart Metering Publications of 12<sup>th</sup> and 19<sup>th</sup> December 2012

On 12<sup>th</sup> December 2012, the Department of Energy and Climate Change (DECC), on behalf of the Government published its latest set of documents associated with the Smart Metering Implementation Programme (the "Programme"). These [publications](#) describe the latest smart metering policy positions in relation to consumer engagement, privacy, security and monitoring and evaluation.

On 19<sup>th</sup> December DECC further published the first annual roll-out progress report and the Secretary of State has designated the first version of Smart Metering Equipment Technical Specifications (SMETS).

This briefing note draws on this full set of Programme publications issued by Government in December and includes:

- highlights of Government's Publications;
- a summary of:
  - the first version of SMETS; and
  - the first annual roll-out progress report;
- an outline of Government's consultation responses on:
  - Consumer Engagement Strategy;
  - Data Access and Privacy Framework;
  - Information Requirements for Monitoring & Evaluation;
  - Security Risk Assessments and Audits (pre-DCC); and
- a summary of the consultation on implementing the Energy Efficiency Directive provision on easy access to 24 months of consumption data for consumers with smart meters.

### Highlights of Government's Publications

DECC's press release captured the key conclusions from the publications as follows:

- *consumers will have choice on how often their energy supplier can access their energy consumption data;*
- *suppliers will not be able to use energy consumption data for marketing purposes unless they have customer's explicit consent;*
- *suppliers will be required to give their customers reminders about the choices they have made and how they can change their minds;*
- *the Government will request annual reports from all larger energy suppliers setting out their plans and progress with the roll-out; and*
- *a new Central Delivery Body will help consumers to use smart metering to better manage their energy consumption and expenditure.*

The press release also noted that “*the proposals set out in these series of publications will make sure that consumers and suppliers can use the energy data provided by smart meters in the best way possible, at the same time as making sure consumer rights are protected*”.

## Designation of the first version of the Smart Metering Equipment Technical Specifications (SMETS 1)

On 18<sup>th</sup> December 2012, the Secretary of State designated the first version of [SMETS](#) as defined in the energy supplier licence conditions for the rollout of gas and electricity smart metering equipment.

The SMETS describes the minimum physical, functional, interface and data requirements of smart metering equipment installed to comply with the rollout licence conditions. SMETS 1 establishes the functional requirements that are required to be delivered in a consistent, defined way, such that any supplier will be capable of operating any meter with clear understanding of the processing the equipment will undertake and the outputs the supplier will receive.

SMETS 1 was notified to the European Commission in accordance with the requirements of Article 8 of Directive 98/34/EC following industry consultation and update by Government in April 2012 ([response](#)).

An explanatory [memorandum](#) has also been published to provide further background information on SMETS components and requirements.

## First Annual Progress Report on the roll-out of Smart Meters

The first Government annual [report](#) on progress with the roll-out of smart meters was published on 19<sup>th</sup> December 2012. This provides an introduction to smart metering and describes the benefits for consumers. It also provides a high level overview of the steps that Government and the Energy Industry are taking to prepare for the mass roll-out of smart meters across Great Britain, which is expected to start towards the end of 2014.

The report provides an update on the Smart Metering Implementation Programme (SMIP) and its progress towards:

- delivering the Government’s vision that every home in Great Britain should have smart electricity and gas meters and for smaller business and public sector premises to have smart or advanced metering suited to their needs, by the end of 2019; and
- the roll-out of smart meters as an important part of Britain’s transition to a low-carbon economy and meeting some of the long-term challenges faced in ensuring an affordable, secure and sustainable energy supply.

The SMIP is being delivered in two phases: the Foundation Stage and mass roll-out. During the Foundation Stage, which began in March 2011, the Government is working with the energy industry, consumer groups and other stakeholders to ensure all the necessary groundwork is completed before energy suppliers start the mass roll-out. Mass roll-out is expected to begin in late 2014 and be completed by the end of 2019.

The report recognises that the interests of consumers lie at the heart of the smart meter programme and focuses on consumer engagement as a crucial aspect of the successful rollout of smart meters and the realisation of the benefits to consumers, the Programme and GB and includes samples of customer quotes. Independent evaluation by DECC has found:

- Consumers are actively engaging with their in-home displays e.g. research by E.on shows that following the 1st bill consumer interaction with IHDs remains high, with 53% using their display at least once per day, 21% every 2-3 days and 19% about once a week;
- EDF Energy, first:utility, British Gas and E.on are seeing consistently high levels of customer satisfaction with smart meter installations;
- Trials of pre-payment smart meters have shown positive consumer benefits e.g. 70% of British Gas pre-payment customers moved onto a smart meter in pre-payment mode were satisfied with smart meters; most wanted to keep them after the trial had ended, valuing the greater control and flexibility e.g. topping up by mobile phone;
- First:utility research shows that customers with smart meters compared to those with standard meters are 60% more likely to say 'first:utility helps me understand how I am using energy' and that they offer useful tools to help save money on energy bills';
- EDF Energy research shows that 67% of customers have found smart meters impacted on the way they used energy;
- British Gas surveys of businesses 4 months after smart meter installation have found that 48% of customers see a time-saving benefit from not having to read their meter and 43% seeing a budgetary control benefit from receiving bills based on an accurate read.

The report includes examples of supplier services launched in 2012 for consumer engagement:

- first:utility launched their my:energy service, developed with the leading US energy management company OPOWER, and employs analysis of smart meter data to help customers save energy through personalised energy-saving tips, detailed analysis and comparative reports. The service enables customers to compare energy usage against their neighbours and monitor the immediate impact of energy saving actions.
- British Gas took its business-specific Business Energy Insight smart-enabled energy efficiency service from trial to market, with over 40,000 small and medium enterprise sites registered to use the service to date, at no additional cost to the customer. British Gas also launched a campaign featuring five 'Energy Challenge Live' case studies achieving an average 13.5% reduction in energy (a saving of £1,410 per year).

## Summary of Government Response to the Consultation on Consumer Engagement Strategy

Government published its [response](#) to the April 2012 consultation on Consumer Engagement Strategy which sets out:

- its view on effective engagement;
- details of how domestic and non-domestic consumers will be engaged centrally; and
- obligations to establish a Central Delivery Body (CDB) with the aim of providing reassurance for consumer concerns and assistance to consumers to better use their smart meters.

As part of its response to the consultation, the Government has updated the Consumer Engagement Strategy's aims so that it now covers building consumer support for the roll-out, facilitating the realisation of consumer benefits, and ensuring that vulnerable, low income and pre-payment consumers can benefit from the roll-out of smart meters.

The Government confirmed the initial consultation position regarding the 4 main levers of energy saving behaviour change (direct feedback in near real-time, indirect feedback, advice/guidance and motivational campaigns).

The following table summarises the Government’s initial position in the April consultation and its final position (response) in the December publication:

April 2012 Position	December 2012 Response
<p>Government advocated a central consumer engagement body as a source of independent advice and information, media handling and development of common materials and messages. Scope and activities was consulted on, including options for community outreach.</p>	<p>Government position remains unchanged as a centralised engagement programme will be undertaken by a Central Delivery Body (CDB).</p> <p>Government noted that third parties (e.g. charities, consumer groups, community organisations and local authorities) will play an important role in delivering effective engagement.</p> <p>The CDB will facilitate the involvement of third parties by co-ordinating outreach action – this will reduce the burden on third parties of potentially having to work with multiple Suppliers.</p>
<p>Government suggested placing licence conditions on larger Suppliers which would oblige them to create and fund an independent central delivery body (or use an existing body) responsible for delivering the consumer engagement policy.</p> <p>The Government suggested that the central body is likely to be a not-for-profit body and the intention to set it up during the first half of 2013. Furthermore, Government considered the level of regulation that will be appropriate.</p>	<p>Establishment of the Central Delivery Body (CDB) will be funded by Larger Suppliers by market share. Operation will also be funded by Larger Suppliers, but with small Suppliers contributing to fixed operating costs – by domestic market share. It estimates that the CDB’s present value cost to be £87million.</p> <p>Licence conditions will oblige large Suppliers to set up the CDB by June 2013.</p> <p>The CDB will be a not-for-profit body governed by a Board of Directors who will be nominated by and represent:</p> <ul style="list-style-type: none"> <li>• large Suppliers (6 Directors);</li> <li>• small Suppliers (2 Directors);</li> <li>• relevant non-domestic Suppliers (2 Directors);</li> <li>• Consumer Focus (2 Directors); and</li> <li>• consumer groups representing energy consumers interests (2 Directors).</li> </ul> <p>The CDB will have an independent chair, appointed by the Larger Suppliers but with a Government veto if necessary to ensure independence.</p> <p>In addition, DECC and network operators will be able to attend Board meetings as observers.</p>
<p>Government considered how consumer engagement for the programme can interact with other energy policies (e.g. Green Deal and demand-side response). The intention was that bringing various policies together offers the opportunity to provide savings for Suppliers as well as assisting vulnerable and low income consumers.</p>	<p>Government expects Suppliers to consider how they can bring together obligations to deliver other energy policy and initiatives with the smart metering roll-out.</p> <p>Government is also considering how consumer engagement can exploit synergies; it intends to progress this by:</p> <ul style="list-style-type: none"> <li>• gathering more evidence through early assessment of emerging impacts; and</li> <li>• potentially undertaking testing and trialling.</li> </ul>

The delivery of some of the Consumer Engagement Plan, Performance Management Framework and Annual budget is now by the end of 2013 (not March 2014 as previously stated) and the first annual report must be released by March 2014.

The Performance Management Framework will now be set by the Larger Suppliers, which makes sense as their monitoring mechanism of ensuring supplier Licence Conditions are being met. This replaces the previous proposal of an “Engagement Agreement” between Suppliers and the CDB.

Government highlighted that it will focus on 5 key areas (to supplement the work of the Central Delivery Body) as follows:

- evidence gathering during the Foundation Stage;
- helping build trust and confidence of consumers;
- capability building by helping organisations prepare to work with the Central Delivery Body (e.g. through training and advice);
- enabling wider changes to the energy market/system by working to ensure linkages to that are understood and exploited; and
- identifying engagement gaps by monitoring the engagement impacts and filling gaps during mass roll-out (where necessary).

## Summary of Government Response to the Consultation on Data Access and Privacy

Government published 3 inter-related documents covering data access and privacy:

- [Government Response to Data Access and Privacy Framework](#);
- [Privacy Impact Assessment](#); and
- [Public Attitudes Research: Data Access & Privacy](#).

### Government Response to Data Access and Privacy Framework

Government published its [response](#) to the consultation on Data Access and Privacy. The framework and associated obligations will be contained within a new Standard Licence Condition which will come into force at the end of June 2013.

Government has committed to a review of the framework within 3 years of coming into force with the possibility of additional regulatory intervention if deemed necessary.

The following table summarises Government’s initial position in the April consultation and its final position (response) in the December publication:

April 2012 Position		December 2012 Response			
It was proposed that domestic consumers will have access to their data via either an IHD, additional devices connected to the Home Area Network (e.g. bridge to a home PC) or their Supplier.		Government position remains unchanged as consumers will be able to access data through their IHD, connection of additional devices to the HAN, or by requesting information from their Supplier.			
It was proposed that Suppliers would have access to their domestic customers' data subject to the following:		Domestic consumers will have control over how their energy consumption data is used, except where this is required for billing or for other regulated purposes. Specific requirements:			
<table border="1"> <thead> <tr> <th>Data Type</th> <th>Access Rule</th> </tr> </thead> <tbody> <tr> <td>Monthly</td> <td>Unrestricted for billing and regulated duties</td> </tr> </tbody> </table>	Data Type	Access Rule	Monthly	Unrestricted for billing and regulated duties	<ul style="list-style-type: none"> <li>• Consumers have to give explicit consent for Suppliers to be able to use energy consumption data for marketing purposes;</li> <li>• Consumers can opt out of allowing Suppliers</li> </ul>
Data Type	Access Rule				
Monthly	Unrestricted for billing and regulated duties				

<p>Daily (or less granular data) for purposes other than marketing</p>	<p>Customer can opt out, except to support theft detection. Different rules apply for PAYG and Time of Use tariffs where additional data can be collected to support prepayment mechanisms and within day tariffs.</p>	<p>to access energy consumption data relating to a period of less than one month;</p> <ul style="list-style-type: none"> <li>• Consumers have to give explicit consent for Suppliers to be able to access the most detailed level of data (up to half-hourly);</li> <li>• Suppliers to provide clear explanation to consumers which energy consumption data is being accessed, its purpose and the choices the consumer has about this; and</li> <li>• Suppliers to have auditable processes in place for recording of opt-in and opt-out consents from consumers.</li> </ul> <p>Government outlined some exceptions to these basic rules e.g. allowing half-hourly consumption data to be used for approval trials' purposes as long as there is no objection from the consumer and where theft of energy is suspected.</p>
<p>Half-Hourly and marketing</p>	<p>Customer must opt in, with some exceptional arrangements considered for trials.</p>	
<p>It was proposed that Network Operators (NOs) would have access to domestic consumers' data subject to the NOs developing and submitting for approval plans detailing how privacy concerns would be addressed and what data would be used for. In the event that such plans have not been submitted, the consultation sought views on the arrangements that should apply.</p>		<p>Government position remains unchanged as NOs will be able to access domestic customers' energy consumption data for regulated purposes. However, the following requirements apply:</p> <ul style="list-style-type: none"> <li>• NOs must aggregate or otherwise treat data in such a way so that it can no longer be associated with an individual premises, and</li> <li>• NOs will require plans for such access to be approved by DECC or Ofgem.</li> </ul> <p>Government will remain open to new evidence from NOs as they continue to develop the thinking about access to data from individual households in the longer term.</p>
<p>It was proposed that Third Parties would have access to domestic consumers' data via the DCC, subject to:</p> <ul style="list-style-type: none"> <li>• the consumer granting them access; and</li> <li>• consumer protection measures to be set out in the in the Smart Energy Code, which are proposed to include: <ul style="list-style-type: none"> <li>- that third parties must take steps to verify that any request for third party services has come from an individual living in the premises in question;</li> <li>- that third parties must properly obtain consent from consumers to access their data; and</li> <li>- that third parties must provide annual reminders to consumers about data they are collecting.</li> </ul> </li> </ul> <p>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.</p>		<p>Government confirmed that consumers will be able to share their energy consumption data with Third Parties if they choose to do so.</p> <p>If Third Parties require access to data remotely via the DCC, then the Smart Energy Code will place a number of requirements on them including:</p> <ul style="list-style-type: none"> <li>• verification that the request for Third Party services has come from the individual in question;</li> <li>• obtaining explicit consumer consent (opt-in) before requesting data from DCC; and</li> <li>• reminding consumers at regular intervals about the data that is being collected and the choices the consumer has.</li> </ul> <p>Government confirmed that audit arrangements will be developed by the Smart Energy Code Panel to ensure that the above requirements are complied with.</p>

<p>Government noted that a number of factors point to different arrangements for non-domestic customers:</p> <ul style="list-style-type: none"> <li>• the Data Protection Act is unlikely to apply, except in the case of some smaller non-domestic customers such as sole traders;</li> <li>• privacy concerns are likely to be lower for non-domestic consumers;</li> <li>• there is an existing market for energy services and significant energy savings are anticipated in the non-domestic sector;</li> <li>• there will be no obligation to use the DCC and many 'advanced' meters are already in use; and</li> <li>• there is no restriction on Suppliers charging for more detailed data.</li> </ul>	<p>Government outlined that smart-type metering already exists and is established in the non-domestic sector. It noted the various approaches to metering compared to the domestic sector, e.g. :</p> <ul style="list-style-type: none"> <li>• Advanced meters;</li> <li>• smart meters opted in to the DCC; and</li> <li>• smart meters opted out of the DCC.</li> </ul> <p>The similarity between micro-businesses and domestic consumers mean that micro-businesses will have choice of whether their Supplier can access more detailed than monthly consumption data i.e. they can object if they wanted to.</p> <p>Non-domestic consumers will have timely access to their own energy consumption data (this covers all opted-in and opted-out smart meters in the non-domestic sector).</p>
---	---

### Privacy Impact Assessment

The Government’s publication of the [Privacy Impact Assessment](#) (PIA) aims to ensure that any perceived privacy impacts are identified (as Government policy develops) and arrangements and/or proposals are in place to manage them.

The PIA sits alongside the Privacy and Data Access Framework and was developed by the Programme in conjunction with stakeholders from industry, consumer groups, regulatory bodies and across the Government.

In addition, the Programme will continue to work closely with the Information Commissioner’s Office and the European Data Protection Supervisor.

The Government confirmed that it will continue to adopt a “Privacy by Design” approach to the delivery of the Programme.

The PIA document covers the following areas:

- purpose (why an assessment of privacy impacts is needed) and the assessment methodology (how/what privacy impacts are identified);
- EU guidelines, privacy enhancing technologies and the 1998 Data Protection Act;
- risk review process; and
- the identification of various potential privacy impacts and measures (management approach) for addressing them.

### Public Attitudes Research: Data Access and Privacy

The Government’s publication of the [Public Attitudes Research: Data Access and Privacy](#) aims to examine the extent to which the Government’s Privacy and Data Access Framework proposals have addressed potential concerns that consumers may have.

The research document sits alongside the Privacy and Data Access framework and was undertaken by Navigator for Government.

The publication covered:

- background to the research and its design; and

- the findings and conclusions.

The key conclusion from the research was that the respondents felt that the Privacy and Data Access Framework addressed their main concerns over smart meters’ data and privacy.

## Summary of Government Response to the Consultation on Information Requirements for Monitoring and Evaluation

The Government published its [response](#) to the consultation on Information Requirements for Monitoring and Evaluation. The response sets out the Government’s and Ofgem’s approach to these requirements for monitoring and evaluating the roll-out of smart meters following the initial [May 2012](#) consultation and strategy.

The May 2012 consultation and strategy set out objectives in relation to the SMIP to:

- ensure that sufficient evidence about consumer impacts and the effectiveness of different approaches to consumer engagement is available so that it informs the ongoing development of the consumer engagement approach;
- report on the full range of costs and benefits and inform actions to optimise the realisation of benefits;
- monitor the capability and readiness of industry to meet their roll-out obligations;
- track progress towards completion;
- publish sufficient information progress and benefits to enable stakeholders’ scrutiny of and engagement with the Programme; and
- undertake a comprehensive evaluation of the overall success in delivering the Programme objectives and inform future policy development.

The Government noted that DECC could take a number of actions when monitoring and evaluating activities to identify risks to benefits realisation or opportunities to enhance the benefits. These actions could include areas such as influencing stakeholders; amending the regulatory framework; or through wider DECC policy development.

The Government’s final position in its response document is captured in the following table:

Area	Government Position/Conclusion
Information requests to energy suppliers from Government	<p>Licence modifications will allow DECC to request information from energy Suppliers for monitoring and evaluation of the roll-out (requests will specify content, format and timing). Suppliers requirements will be as follows:</p> <ul style="list-style-type: none"> <li>• larger<sup>1</sup> Suppliers to provide annual roll-out reports setting overall plans and progress for delivery including information for tracking costs and benefits;</li> <li>• larger Suppliers to provide quarterly roll-out progress reports with key indicators being smart meter and IHD installations and operational metrics for supporting costs and benefits tracking; and</li> <li>• smaller and non-domestic Suppliers to provide annual roll-out progress reports.</li> </ul> <p>Ad hoc information requests can also be made by DECC, if necessary.</p> <p>Other requirements also allow DECC to request the following information:</p> <ul style="list-style-type: none"> <li>• From Suppliers: key smart meter data items at MPAN/MPRN level (to</li> </ul>

<sup>1</sup> Larger Suppliers are those with more 250k domestic gas customers or 250k domestic electricity customers.



	<p>support the development of the National Energy Efficiency Data framework).</p> <ul style="list-style-type: none"> <li>From Gas Transporters and Electricity Distributors: information to enable evaluation of costs and benefits, and impacts on network companies – this will be obliged via Licence modifications and will commence once mass roll-out starts.</li> </ul>
<p>Provision of energy suppliers' roll-out plans and other information to Ofgem</p>	<p>Licence obligations will require Suppliers to provide plans and information to Ofgem to facilitate the regulation of the roll-out – there will also be compliance with various aspects of the plans.</p> <p>Specific requirements include:</p> <ul style="list-style-type: none"> <li>Suppliers to provide well-reasoned plans setting out how they will meet their roll-out obligations by the end of 2019.</li> <li>For larger Suppliers: submitted plans are likely to be a subset of the information from the annual roll-out report submitted to DECC – there will be no requests for information on costs and benefits as that will be part of the Supplier submission to DECC.</li> <li>Suppliers' plans to contain annual milestones indicating the percentage (set by Suppliers themselves) of their smart meter installations by 31<sup>st</sup> December each year (or an advanced meter installations under the relevant exceptions to the smart meter roll-out obligation) up to and including 31<sup>st</sup> December 2018.</li> <li>Suppliers would be required to achieve at least 95% of their milestone, unless Ofgem directed a lower figure.</li> <li>Re-submission of Supplier plans (and annual milestones) will be allowed until early 2017.</li> <li>Ofgem discretion will be required for re-submissions of plan (and milestones) within year or after 2017.</li> </ul> <p>Following the roll-out completion date of 31<sup>st</sup> December 2019, Ofgem would consider if all reasonable steps were taken by Suppliers to arrange for all their relevant customers to have smart or advanced meters installed.</p> <p>Ofgem could take appropriate action if individual Suppliers have not met their obligations.</p> <p>Ofgem will also engage with stakeholders in developing this framework further, including consideration of whether a different approach is appropriate for smaller Suppliers.</p>
<p>Publication and dissemination</p>	<p>The SMIP's progress will be published by Government – it is intended that DECC would publish an annual report, supplemented by quarterly updates in addition to other relevant information (research and evaluation outputs).</p> <p>To ensure appropriate protection, data and information will be "anonymised" and aggregated.</p> <p>Ofgem may ask Suppliers to publish some or all of their roll-out plans information</p>

The Government has noted that it expects to lay the Licence Conditions in Parliament; the first information requests to larger Suppliers are expected to be issued in early 2013 (for the annual report and quarterly updates).

## Summary of Government Response to the Consultation on Security Risk Assessments and Audits (pre-DCC)

In May 2012, the Government invited views on a draft licence condition (on electricity and gas suppliers) giving effect to its policy approach to security arrangements during the period ahead

of the Data and Communications Company (DCC) providing services to smart meters. The obligations will be contained within Standard Licence Condition 46 relating to electricity supply and Condition 40 for gas supply.

The consultation (which closed on 27 July 2012) set out the Government’s proposals for ensuring that security is embedded into the design process for smart meters and their communication systems from the outset. It noted that ahead of the DCC ‘go live’ phase, energy suppliers have end-to-end responsibility for the smart metering solution.

The Government has now published its [response](#) to this consultation, following its consideration of the responses to the May 2012 consultation, the revised licence conditions. The Government expects that, subject to successful completion of the Parliamentary process, the licence conditions will take effect by the end of 2012.

The following table summarises the Government’s initial position in the May consultation and its final position (response) in the December publication:

May 2012 Position	December 2012 Response
<p><b>Period of Application</b></p> <p>The licence condition was drafted to remain in force during the period until the DCC started to provide services to SMETS compliant meters, referred to as Smart Energy Code ‘Go Live’.</p>	<p>Government has decided not to define the Go Live concept in the licence condition. It has now provided for the Secretary of State to issue a direction to cease the condition, and has confirmed that this will be issued when the DCC starts to provide services to SMETS compliant meters.</p> <p>This licence condition applies to all suppliers but only applies to SMETS compliant meters, not ADM or AMR meters.</p> <p>Security post DCC go live will be subject to new conditions and is not defined here.</p>
<p><b>End to End Security</b></p> <p>Suppliers are required to take such steps and do such things as are within their powers to provide a secure end-to-end system, including the smart metering equipment in the consumer’s premises, the communications network between the SMS and the energy supplier, the supplier’s I.T. systems, and all the business procedures associated with the installation, operation and support of the end-to-end system.</p> <p>The licence condition states that the system is secure if it is operated to an ‘Appropriate Standard’. This standard is further defined in the licence condition.</p>	<p>The licence condition retains the high level obligation that suppliers are responsible for security of their end-to-end systems, even where they make use of service providers.</p> <p>Amendments have been made:</p> <ul style="list-style-type: none"> <li>to clarify that a security incident is an event of interference or misuse with the supplier end-to-end system or with any individual element of it such that it, e.g. causes any loss, theft or corruption of data; and</li> <li>that the ‘Appropriate Standard’ relates to the energy sector in Great Britain.</li> </ul>
<p><b>Risk Management</b></p> <p>The draft licence condition set out a number of good practice security disciplines which are expected of suppliers in delivering a secure end-to-end system, including the carrying out of on-going comprehensive risk assessments.</p> <p>The consultation:</p> <ul style="list-style-type: none"> <li>proposed that suppliers operating SMETS compliant meters before the DCC provides services, should seek to align their security operations with ISO 27001 during this</li> </ul>	<p>Government confirms that the good practice security disciplines as defined in the proposed licence condition were supported by respondents and remain as proposed.</p> <p>However, the Government has decided to give a definite date by which energy suppliers need to demonstrate compliance with ISO 27001, and has set this at eighteen months after the licence condition comes into force.</p> <p>Government has clarified that the obligation is to ‘comply’ with ISO 27001 as opposed to ‘obtain formal certification’ against the standard, although</p>

<p>period, but with no explicit requirement to become certified it;</p> <ul style="list-style-type: none"> <li>• expects suppliers to adhere to standards in line with good industry practice and that the standards adopted must be capable of being verified by a Competent Independent Organisation (CIO);</li> <li>• proposed the CIO to be an organisation with certain qualifications or characteristics e.g. being members of CESC schemes, such as CCP2, CLAS3, CHECK 4or CTAS5.</li> </ul>	<p>suppliers may choose to do so.</p>
<p><b>Independent Audit</b></p> <p>The consultation proposed that:</p> <ul style="list-style-type: none"> <li>• there should be requirements on suppliers to have an independent audit to verify that Information Security Plan set by senior management is appropriate; in line with good industry practice; and has been carried out;</li> <li>• this audit should be carried out by the Competent Independent Organisation (CIO) and defined the characteristics of the CIO, but did not specify who in the CIO conducts the audit;</li> <li>• the first audit to be conducted within six months of the licence condition coming into force, with subsequent audits being carried out at least every 12 months;</li> <li>• a supplier’s senior management must demonstrate how they have responded to the audit report, make it available to the Ofgem or Government on request.</li> </ul>	<p>Government’s view remains that requiring independent organisations to conduct these audits instils a high level of confidence that the level of security afforded to smart metering systems can be competently judged and assessed. It also maintains its view that the first audit should be within six months of the licence condition, to:</p> <ul style="list-style-type: none"> <li>• send a strong signal on the importance of security to ensure consumer confidence;</li> <li>• gives suppliers more opportunity to identify and address security weaknesses before they accede to the SEC and enrol meters in DCC;</li> <li>• reduce the risk that a significant security breach will occur during early rollout.</li> </ul> <p>The audit will reflect the size of a supplier’s early rollout of smart meters and that the costs of such an audit are therefore expected to be proportionate.</p> <p>Some changes have been made to the licence condition. The Government has:</p> <ul style="list-style-type: none"> <li>• set the time by which the report has to be completed following the audit, at one month;</li> <li>• clarified that the lead auditor of the team conducting the audit from the CIO is a member of CLAS; and</li> <li>• has determined not to mandate that the lead auditor should hold ISO 27001 qualifications.</li> </ul>
<p><b>Role of Government and Ofgem</b></p> <p>The consultation proposed that the Government should have the ability to direct a supplier (or suppliers collectively) to take a particular course of action.</p> <p>This would only be in the context of achieving secure systems or for the purposes of an appropriate test or trial e.g. where the Government needs to intervene for the purposes of protecting infrastructure.</p> <p>Government will consider the available evidence when deciding whether issuing a direction is an appropriate response in respect of particular circumstances.</p> <p>The Government also invited views on whether the Authority should have such a power of direction outlined in the licence condition.</p>	<p>Government has decided that no limitations on the Government’s power need to be drafted into the licence condition, as this is not commonplace and, when exercising such a power, it is incumbent on the Government to act reasonably and with due regard to available evidence.</p> <p>The Government notes that Ofgem already has powers to intervene to protect and facilitate the effective functioning of the energy supply market and to protect consumers. Given this, it is expected that should the need arise, Ofgem can rely on such powers to require suppliers to take a particular course of action.</p> <p>The Government reaffirms that it will continue to work with stakeholders and energy suppliers where appropriate to provide guidance to energy suppliers on the security of smart metering systems.</p>

## Summary of Government Consultation on implementing the Energy Efficiency Directive

The [consultation](#) opened on 12<sup>th</sup> December 2012 and is due to close on 6<sup>th</sup> February 2013. This consultation will inform the Government's implementation of the Energy Efficiency Directive provision for domestic consumers to have easy access to 24 months of daily/weekly/monthly/annual historical consumption data where they have a smart meter.

### Energy Efficiency Directive

The Energy Efficiency Directive (EED) entered into legal force 14<sup>th</sup> November 2012 and Member States have until 5<sup>th</sup> June 2014 to implement the Directive. It lays down a number of requirements relating to smart meters.

DECC is undertaking an exercise to assess whether additional regulation needs to be put in place to deliver the Directive provisions.

### Providing Consumers with access to 24 months of Consumption Data

Most of the EED requirements are already catered for in the GB SMIP. The key area that is not already covered is that of consumer access to historical data. The EED requires that:

- consumers should have easy access to information on historical consumption, including:
  - cumulative data for at least the three previous years or since the start of the supply contract if this is shorter, at a frequency corresponding to the consumer's bills;
  - detailed data according to the time of use for any day, week, month and year made available via the internet or the meter interface for at least the previous 24 months, or since the start of the supply contract if this is shorter; and
- that consumers should have access to their consumption data free of charge.

One of the options for delivery is the inclusion of additional data (24 months instead of the 13 months) in the smart metering system.

The Government is consulting on implementation of the EED provision now so that if any additional functionality is needed within the smart meters it can be included in the second version of the Smart Metering System Technical Specifications (SMETS) and the Communications Hub Technical Specifications (CHTS).

Initial assessment of the rest of the Directive: Government does not expect to have to put additional requirements in place to deliver other smart meter provisions. DECC is considering whether additional regulation is needed to deliver the provision to provide easy access to cumulative data for at least the three previous years, but this is not in the scope of the work of the Smart Metering Implementation Programme.

### Impact on SMIP Components

Component	Impact
Smart Metering Equipment Technical Specifications and Communications Hub Technical Specifications	<p>SMETS and CHTS define the minimum capabilities of smart metering equipment, including data storage capabilities. They currently require that smart metering systems have the capability to store 13 months of half hourly consumption data. Consumers can view this data on their IHD, can give permission to a third party to access the data or download it from their meter.</p> <p>There is currently no requirement to store 24 months of daily/weekly/monthly /annual consumption data within the smart metering equipment.</p>

Operational Licence Conditions	The proposed OLCs, (consulted on in August 2012) already require that energy suppliers make all consumption, export and tariff information held by the smart metering system available to domestic consumers over the HAN.
DCC Licence and Smart Energy Code	The DCC Licence requires the DCC to provide services to DCC users. This Licence should not need to be changed to deliver the Directive provision.  The SEC must include definition of the services that the EED requires.
Smart metering data access and privacy framework	The Government response to the data access and privacy consultation (see above) confirms that a framework for access to data based on the principles of the Directive, will be put in place to: <ul style="list-style-type: none"> <li>• allow suppliers to access monthly energy consumption data, without customer consent, for billing and to fulfil any statutory requirement or licence obligation;</li> <li>• allow suppliers to access daily energy consumption data for any purpose except marketing, with opportunity for customers to opt out;</li> <li>• require suppliers to receive explicit (opt-in) consent from the customer to access half-hourly energy consumption data, or to use energy consumption data for marketing purposes; and</li> <li>• ensure appropriate arrangements to facilitate third party transactions with consumers and the DCC, with sufficient consumer protection.</li> </ul>

## Consultation on the Delivery of the Directive provision

DECC is clear that the solution for delivering the provisions must be simple so it can be easily understood by consumers, implemented by industry by the deadline and effectively enforced.

The Directive requires consumers to have access to 24 months of consumption data and that consumers should have easy access to this data; via the 'meter interface' or via 'the internet'.

This consultation considers where the data might be stored, and options for accessing it.

### Storage of data

There are two main solutions:

- in the smart metering equipment; or
- in Suppliers' back office systems.

### Consumer Access to Data

There are two main options:

- via the 'meter interface', i.e. information would be displayed e.g. on an In Home Display (IHD), on the meter display or the consumer downloading the data onto a computer, via the Home Area Network (HAN); or
- via the 'internet' e.g. consumers accessing data through an internet portal or by email.

The Government believes that providing access to the data via the IHD or on the meter itself is not practical, as it will not be easy for consumers to view 24 months of daily data in these ways, and these options have not been considered further.

## Options for implementing the Directive provision

The main options considered by Government were:

Option		Comment
A	Do nothing	<p>Although consumers could download their half hourly data directly from their meter via the HAN, they may need to purchase or be given a 'consumer access device' to be able to do this.</p> <p>Also the consumer could only access a maximum of 13 months of historical data at one time, so would need to download the rest of the data in a further 11 months to give them the full 24 months.</p> <p>Option A does not meet the 'free' or 'ease of access' requirements.</p>
B	Capability added to smart metering equipment in SMETS 2 (for electricity) and the communications hub in CHTS (for gas) to store 24 months of daily consumption data	<p>Given the benefits of this option and limited impacts it appears prudent to include the capability to store 24 months of daily data in SMETS 2 electricity meters and communications hubs.</p> <p>By only including the capability in SMETS 2 and CHTS and not putting any additional requirements in place as to how consumers would access their data, we would be relying on the Operation Licence Conditions to provide consumers with access to their data.</p> <p>Although this would enable consumers to have access to the data on their meter over the HAN, it is unlikely to guarantee easy access to all data for all consumers.</p>
C	Option B plus a general requirement on suppliers in licence condition to meet the Directive requirements	<p>This would place a general requirement on suppliers to deliver the Directive provision in addition to the inclusion of the capability to store the data in SMETS and CHTS.</p> <p>Suppliers would decide how their consumers access their data. There may be increased risks in terms of consumer experience, particularly on change of supplier, if the gaining supplier operates a different system to the incumbent. Finally, if a supplier did not offer access over the internet, it would need to ensure that the consumer was able to download their data from their meter free of charge. Providing devices so that consumers can download data may result in increased costs for suppliers.</p>
D	Option B plus a requirement on suppliers to provide access to data via the internet, at the request of the consumer	<p>This option would place a general requirement on suppliers to deliver the Directive provision, but would also include a requirement to provide data via the internet (at the request of the consumer, rather than as a default).</p> <p>This would guarantee consumers access to their data (on request) over the internet or via email. They could also download the data on the meter directly if they had a consumer access device (for their personal use or for provision to a third party).</p>

## Government position

The Government's current view is that **Option D** is the preferred option for implementation.

However, it recognises that there could also be merit in a less prescriptive approach for suppliers as set out in **Option C**, and therefore also welcomes views on this option.

The Government also believes the obligation to provide consumers with easy access to 24 months of consumption data should also apply to consumers with SMETS 1 meters, but does not expect the capability to store 24 months of data to be added to SMETS 1 metering systems.

## About Engage

Engage is an independent specialist consultancy company focused on providing expert advice to the energy and utilities industry in GB and globally. Our in-depth knowledge and experience together with our delivery capability in these markets means that we give unrivalled insight and solutions. This enables sound and profitable business decisions to be made to successfully deliver strategic goals.

We are trusted advisors throughout the supply chain and our consultants are all industry practitioners. We can provide support in the following areas: Smart metering and smart grids; Project management and assurance; Business improvement and transformation; Market operation and development; Revenue and margin assurance; Information Services; Retail competition; Metering, billing and settlements; Industry design and Regulation; Training and knowledge transfer; Stakeholder Engagement and Management.

We work with suppliers, distribution network operators, metering manufacturers, trade associations, central agents, communications providers, system integrators, technology providers, water companies, the Government and regulators.

If you have any feedback or questions, please do not hesitate to contact:

Amy Cooke

Director, Business Development

T: 07875 307444

E: [amy.cooke@engage-consulting.co.uk](mailto:amy.cooke@engage-consulting.co.uk)

Pippa Stirling

Senior Business Development Manager

T: 07817 661672

E: [pippa.stirling@engage-consulting.co.uk](mailto:pippa.stirling@engage-consulting.co.uk)