

eMeter response to Ofgem Smart Metering Prospectus Consultation

On the 27th of July, Ofgem launched the 'Smart Metering Implementation Prospectus' and opened a consultation on issues regarding the Roll Out of Smart Meters in the UK. Together with the Prospectus, Ofgem published 14 extra documents, each of them referring to a specific issue related to Smart Metering Systems.

Open to consultation:

1. Consumer Protection
2. Statement of Design Requirements
3. Implementation Strategy
4. In-Home Display
5. Communications Business Model
6. Data Privacy and Security
7. Rollout Strategy
8. Regulatory and Commercial Framework
9. Non Domestic Sector

References only:

10. Impact Assessment of a GB-wide smart meter rollout for the domestic sector
11. Impact Assessment of advanced/smart meters rolled out to small and medium domestic sites
12. DECC Paper on disablement/enablement functionality for gas smart meters
13. Consumers' views of Smart Metering, Report by FDS International, July 2010
14. Analysis on disablement/enablement functionality for smart gas meters, Gemserv 2010

Among other issues, the Prospectus aims to accelerate the Roll Out of smart meters in the UK. Consequently, Ofgem has scheduled two different deadlines for responding to consultation questions recorded in the Prospectus and nine of the documents published late July.

A) 28th of September

2. Statement of Design Requirements
3. Implementation Strategy
7. Rollout Strategy

B) 28th of October

1. Consumer Protection
4. In-Home Display
5. Communications Business Model
6. Data Privacy and Security
8. Regulatory and Commercial Framework
9. Non Domestic Sector

QUESTIONS FROM THE PROSPECTUS FOR THE 28TH OF SEPTEMBER

INTRODUCTION

eMeter is a smart meter software company that provides a smart network application platform (SNAP) to integrate smart meters and smart grid communications networks and devices with utility IT systems. Being vendor-neutral toward all meter, hardware, and legacy utility software systems (e.g. CIS and Billing), eMeter has a unique, unbiased and global perspective on smart meter IT issues. In addition, eMeter's principals have participated in the definition and development of the smart grid for nearly three decades, including leading advanced metering working groups in regulatory proceedings, participating in a wide variety of industry standards groups, founding the Demand Response and Smart Grid Coalition (DRSG), managing consumer-oriented Smart Grid pilots (e.g. PowerCentsDC and the Ontario Smart Price Pilot) that have been recognized for demonstrating best practices, and testifying before the U.S. Congress and various state legislatures on these issues. eMeter has also been active in Europe, participating in EU and ERGEG activities and consultations and having been an active participant in Ofgem's previous smart metering consultations. Finally, eMeter's software is in use in Smart Grid projects around the world, including several in Europe.

The smart meter rollout should be consumer focused. The benefits of smart meters are

- increased utility operating efficiency through automation of manual functions,
- greater energy efficiency through consumer information feedback,
- peak reduction through dynamic pricing and automated control,
- better renewable integration through sensing and automated control,
- support for electric vehicles through dynamic pricing and automated sensing and controls, and
- greater support of intermittent renewable distributed generation through automated sensing and controls.

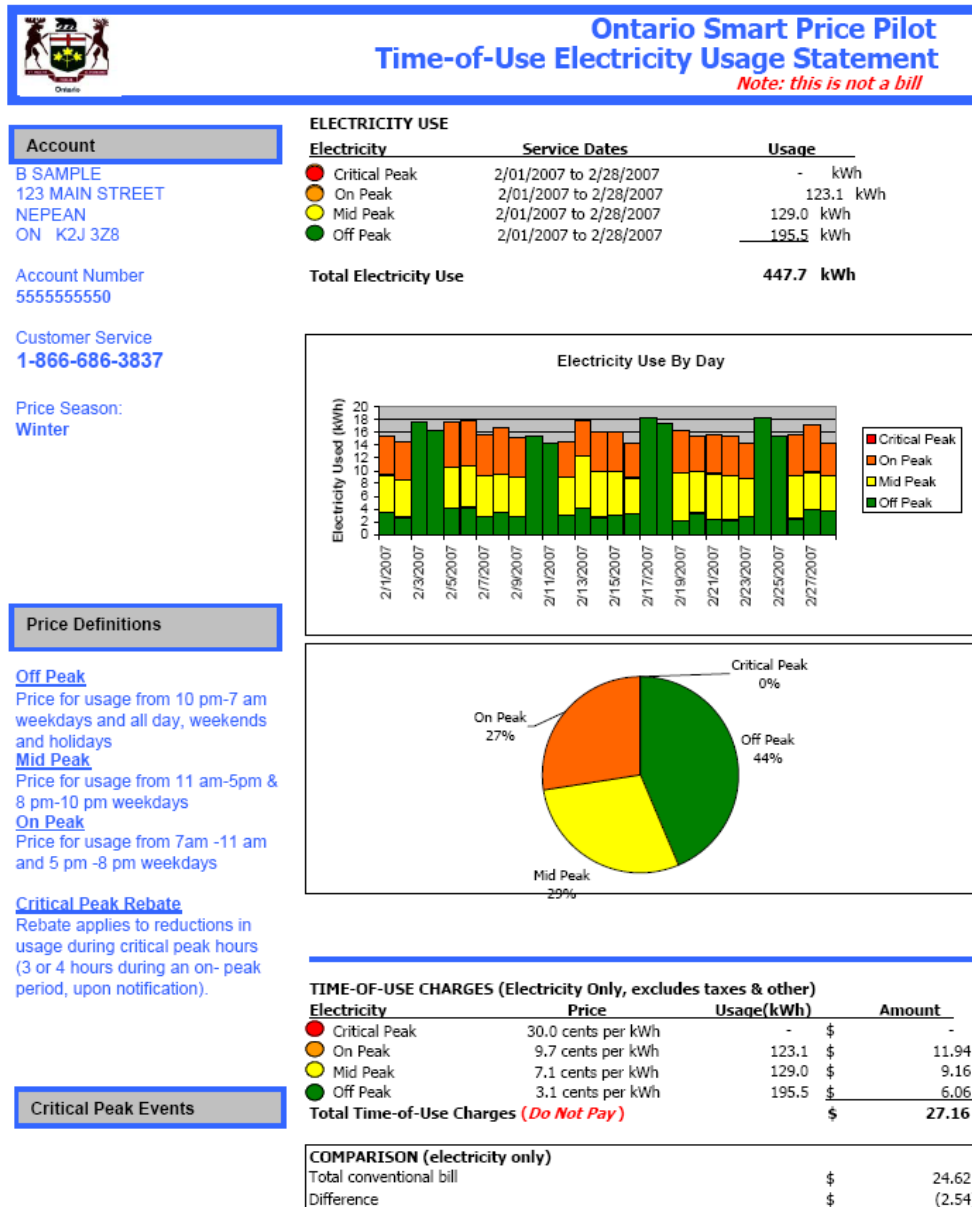
The smart meter system should be designed and built to achieve these goals.

CHAPTER 2 The Consumer Experience

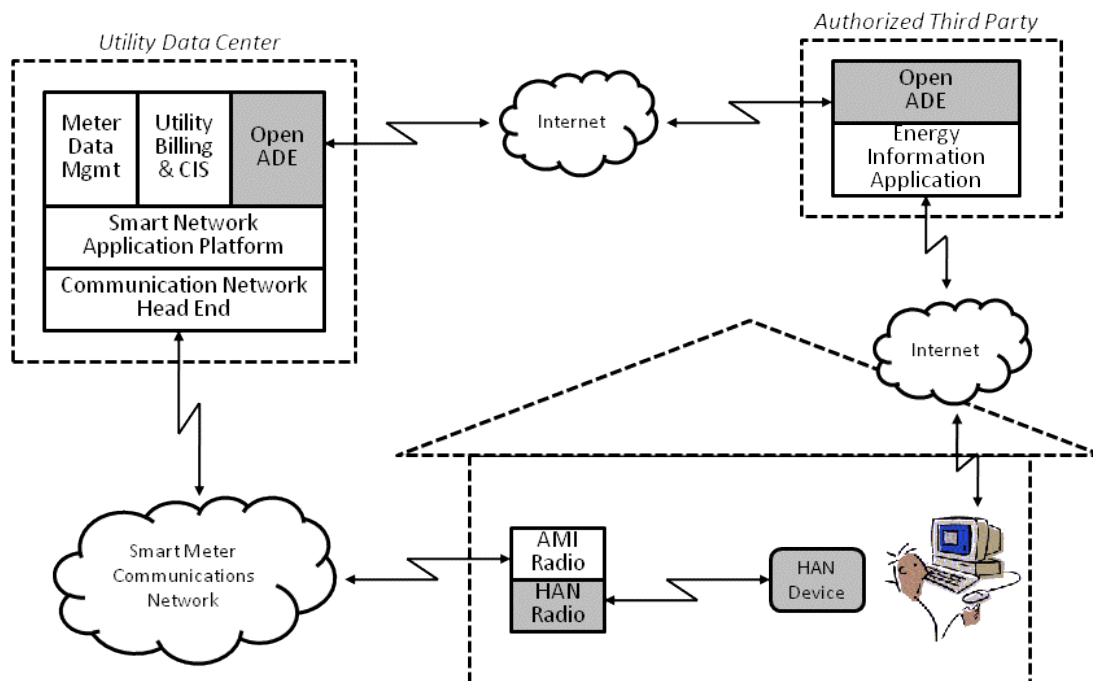
Question 3: Do you have any comments on the proposed approach to ensuring customers have a positive experience of the smart meter rollout (including the required code of practice on installation and preventing unwelcome sales activity and upfront charging)?*

Pacific Gas & Electric acknowledged that its customer complaints resulted from a "lack of focus on the consumer" in the smart meter deployment experience. When consumers receive smart meters, they should experience immediate benefits in the form of receiving additional, detailed information about their energy use with their monthly bill (see sample below from Ontario Smart Price Pilot), next-day online access to their energy information, and the option of real-time data through a Home Area Network (HAN) interface (see figure). The OpenADE (for "open automated data exchange") interface allows for free, online access to applications developed by third parties for consumers (e.g. Google PowerMeter). eMeter also refers Ofgem to the results of the PowerCentsDC, Washington DC Smart Grid pilot, included in the appendix.

Ontario Smart Price Pilot Electricity Usage Information



OpenADE and HAN Interfaces



eMeter supports the special care Ofgem proposes to ensure that customers have a positive experience. Ofgem's investigation on how retail electricity sales forces should approach consumers without providing misleading information is a good starting point for the roll out of smart meters.

<http://www.emeter.com/2010/uk-ofgem-cracks-down-on-misleading-claims-by-power-suppliers/>

Ofgem should ensure that suppliers should not use home visit opportunities to provide misleading information and they should inform consumers that smart metering together with its benefits is a national initiative. eMeter believes that a national-wide campaign will help avoid misleading information.

Home visits are an excellent opportunity to educate the consumer. eMeter advocates a national initiative that highlights the minimum information that each supplier should provide to consumers.

CHAPTER 3 Industry Roles & Responsibilities

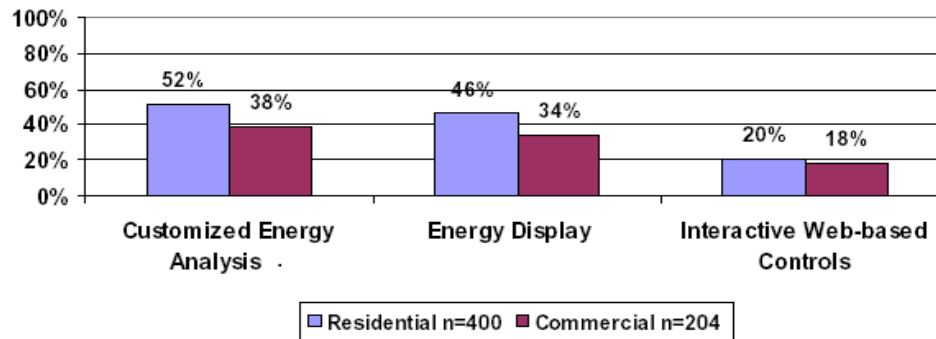
Question 6: Do you have any comments on the functional requirements for the smart metering system we have set out in the Functional Requirements Catalogue?*

eMeter's main concern about the high-level functionality is the mandatory provision of the real-time information to an in-home display. eMeter welcomes mandatory provision of the real time information, however, more advanced information can be more easily made available in smart phones, iPads, laptop computers and other devices than via a dedicated in-home display and will help achieve more fully the benefits of smart meters, such as Demand Side Response (DSR).

A learning from eMeter's many projects with consumers is specific to energy information feedback: in-home displays are not the only answer to the question of how to motivate consumers to conserve energy through feedback. In-home displays are useful tools for some consumers, but not all, and have insufficient information in many cases (the consumer focuses on reducing electric heat by knowing it contributes 50% of the bill amount, not knowing it has real-time power consumption of 1.5 kilowatts, as do a hair dryer or toaster). The answer, instead, is to provide the right information in the right way to widely varying individual consumers. The

answer is to recognize that “right” differs for consumers: some like in-home displays, others prefer the data on their laptop where it can be more easily manipulated and understood, and others prefer a printed report with their bill. A statistically valid survey of residents and businesses throughout California expressed the following preferences for receiving information:

Consumer Preferences for Electricity Usage Information



Consumer engagement applications (such as eMeter’s Energy Engage system or British Gas’s iPhone energy application) will enable innovative market products — and support DSR. The new policy paper from Ofgem on DRS highlights the opportunities and challenges of asking UK consumers to alter how they use energy in response to price signals.

In DSR, energy consumers play a more active role in the energy market by being more flexible and changing consumption patterns in response to price signals. The goals are to flatten spikes in electricity demand and to promote a dynamic relationship between energy demand and supply.

eMeter believes HANs should be based on open standards and protocols as Ofgem specified in the Prospectus. Flexible HAN interfaces will accommodate new improved devices should they become available during the implementation. As for interoperability, the critical interfaces are the OpenADE and HAN interfaces, because they open smart meter data to consumers and, with consumer permission, allow the market to develop innovative uses and devices. With these open interfaces, all manner of providers and manufacturers can build compatible devices and applications to use smart meter data. Other interfaces are important but much less so, for example the interfaces between smart meter communications and utility outage management systems. Here, interoperability is helpful but not an essential driver of the market.

Question 7: Do you see any issues with the proposed approach to developing technical specifications for the smart metering system?*

eMeter acknowledges hearing from industry experts on elements to develop technical standards will take time and organization, which sounds contrary to government willingness to accelerate the process of smart meters roll out. However we welcome Ofgem’s initiative as it will facilitate the suppliers’ mandatory roll out, as specifications to be requested should be in line with not only what the market has to offer but what best suits to the UK market and its players. eMeter believes smart metering is a process of collaboration and partnerships between utilities and industry players. Energy regulators should facilitate this communication and focus on consumer interests and protection.

Security is a serious issue that must be addressed thoughtfully. Fortunately, security can be reliably handled using available technologies. Moreover, the utility industry has a long and very strong history of avoiding security breaches. eMeter suggests Ofgem refer to the extensive discussion of smart grid security standards released last month by the U.S. National Institute of Standards and Technology; all three volumes of the report are available at: <http://csrc.nist.gov/publications/PubsNISTIRs.html#NIST-IR-7628>.

Question 16: Do you have any comments on the proposals for requiring suppliers to deliver the rollout of smart meters (including the use of targets and potential future obligations on local coordination)?*

As mentioned before, eMeter considers the smart metering system a collaboration of utilities, industry players, regulators and consumers. Collaboration between the local authorities and the suppliers would definitely enhance consumers' acceptance of the installation of the new and smart meters. However, permitting flexibility to suppliers to have their own installation pattern – deciding which consumers to target first – will support installation cost control. Several strategies could be considered, such as targeting building blocks, or specific geographical areas where the consumers are more eager to enjoy the benefits of smart metering, as per life style or high levels of consumption.

The earlier the benefits are seen by a major number of consumers, the more eager the rest of consumers will be to have a smart meter installed.

CHAPTER 4 Implementation and Next Steps

Question 17: Do you have any comments on our implementation strategy? In particular, do you have any comments on the staged approach, with rollout starting before DCC services are available?*

DCC will be at the heart of the new scenario, however eMeter supports the rollout starting before its services are available, provided most DCC specifications are set up. Specifications regarding the following are important, as are the data interfaces (see OpenADE and HAN figure above):

- HAN interface ownership: should the DCC own them and charge retailers for their usage?
- Direct consumer access to the DCC, as in Texas¹, which permits direct access to consumers to the data via the centralized Smart Meter Texas portal (we assume consumers in the UK will get data through their retailers, however).

An intermediate solution should be set up aiming to secure all the benefits from the smart meters that are to be installed before DCC starts operating in Autumn 2013, as well as its transition. The Interim solution should facilitate not only the two ways communication to both gas and electricity meters, but to conglomerate the data and provide scheduled data retrieval. Ofgem should allow the market to establish an interim solution without interference by Ofgem, and the provider of the interim solution, if any, should not be hindered from participating in bidding to provide DCC services. This is based on the assumption that any interim solution provider bears the full risk of its investment in the interim solution.

Question 18: Do you have any other suggestions on how the rollout could be brought forward? If so, do you have any evidence on how such measures would impact on the time, cost and risk associated with the programme?*

The rollout could be brought forward without mandatory In-Home Display. It will translate in extra cost for the supplier, which could be unnecessary. eMeter believes that Ofgem should reconsider the obligation to provide an In-Home Display as discussed above, and allow for flexible alternatives. If Ofgem expects over time more advanced displays and other applications to be offered that exceed the minimum requirements, why not leave to the retailers the way they want to facilitate consumers the information on their gas and electricity consumption?

eMeter sees the following as minimum requirements for display of real-time, in-home data, whether via a dedicated IHD or another means such as a smart phone or laptop computer:

¹ Blossom G & King, C "Regulatory Briefing" Sept, 2010

- electricity and gas consumption.
- historical consumption so that consumers can compare current and previous usage.
- usage information displayed in pounds and pence as well as kilowatts and kilowatt hours and the display to include a visual (i.e. non-numerical) presentation that allows consumers to easily distinguish between high and low levels of consumption.
- accurate account balance (cost) information (amount in credit or debit); but not necessarily updated in real-time. Daily updates of account balances is the least cost, highest reliability approach. It allows use of existing billing systems to support and validate the calculations.
- capability to display information on both gas and electricity consumption, price, and cost.

Ofgem seeks views on whether information on carbon emissions should also be included. eMeter supports carbon emission information as an important measure for consumers to know how much their energy consumption contributes to carbon emissions. This figure, should the case arrive, will support the calculation of individual carbon emission footprints.

Question 19: The proposed timeline set out for agreement of the technical specifications is very dependent on industry expertise. Do you think that the technical specifications can be agreed more quickly than the plan currently assumes and, if so, how?*

The key is to have a defined and open process, with specific deliverables and specific deadlines. All parties should be welcome, input taken, decisions taken, and results disseminated. There is a wealth of practical, real-world experience available that is a critical input and should be taken advantage of.

Question 20: Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?*

eMeter welcomes the future Smart Energy Code as the single body to regulate DCC and Ofgem's readiness to evolve its organizations parallel to the development of the programme. However we believe that there should be a group that starts looking at future applications that will support achieving fully the benefits from smart metering, such as DSR and Electric Vehicles.

2. STATEMENT OF DESIGN REQUIREMENTS

CHAPTER 3 Overview of the Smart Metering System Functional Requirements Catalogue

1. Smart meters

The major meter manufacturers currently offer base model meters that include the hardware building blocks that would enable the majority of the functional requirements to be met:

- metrology Integrated Circuit (IC)
- Central Processor Unit (CPU)
- memory
- enablement/disablement
- WAN and HAN

Some firmware changes may be necessary to make smart meter more secure.

2. In-home display

Mandated for domestic consumers with

- real time information on E&G consumption

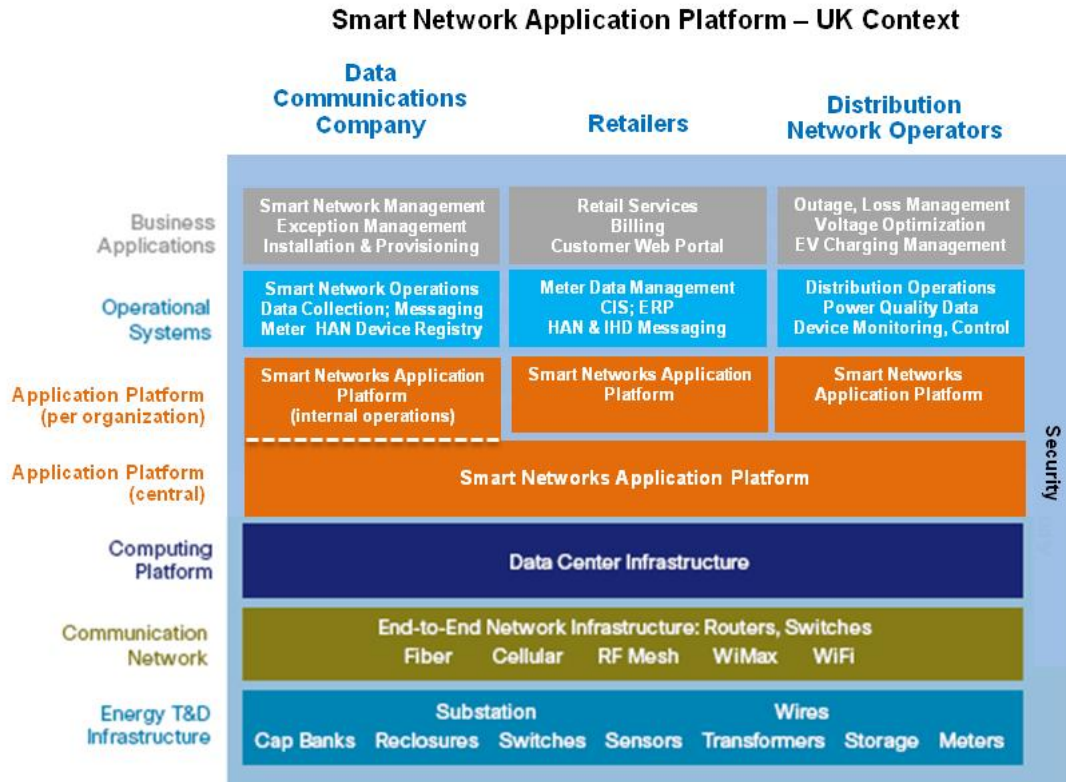
- historical information on consumption
- inf. in pound and pence, KW & KWh and a non numerical (graph_
- CO2 information should be included?

Question 1: Should the HAN hardware be exchangeable without the need to exchange the meter?

Yes. We see the following HAN functional requirements:

1. Only a single utility HAN interface per consumer premise, when technically possible
2. Upgrades should be compatible with devices connected to original HAN (new technology should backwards compatible); ZigBee Smarter Energy Profile, approved for use in the U.S. by the federal National Institute for Standards and Technology (NIST), includes the ability to download new versions of firmware to HAN devices to support new and evolving functionality.

eMeter believes that HAN hardware should be interoperable as it would allow more flexibility and longevity to the solution selected. We propose a robust data communication architecture that provides such flexibility by separating the sources of uses of data, providing access to data by multiple software applications, and sharing communications network access among multiple software applications. This is accomplished via a smart network application platform as seen in the figure below.



Question 2: Are suitable HAN technologies available that meet the functional requirements?

HAN Functional Requirements:

1. Only a single HAN per consumer premise, when technically possible
2. Upgrades compatible with devices connected to original HAN (new technology should backwards compatible)

3. Modularity: There is no requirement for the HAN hardware to be exchangeable without exchanging the meter

The technology exists and cost will vary depending on the HAN interface architecture selected. Technology evolves continuously and so the standards, such as Zigbee aiming to allow interoperability. Zigbee recently announced that has set up and European division, aiming to develop European partnerships and collaboration, promoting a greater adoption of Zigbee standards wireless EU smart projects.

Having a separate box to hold the HAN will allow modularity and HAN will be more upgradable, which requires intensifying firmware and hardware. If the HAN holds a user-replaceable HAN radio set change in standards and technology might request firmware change only.

Question 3: How can the costs of switching between different mobile networks be minimised particularly in relation to the use of SIM cards and avoiding the need change out SIMs?

If communication goes to the DCC the need to switch network suppliers will be eliminated, therefore the need to visit the consumers and change their SIM

Question 4: Do you believe that the Catalogue is complete and at the required level of detail to develop the technical specification?

Together with the required functions as name in Table 5 of the Prospectus (Basic Metrology, HAN, Enablement/Disablement, Tamper proof, Local data Management and Display, and storage, Import Export), some functions beyond high-level list of requirements² should be included, such a Tariff of Use, more specific functions about measurements of active power and interval metering and recording of active energy. These functions are needed for providing detail energy usage feedback, supporting dynamic, enabling demand response, and creating operating efficiencies and savings. Installing new meters without these items is like buying computer without any Internet access or optical disc drives.

eMeter believes that the absences of this function in EU Directive of Measuring Instruments, MDI³ could have an impact in Member Countries where, despite the MID equivalence, the institutions responsible for metrological verifications and auditing on measuring instruments could hinder the use of smart meters containing the above functions, because the are not foreseen by the, thus risking decelerating the roll-outs. This could lead to obstacles in competition and increases in cost for manufactures and/or system, which would in turn have a negative impact on customers.

eMeter responded to ERGEG Public Consultation on Draft Guidelines of Good Practices on Regulatory Aspects of Smart Metering for Electricity and Gas. eMeter's respond made a note on the importance of including these functions

² 1. Remote provision of accurate reads/information for defined time periods - delivery of information to customers, suppliers and other designated market organization (Electricity & Gas)
2. Two way communications to the meter system; communications between the meter and energy supplier or other designated market organisation; upload and download data through a link to the wide area network; transfer data at defined periods; remote configuration and diagnostics, software and firmware changes (E&G)
3. Home area network based on open standards and protocols; provide "real time" information to an in-home display; enable other devices to link to the meter system (E&G)
4. Support for a range of time of use tariffs; multiple registers within the meter for billing purposes (E&G)
5. Load management capability to deliver demand side management; ability to remotely control electricity load for more sophisticated control of devices in the home (E)
Remote disablement and enablement of supply that will support remote switching between credit and pre-pay (E only)
6. Remote disablement and enablement of supply that will support remote switching between credit and pre-pay (E&G)
7. Exported electricity measurement; measure net export (E only)
8. Capacity to communicate with a measurement device within a microgenerator; receive, store, communicate total generation for billing (E only)

³ Directive 2004/22/EC of the European Parliament and of the Council of 31 March 2004 on measuring instruments

The Prospectus presents each functional requirement⁴ in a table that includes an explanation of the request about Ofgem breakdowns, together with a justification of the requirement. eMeter considers that an extra logical sections that looks at estimated cost of each of the requirements should be added, as it would contribute to decisions based in cost/benefits analysis.

Question 5: Do you agree that the additional functionalities beyond the high-level list of functional requirements are justified on a cost benefit basis?

Yes, some functionalities, such as active power, interval metering and recording of active energy together with consumers ability to track their profile on a website or smart phone applications, will enhance consumer willingness to change their consumption patterns and the further development of demand response.

Question 6: Is there additional or new evidence that should cause those functional requirements that have been included or omitted to be further considered?

Web portal or smart phone applications versus IHD. It allows consumer to be more active in their planning of energy consumption, such as setting filters alarms when certain consumption previously established threshold

CHAPTER 5 Achieving Technical Interoperability

Question 7: Do you agree that the proposed approach to developing technical specifications will deliver the necessary technical certainty and interoperability?

We welcome Ofgem effort to support common minimum technical specifications to secure not only technical but commercial interoperability- switching supplier. However industry players and suppliers need to be taking into account when defining these minimum specifications, as circumstances vary among different utilities and the current back offices systems. Therefore eMeter consider Option 2⁵ as the best option together with the establishment of the Smart Metering Design Group (SMDG), where industry will have a more relevant role and specifications will support a more flexible market.

eMeter would like to highlight that meters should support certain tariff structures to enables innovation and retail competition. Collaboration and open dialogue with technical international standards such as Zigbee, DLSP is mandatory to enhance interoperability.

Question 8: Do you agree it is necessary for the programme to facilitate and provide leadership through the specification development process? Is there a need for an obligation on suppliers to co-operate with this process?

Providing leadership and guiding the industry it would be highly beneficial as it would help to secure a broader interoperability and understanding between the players.

Question 9: Are there any particular technical issues (e.g. associated with the HAN) that could add delay to the timescales?

Interoperability.

⁴ The functional requirements are divided into 12 logical sections: Installation and Maintenance, Operational, Display and Storage, Interoperability, Prepayment and Credit, Gas Specifics, Diagnostics, Security and Privacy, HAN, WAN and IHD

⁵ Option 1: Ofgem developing both the functional requirements and the technical specifications.

eMeter believes HANs should be based on open standards and protocols as Ofgem specified in the Prospectus. Flexible HAN interfaces will accommodate new improved devices should they become available during the implementation. As for interoperability, the critical interfaces are the OpenADE and HAN interfaces, because they open smart meter data to consumers and, with consumer permission, allow the market to develop innovative uses and devices. With these open interfaces, all manner of providers and manufacturers can build compatible devices and applications to use smart meter data. Other interfaces are important but much less so, for example the interfaces between smart meter communications and utility outage management systems. Here, interoperability is helpful but not an essential driver of the market.

Question 10: Are there steps that could be taken which would enable the functional requirements and technical specifications to be agreed more quickly than the plan currently assumes?

eMeter believes that there are steps that could be taken that will enable the functional requirements and technical specifications to be agreed faster:

- Suppliers should be open regarding solutions that are considering to put into practices
- Solutions should promote interoperability and flexibility

3. IMPLEMENTATION STRATEGY

CHAPTER 2 Programme management and governance

Question 1: Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?

eMeter will like to propose a larger representation of the industry within the new proposed governance scheme. We believe it is becoming very complicated to achieve the energy regulatory tasks, as they are enormous in their range and in a constantly changing world. The regulators alone could not track all the changes happening in the industry.

CHAPTER 3 Programme activities

Question 2: Are there other cross-cutting activities that the programme should undertake and, if so, why?

Future appliances: broad minimum specifications should be requested supporting Energy Demand Side Management. Also the use of Electric Vehicles need some regulations that support price Time of Use tariffs.

CHAPTER 5 Implementation plan for regulatory framework change

Question 3: Do you agree with our proposal for a staged approach to implementation, with the mandated rollout of smart meters starting before the mandated use of DCC for the domestic sector?

An intermediate solution should be set up aiming to secure all the benefits from the smart meters that are to be installed before DCC starts operating in Autumn 2013, as well as its transition. The Interim solution should facilitate not only the two ways communication to both gas and electricity meters, but to conglomerate the data and provide scheduled data retrieval.

The staged rollout main's benefit is that learnt with experience practices could be implemented at a later stage of the rollout

Question 4: Do you have any comments on the risks we have identified for staged implementation and our proposals on how these could best be managed?

1. Lack of interoperability of early rolled out meters. To carry out more interoperability test and go for solutions that comply with the test will dismiss risks of early roll out rolled out meters.

2. Communication services. eMeter proposes that suppliers select solutions that provide flexibility and scalability; a platform that would support Ofgem requirements change. They should look for a flexible platform that permit individual applications to be changed or new ones added in a modular fashion. Accordingly, these changes should be made without modifications to the underlying software platform or expensive customization

3.DCC capability to communicate with previously installed communication services could be at partly overcome if the solutions previously implemented are open.

Question 5: Do you have any other suggestions as to how the rollout could be brought forward, including the work to define technical specifications, which relies on industry input?

eMeter believes that the rollout could be brought forward if Ofgem decides not to request meters to storage consumption data but to store information from all the meters at the MDM solution.

Question 6: Do you agree with our planning assumption that a period of six months will be needed between the date when supply licence obligations mandating rollout are implemented and the date when they take effect?

Yes, however suppliers should prepare themselves identifying more proactive consumers to smart meters, and those geographical areas where the deployment will make more sense for their business cases. Targeting the most proactive consumers and areas will bring the most of the smart metering to the consumers faster.

Suppliers should start preparing themselves for the different technical specifications and scenarios that could be finally selected

Question 7: Do you have any comments on the activities, assumptions, timings and dependencies presented in the high-level implementation plan?

eMeter agrees with Ofgem assumptions of

- ramp-up period needed before reaching peak capability for rolling out smart meters
- DCC + Industry need testing before suppliers are required to use DCC services
- Functions and technical specifications need to be notified to the EU
- Framework changes required for smart meter rollout and new DCC framework can be progressed in parallel

eMeter welcomes Ofgem requests of technical interoperability as they will facilitate essential benefits of smart meters to occur, such as switching supplier together with easing the incorporation of more updated devices in the future.

Meters should support different tariff structures to enable the incorporation of future applications and a more open retail competition.

7. ROLLOUT STRATEGY

CHAPTER 2 Approaches for Rollout

Question 1: Do you believe that the proposed approach provides the right balance between supplier certainty and flexibility to ensure the successful rollout of smart meters? If not, how should this balance be addressed?

eMeter welcomes Ofgem review/process as it allows suppliers flexibility at first and change that later if a better option is needed to achieve targets.

However, eMeter foresees that aiming to engage consumers fast suppliers need to have the IT communication system ready. Consumers should start enjoying the benefits coming from the installation of the meters no later than a few days after the implementation takes place. Not only the IHD should be available but also some web access where they could see their consumption, together with the price and even the CO2 their consumption produce.

The supplier must explain to the consumers the benefit of having a smart meters installed at their homes. Messages should be simple and engaging. That is the reason why eMeter highlight the importance of a web site tool, that provides the consumer with a more interactive tool

Question 2: Would the same approach be appropriate for the non-domestic sector as for the domestic sector?

eMeter considers that initially the same approach could easily fit for implementing smart meters to domestic and non-domestic consumers.

Question 3: Is there a case for special arrangements for smaller suppliers?

Ofgem should take special care at the cost and accessibility of smart meters and installation services for small suppliers. They might face some cost disadvantages regarding data security and their relationship with the DCC, if compared to large electricity and gas suppliers.

CHAPTER 3 Mechanism for General Consumer Engagement

Question 4: What is the best way to promote consumer engagement in smart metering? As part of broader efforts, do you believe that a national awareness campaign should be established for smart metering? If so, what do you believe should be its scope and what would be the best way to deliver it?

Providing consumers with advice on how they could change their consumption patterns. Suppliers should highlight those tips that will get easily and noticeable changes, so the consumers will soon see a difference gaining motivation to improve energy efficiency.

A national campaign should be launched to avoid suppliers providing misleading information. The national campaign should inform about the fact that smart meters installation is part of a national wise scheme and what are the minimum requirements to suppliers. eMeter believe that it would lower the opportunities to provide misleading information on this regards.

Chris King, eMeter Chief Regulatory Officer presents some evidence coming from British Gas rolling experience <http://www.emeter.com/2010/most-british-gas-customers-are-happy-with-their-smart-meters/>

Reasons for positive consumers attitude to smart meters mentioned by Chris King:

1. Consumer focus. To design the smart meter roll out with customers in mind.
2. Respect. Allow customers to refuse smart meter installation are not forced them to accept it. According to British Gas smart meter roll out, so far not a single British Gas customer has refused a smart meter after getting full information and an explanation from the meter installer.
3. Friendly installers. Ensuring that meter installers are well trained and fully informed
4. Transparency and communication. Smart meter recipients will also get an in-home display to help them understand their energy usage. As mentioned before the IT communication systems should be ready to deliver the consumer what is mentioned during the meter installation.
5. Dynamic pricing choices. Consumers will have been price choices, although these options are still being developed. Schemes that take advantage of half-hourly prices in the UK wholesale electricity market will support electric vehicles and it would allow consumers to save money by using high-availability, low-cost wind power during Off-peak hours. However misleading information should not be provided, and those benefits that could not be delivered yet, should be specified that way.

Question 5: How should a code of practice on providing customer information and support be developed and what mechanisms should be in place for updating it over time?

Suppliers should share their experience when installing smart meters, providing information to consumers, and engaging them to change their consumption patterns.

A working group of good practices could be created. The group will provide a pool of expertise and good practices exchange.

Also the group when gaining knowledge throughout experience will set up minimum steps to avoid misleading information and to provide tips on how better install the meter and get the best results.

CHAPTER 4 Obligations on suppliers to Complete the Roll Out

Question 6: Do you agree with the proposed obligation on suppliers to take all reasonable steps to install smart meters for their customers? How should a completed installation be defined?

Suppliers should have the IT system ready to enable the consumers to start enjoying benefits of smart meters a few days after the installation. The consumer should soon after the installation be able to see its consumption data, not only from the In-Home Display but web access where they could see the consumption, the price and even the CO2 their consumption produce.

Suppliers must explain to the consumers what are the benefits of smart meters. Messages should be simple and engaging, and the consumer should be able to see and enjoy the results soon. That is the reason why eMeter highlights the importance of a web site tool, as it will provides the consumers an interactive tool with information about their energy efficiency and their energy consumption pattern.

Question 7: Do you think that there is a need for interim targets and, if so, at what frequency should they be set?

eMeter believes that interim targets will bring more certainty to the roll out it will accelerate the process and facilitate a better planning for the DCC.

Certain types of meter should be included in the first phases of the roll out, such as prepayment ones. It will enable the preparation of the infrastructure needed as well as the elimination of all the current methods of meters top up payment.

Question 8: Do you have any views on the form these targets should take and whether they should apply to all suppliers?

eMeter concerns about small suppliers. They should be exempt from the interim target as it would bring them more flexibility in negotiating contracts and allow them to better train their staff.

Question 9: What rate of installation of smart meters is achievable and what implications would this have?

eMeter wants to highlight that in terms of engage consumers once the meter is installed consumers should be able to have access to their consumption data short after. The rate of installation of smart meters should take into account also the IT communication systems.

CHAPTER 5 Priorisation of Specifics Consumer Groups

Question 10: Do you have any evidence to show that there are benefits or challenges in prioritising particular consumer groups or meter types?

Suppliers should start the installation of the smart meters at the premises of those customers that want to enjoy the benefits of smart metering and also to target the areas where smart metering will be installed easily.

CHAPTER 7 Consumer Issues

Question 12: Do you agree that there is already adequate protection in place dealing with onsite security or are there specific aspects that are not adequately addressed?

eMeter acknowledges Ofgem concerns of onsite security, as it is showed in the investigation launched to report sales representative that were giving consumers misleading information, often causing consumer to switch power providers and end up with a bad deal that increased their bills.

<http://www.emeter.com/2010/uk-ofgem-cracks-down-on-misleading-claims-by-power-suppliers/>

A national campaign will bring awareness to consumer on smart grid benefits, and what to expect from smart meters installers.

Question 13: Do you agree with our proposal to require suppliers to develop a code of practice around the installation process? Are there any other aspects that should be included in this code of practice?

eMeter sees a code of practice as a starting point to provide consumers to the minimum standards they should expect from the meter installers.

eMeter appreciates the opportunity to comment.