

RESPONSE TO

DECC

SMART METERING IMPLEMENTATION PROGRAMME

FOR

**A CALL FOR EVIDENCE ON DATA ACCESS AND
PRIVACY**

OCTOBER 2011



COMMERCIAL IN CONFIDENCE

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RESPONSE TABLES

SMIP A CALL FOR EVIDENCE ON DATA ACCESS AND PRIVACY

#	Question	Response
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)?	<p>As a service provider to the DCC CWW will support the data and privacy standards that are set by the Programme.</p> <p>With the proper regulation and supervision in place, 48 half-hourly consumption reads should pose little concern to consumers. This level of detail is not granular enough to provide appliance-level disaggregation and identification. With the proper safeguards in place and proper stewarding of the administrator of the data (i.e., at the DCC), the opt-in consumer can have data persisted over time and allow for the transition of this data even across the switch of suppliers.</p>
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?	<p>CWW have no specific views in this area. It is incumbent on the Programme to specify the services required.</p> <p>Technically different data privacy and security requirements for third parties may make the end to end solution more complicated but we are comfortable that once the services are specified service providers will deliver an appropriate solution.</p>
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?	<p>CWW agree that there are data uses where there can positive benefits.</p> <p>Potentially sensitive consumer data should be treated differently from operational data such as voltage data. A distinction needs to be made between the granularity with which values are recorded within the Smart Metering System (i.e., interval data recording) and the frequency with which the data is retrieved.</p> <p>We believe that real-time or near real-time access to data on the meter should not be precluded. Predicating the WAN functionality of the SMIP on once-a-day, off-peak meter reads will limit the benefits of the system to consumers and DNOs (e.g., conservation voltage reduction schemes; interfacing between metering and EV systems, inverters, etc). Consumers benefit indirectly but greatly from DNO operational efficiency improvements.</p>

#	Question	Response
		<p>There are fault response scenarios where near real time consumption and energisation data can reduce costs for DNOs and improve service for customers.</p> <p>For example the high resolution polling of targeted meters within an outage zone, in combination with an asset database can:</p> <ul style="list-style-type: none"> - Reduce the time to restore and cost to fix an outage by clearly identifying throughout the restoration efforts, which consumers are still impacted by the outage. <p>Note: This consumer end-point information is also significantly enriched if a smart metering and smart grid operation scheme are operated in conjunction with each other.</p> <ul style="list-style-type: none"> - This enables the operations management team to keep & direct resources in the field until 100% of the impacted consumers are restored and avoids re-dispatch. - Identifies in detail all consumers impacted by an outage allowing full impacts and probable root causes to be more fully understood enabling a faster response. <p>Following the resolution of the grid outage event</p> <ul style="list-style-type: none"> - Smart metering schemes with on-demand polling can further reduce costs for DNOs by enabling follow on fault calls from consumers to be rapidly triaged as on/off the DNO network. - By sensing the meter energisation state on demand, a consumer can be informed at first point of contact whether a power interruption is occurring on the supply or distribution unit (consumer) equipment. <p>This reduces costs and improves services by</p> <ul style="list-style-type: none"> - Reducing DNO engineer dispatches to consumer only to determine that a consumer DB trip has operated - Enabling the consumer to address the cause of an outage if the issue is at Distribution level - thus reducing the term of the outage - Reducing the number of instances where a consumer gets charged for engineer dispatch to a Distribution issue.

#	Question	Response
4	<p>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?</p> <p>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?</p> <p>Please provide empirical examples and explain the basis of any assumptions and distinguish between gas and electricity.</p>	<p>CWW consider this beyond our scope as a communications service provider.</p> <p>However as an opinion we would envisage that advising customers on tariff opportunities and demand shifting advice would be key services enabled by this data</p>
5	<p>Should theft management be considered a regulated duty for which suppliers should have access to a certain level of smart metering data?</p> <p>What level of data would be required and how would this be used to manage theft? Please provide practical examples.</p>	<p>CWW consider this beyond our scope as a communications service provider. However we believe that this should be considered a regulated duty.</p> <p>Theft management is a practical benefit. We believe that half-hourly data is sufficient to accomplish this end and deliver practical operational and societal benefits.</p> <p>In terms of data the measurement of disparity between usage, tariff and bill is critical here. Smart meters should enable a true comparison between feeder and point of use, total usage of all meters on feeder should equal the supply from that feeder.</p>
6	<p>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)?</p>	<p>C&WW have no specific views in this area. It is incumbent on the Programme to specify the services required.</p> <p>We will ensure that the communication services deployed will deliver the requisite throughput and performance characteristics as specified</p>
7	<p>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?</p>	<p>C&WW have no specific views in this area. It is incumbent on the Programme to specify the services required.</p> <p>We will ensure that the communication services deployed will deliver the requisite throughput and performance characteristics as specified</p>

#	Question	Response
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?	C&WW have no specific views in this area. It is incumbent on the Programme to specify the services required. We will ensure that the communication services deployed will deliver the requisite throughput and performance characteristics as specified
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.	C&WW have no specific views in this area. It is incumbent on the Programme to specify the services required. We will ensure that the communication services deployed will deliver the requisite throughput and performance characteristics as specified
10	What level of data would be required and how would this be used to manage debt? Please provide practical examples.	C&WW have no specific views in this area, it is beyond our scope as a communications service provider.
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?	CWW have no specific views in this area, it is beyond our scope as a communications service provider. This question would be best answered by suppliers.
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?	CWW have no specific views in this area, it is beyond our scope as a communications service provider. It is our opinion that a cost effective, reliable, response WAN is useful here. This could be done asynchronously or via polling. As a service provider to the DCC CWW will support the data and privacy standards that are set by the Programme.
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?	C&WW believe that the use of data by DNOs to support their network management should be facilitated by the DCC but should not be a regulated duty as this potentially constrains the DNOs. The DCC may enable the DNOs to maintain an efficient and economic network but this should not be mandated as this may discourage innovation in the future.
14	Do you agree with the requirement for such data to be anonymised or aggregated wherever possible, and how should this be monitored?	As a service provider to the DCC C&WW will support the data and privacy standards that are set by the Programme.

#	Question	Response
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?	<p>C&WW believe that it is important for this data to be made available to the DNOs for network management purposes.</p> <p>Suppliers should not be in the data path in order for DNOs to extract operational efficiencies from the WAN deployment. DNOs should have real-time or near real-time access to relevant objects on the meters; they should have access to operational data persisted at the CSP head end.</p> <p>The DNO remit is grid reliability and delivering electricity cost effectively; these operational benefits flow indirectly to the consumer, but are significant nevertheless.</p> <p>In other countries, smart metering business cases do not hold without factoring in distribution network operational benefits. These business/rate cases are a matter of public record and the utilities that have deployed can corroborate. We're happy to provide references.</p> <p>There is also precedent commonly used in telecommunications billing where aggregate usage data sufficient for forecasting and planning purposes can be provided whilst maintaining consumer privacy.</p>
16	Are there any 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?	<p>CWW have no specific views in this area, it is beyond our scope as a communications service provider.</p> <p>We will ensure that the communication services deployed will deliver the requisite throughput and performance characteristics as specified</p>
17	What evidence is there of likely take-up rates that could be achieved Through different approaches to consumer choice? Smart metering implementation programme	<p>C&WW have no specific views in this area, it is beyond our scope as a communications service provider.</p> <p>We will ensure that the communication services deployed will deliver the take up rates as specified</p>

#	Question	Response
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?	<p>CWW have no specific views in this area, it is beyond our scope as a communications service provider.</p> <p>As a service provider to the DCC CWW will support the data and privacy standards that are set by the Programme.</p>
19	What parts of the privacy policy framework do you think should be delivered by regulation and why?	<p>CWW have no specific views in this area, it is beyond our scope as a communications service provider.</p> <p>As a service provider to the DCC CWW will support the data and privacy standards that are set by the Programme.</p>
20	What is the most effective way to set out any sector specific protections around privacy (e.g. licence conditions or other alternatives)?	<p>CWW have no specific views in this area, it is beyond our scope as a communications service provider.</p> <p>As a service provider to the DCC CWW will support the data and privacy standards that are set by the Programme.</p>
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?	<p>C&WW knows that certificate-based authentication (PKI) has proven to work well in networked environments.</p> <p>The ZigBee Alliance is just one example of an entity that has leveraged this in the smart energy space; this includes both ZigBee Pro / SEP 1.X and ZigBee IP / SEP 2.0. There is nothing unique to home area networking with a smart metering system that would warrant another approach.</p>

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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?	<p>There are a number of issues that need to be considered.</p> <p>From a Supplier perspective - depending on volume of data and frequency, there may be a limitation on bandwidth available per meter connection.</p> <p>In terms of availability of bandwidth on the access link, any additional services must be qualified against the relevant access media noting its limitations (e.g. lack of multicast support and high latency plus connection establishment times in the case of GPRS).and assessed against other applications sharing the same bandwidth.</p> <p>A Customer Opt-in process should be considered, a message can be sent to IHD from supplier for an opt in request for some type of reward, when switch operated, confirm sent to MDMS and access can be granted via DCC or other entity.</p>
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?	<p>We agree that arrangements such as described should be put into place. And, of course, persisting useful data in the DCC is a precursor so as to not force signatories to traverse the WAN in order extract useful, authorised data</p> <p>A physical switch, operated by consumer, one for pairing within HAN, one for access by supplier either via HAN or DCC could count as opt in confirmation for the consumer.</p> <p>This would be very secure against unauthorised access as you would need to be in the house at least in order to switch on that functionality.</p>
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?	CWW have no specific views in this area, it is beyond our scope as a communications service provider.
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?	CWW have no specific views in this area, it is beyond our scope as a communications service provider.