28 October 2010

Margaret Coaster
Smart Metering Team,
Ofgem E-Serve,
9 Millbank,
London
SW1 3PG

Dear Margaret,

Smart Metering Implementation Programme – Response to October Questions

Following our response to the September questions raised in the Smart Metering Implementation Programme Prospectus, I am excited to share ELEXON's views in this second response. Our company remains committed to the positive transformation that smart metering will bring to the industry, both in terms of its role in underpinning consumer behavioural change, enabling smart grids and as a platform for developing industry processes and systems that should result in a vastly improved consumer experience.

I believe that ELEXON has valuable expertise to share with the programme, given our history of working independently with the energy industry to manage and deliver wide-scale change through NETA and BETTA. As the scope of the DCC and its business model is discussed in more detail, we are keen to play an increasing role in supporting this programme and contributing our experience of delivering critical central market services through an outsourced partnership model.

In responding, we have answered each question in full. The similarities between some questions have led to repetition, but we felt this makes our response easier to read and navigate than heavily cross-referencing answers.

I would like to take this opportunity to highlight key aspects of our response.

Bringing forward the DCC appointment

A balance needs to be struck between achieving the benefits of a competitive licence application process and the pragmatism required given the ambitious timescales to which the DCC licence application and award process is to run. Bringing forward the appointment of the DCC would bring significant benefits to the programme through shortening the rollout timetable, thereby reducing costs and mitigating the risks of service provider contracts that are pre-defined without the direct involvement of the DCC. An appointment that is as close as possible to the establishment of the SEC would also minimise the impact of unclear accountabilities during an interim mandated rollout period with limited governance.

DCC licence award criteria

While a competitive licence award process will bring benefits, it is essential that the licence award criteria consider key factors that will determine the long-term success of the DCC and alignment of its objectives with those of the programme. Factors to consider include:

- Independence from service providers and wider commercial interests
- Energy industry credibility and the ability to deliver commercial arrangements through major change and manage the subsequent development
- Track record in successfully delivering critical central systems through a regulated business model
- Ability to deliver class-leading industry governance and change management procedures and protocols
- Organisational values that align with the objectives of the programme

Maximising the potential of the SEC

ELEXON supports the rationale for establishing a Smart Energy Code. We agree it is essential to support smart metering and deliver its benefits. The SEC's support for a dual fuel market is a key step in transforming the central market, and will allow the industry to introduce efficiencies across other codes and processes.

Making the DCC responsible for administering the SEC code, as ELEXON administers the BSC, could add significant value. In our experience, code administration overlaps significantly with managing corresponding systems and processes. Having one organisation responsible for these key areas will increase accountability, reduce complexity and duplication of processes, and so improve the customer experience and promote competition by removing barriers to entry.

Meter registration and the DCC

From the outset of the DCC's operations, there will be a requirement to manage smart meter registration data; it therefore appears logical to bring full meter registration responsibility for all new smart meters installed under the DCC from the day the meter is installed. If this is not done, there is a heightened risk of lost or duplicated data due to the deregistration of dumb meters and registration of smart meters taking place in different systems.

We believe that a dual fuel registration system, managed by the DCC, will encourage a simpler change of supplier process – critical to improving consumer experience. We have investigated how the change of supplier process could be simplified and have shared some of this thinking with a number of your colleagues, including Dora Guzeleva, Nigel Nash, Mark Cox and Rob Hull.

Approach of the DCC to procurement and contract management

We agree with the proposed scope of licensable activity for the DCC with regard to procurement and management of contracts. A centrally managed model is preferable not only because it is simpler and will result in lower costs with less complexity, but also because we believe that Ofgem will have a more robust regulatory framework from which to monitor the market.

However, the DCC must be involved in any prequalification discussions with its service providers to avoid the risks of pre-defined contracts. Appointing the DCC earlier in the rollout timetable would enable this.

Managing the transition to smart

In terms of wider impacts of the smart meter rollout, ELEXON has concerns about the transition period, where both smart and 'dumb' meters will operate.

During the rollout, additional cost and complexity will be incurred by central processes and systems, such as within settlement and its associated assurance regime. For an extended period, dual standards and assurance processes will be required to service both meter types, and extra safeguards will be required to maintain data quality from the mix of sources.

ELEXON also seeks clarification on the planned status of the SEC during the period before DCC go-live, as we expect a governance framework will be required for the already live mandated rollout. This will greatly help to minimise the issues involved in managing a mix of smart and 'dumb' meters.

I look forward to discussing our response with you. In the meantime, if you or your colleagues need anything further from ELEXON, please contact my colleagues [redacted]

Yours sincerely,

[redacted]

List of Enclosures

Smart Metering Implementation Programme – Response to October Questions

Smart Metering Implementation Programme

October 2010

Smart Metering Implementation Programme: Prospectus

Chapter 2. The Consumer Experience

Question 1.

Do you have any comments on the proposed minimum functional requirements and arrangements for provision of the in-home display device?

ELEXON agrees that the proposed minimum functional requirements for the in-home display device (IHD) at their current level of detail are the correct starting principles. We also agree with the suggested arrangements for providing the IHD.

As the programme works with industry to define the requirements and arrangements further, there are areas that we suggest require special attention to ensure IHDs deliver the intended benefits to customers:

Data access

For consumers to rate their actual energy consumption against meaningful benchmarks, they will need to access their own historic data and compare it to the aggregated data of relevant demographic or geographic peer groups. Access and permitted data use will need to be considered when privacy and consumer protection controls are being developed.

Change of supplier

If the IHD consumer experience is underpinned by access to a rich source of historic consumption data, then the integrity of this data must not depend on consumers maintaining a relationship with the same energy supplier.

Settlement integrity

Any planned functionality for the IHD must not cause discrepancies in the data flowing into settlement or create new security risks that could impact the integrity of settlement. We welcome further discussion on this topic with the programme.

To ensure consumers have a positive perception of the IHD and rollout in general, what the IHD displays must be consistent with what will appear on bills. The simplicity of a 'pounds & pence' display will not realise its intended benefits if it is compromised

by discrepancies between the IHD and the bill. The IHD will also need to be flexible to adapt to potential future changes such as a change in VAT or a currency move to the Euro, for example.

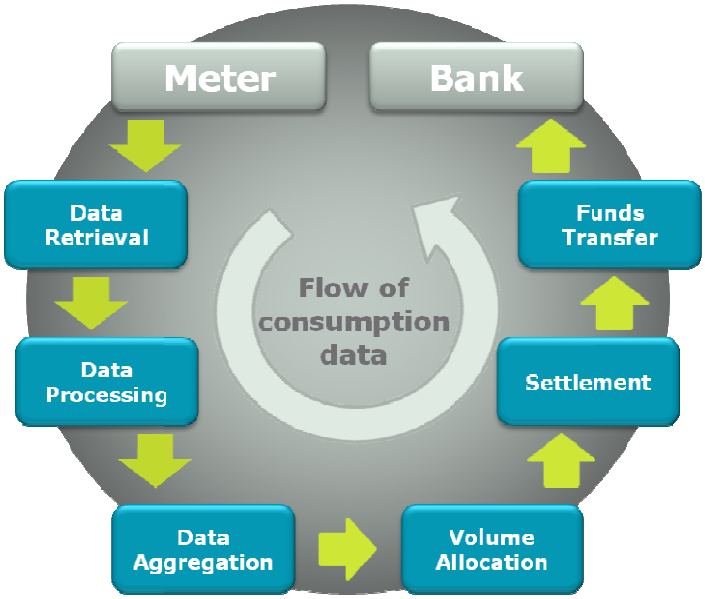
Question 2.

Do you have any comments on our overall approach to data privacy?

ELEXON agrees with the programme's overall approach to data privacy, but we also advocate a pragmatic approach. Privacy safeguards must be flexible so that protecting consumers can be effectively balanced with the challenge of moving to a low carbon economy and enabling smart grids.

From an electricity settlement perspective, we need regular reads that show site usage accurately. These allow us to allocate electricity correctly into half hourly periods for settlement. This means that we need to know when the consumer has actually used electricity.

Diagram 1: How consumer data flows into settlement



In addition to clarifying the data access required for settlement, ELEXON can also support the programme in identifying other 'regulatory duties' for which data would be required. We have significant expertise in this area thanks to our work managing Balancing and Settlement Code (BSC) modifications and our 'meter to bank' responsibility.

We see the related, although separate, issues of privacy, security and data integrity being confused within the context of the programme at times. The key stakeholders of the policies being developed in each of these areas are different: for example, in the context of privacy, the consumer view is of primary importance; with regards to data integrity, we see settlement as a main beneficiary. The programme's approach needs to reflect this thinking and involve the correct experts and stakeholders in relevant discussions.

Question 4.

Have we identified the full range of consumer protection issues related to remote disconnection and switching to prepayment?

In addition to the consumer protection issues outlined in the Prospectus, we believe there are further areas to consider:

Impact of disconnection on data storage

We believe that further discussion is required on protecting consumer data held locally on the meter if it is disconnected. It is possible to foresee situations where consumers are reconnected relatively quickly after being disconnected, particularly in the case of vulnerable consumers. If a meter is disconnected, losing data as well as meter functionality is likely to frustrate already disengaged consumers further.

Effect of electricity disconnection on the gas meter

It is currently unclear to us how a supplier disconnecting the electricity meter will affect the gas meter. In cases where the gas meter 'piggybacks' the power supply of the electricity meter, we would expect to see redundancy in place to maintain power to the gas meter if electricity is disconnected. Without this, there is a risk that data would stop flowing into gas settlement and leave the gas supplier unable to bill the consumer.

Prepayment customer experience

ELEXON expects that for many consumers, prepayment will in time become a 'lifestyle choice' rather than being perceived as an option for credit risk customers. This potential for the growth of prepayment enabled by smart meters will bring innovation and increased competition to energy retailing, and consumers will eventually buy their energy from a supplier of their choice for each 'top-up', selecting on the best price or terms offered. If this vision is to become a reality, the benefits of prepay will need to be communicated positively and the consumer experience will need to offer instant transactions, with significant improvements required to 'Change of Supplier' and other processes. We welcome the opportunity to share our views in this area.

Please contact [redacted] for more information.

Question 5.

Do you have any comments on the proposed approach to smaller non-domestic consumers (in particular on exceptions and access to data)?

In considering the proposed approach to smaller non-domestic customers, we advocate using common processes wherever possible to maximise efficiency at minimum cost.

If providing an IHD for the smaller non-domestic sector is not mandated, then consumers must be able to share meter data with third parties easily, so as to easily integrate with energy management systems.

Chapter 3. Industry Roles & Responsibilities

Question 8.

Do you have any comments on the proposals that energy suppliers should be responsible for purchasing, installing and, where appropriate, maintaining all customer premises equipment?

ELEXON supports the proposals for supplier responsibilities relating to customer premises equipment. However, we also ask for further clarity and confirmation that suppliers will be responsible and accountable for the actions of all their agents, so as to minimise customer confusion and streamline how issues are resolved.

From a settlement perspective, decommissioning dumb meters and installing smart meters must be conducted rigorously. Suppliers will need to be accountable for ensuring the continuity of settlement data when installing and maintaining customer premises equipment. This should be a defined part of a 'successful installation', and supported by a robust assurance framework that ensures central bodies can monitor the impact of installations.

More complex sites with multiple meters and corresponding suppliers, such as blocks of flats in urban areas will need to be considered. Every effort must be made to avoid confusing and disrupting consumers. This could happen, for example, if consumers are unclear which supplier to contact if problems occur across multiple meters from one supplier's installation.

ELEXON offers to support the programme in considering these issues and can share its experience of managing supplier accountability for agents through the BSC 'Supplier Hub' principle. This dictates the responsibility framework of suppliers when conducting data aggregation, data collection and meter operation through agents.

Under the Supplier Hub principle, the supplier is responsible for all of the actions and interactions between their agents, and for the flow of metered data into settlement from its sites.

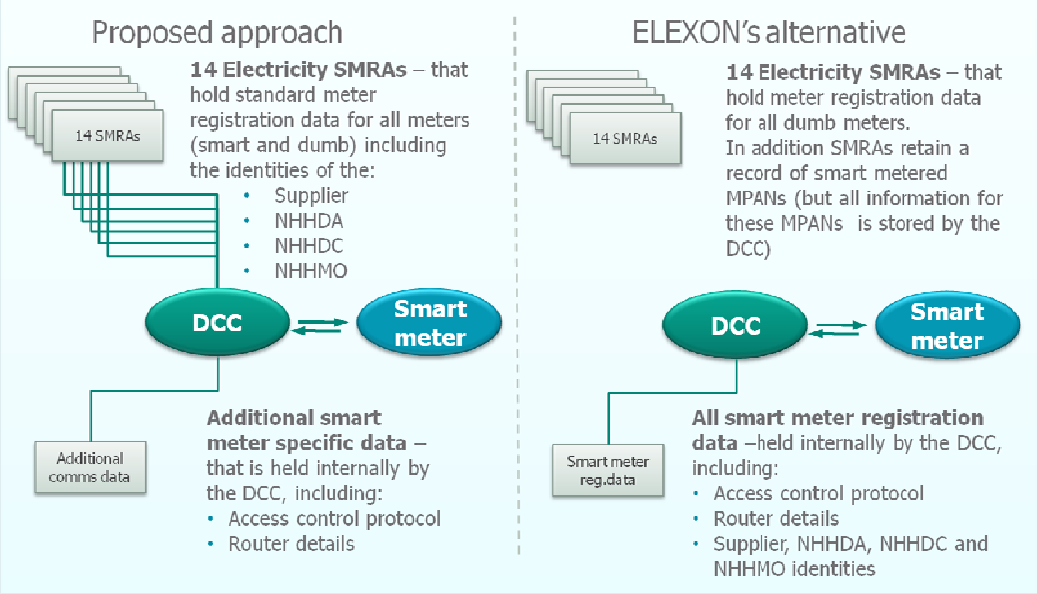
Please contact [redacted] for more information.

Question 9.

Do you have any comments on the proposal that the scope of activities of the central data and communications function should be limited initially to those functions that are essential for the effective transfer of smart metering data, such as data access and scheduled data retrieval?

ELEXON believes that from the outset of the DCC's operations, smart meter registration data must be managed. It therefore appears logical for the DCC to be fully responsible for registering all new smart meters from the day they are installed.

Diagram 3: DCC access to registration data



The DCC could manage legacy meter registration later in the rollout. This would minimise the risks and costs of migrating such a large volume of data. We also envisage that this more integrated scope for the DCC will result in a more secure system with a lower risk to data integrity.

In addition to providing views on the required scope of the DCC, ELEXON will support the programme by defining the settlement requirements for registration, data retrieval and processing and data aggregation across suppliers and agents.

Question 10.

Do you have any comments on the proposal to establish DCC as a procurement and contract management entity that will procure communications and data services competitively?

ELEXON supports the proposal to establish the DCC as a procurement and contract management entity. We have seen through our experience in procuring and managing services for the BSC that this is an efficient, effective and economic model for all stakeholders impacted.

The competitive procurement model has served the industry well. Each tender exercise has led to open, fair and transparent sourcing, allowing us to select the best service or technology and deliver value for money for our customers.

Our recent procurement activity has shown that it is possible to contract with a number of service providers to deliver different elements of central services in the most

appropriate contractual structure. We have worked successfully in complex contractual structures such as tripartite/multiparty and prime/subcontract arrangements. This will be particularly relevant in the case of the DCC where the role encompasses a range of skills and technologies, and where strong contractual and working relationships will need to be forged to make sure delivery is cost-effective, seamless, and ultimately capable of delivering value to consumers.

We do, however, believe that further debate is required on the exposure to risk and liabilities that the DCC and the programme may incur. In particular, two risks concern us: that the service to be delivered by the DCC is not procured, either in full or partially, within the proposed timescales; and, once operational, the service fails to meet its intended performance levels. Bringing forward appointing the DCC and enabling it to enter into early dialogue with Ofgem on the services to be delivered would help to avoid these risks.

Question 11.

Do you have any comments on the proposed approach for establishing DCC (through a licence awarded through a competitive licence application process with DCC then subject also to the new Smart Energy Code)?

ELEXON believes that bringing forward appointing the DCC would significantly benefit the programme. It would shorten the rollout timetable, reduce costs and mitigate the risk from service provider contracts that are pre-defined without the direct involvement of the DCC.

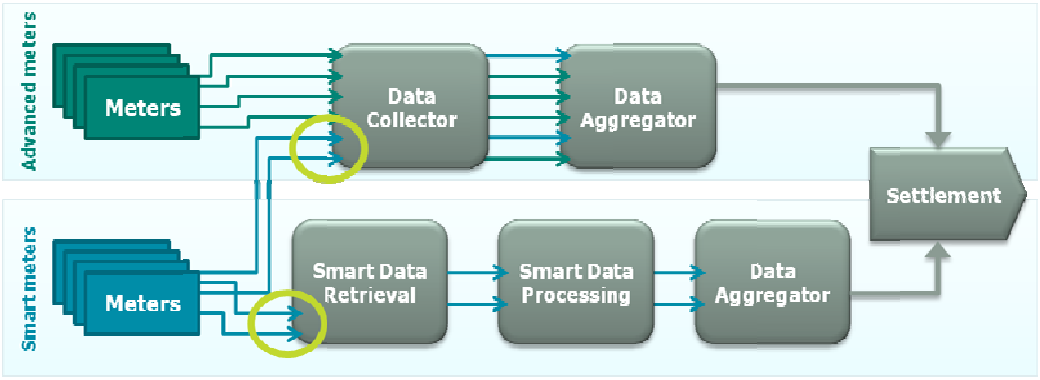
Making the DCC responsible for administering the Smart Energy Code (SEC), as ELEXON administers the BSC, could add significant value. In our experience, code administration overlaps significantly with managing corresponding systems and processes. Having one organisation responsible for these key areas will increase accountability, reduce complexity and duplication of processes, and so improve the customer experience and promote competition by removing barriers to entry.

Question 12.

Does the proposal that suppliers of smaller non-domestic customers should not be obliged to use DCC services but may elect to use them cause any substantive problems?

It would be preferable to mandate the use of the DCC for smaller non-domestic consumers. The benefits of increased competition and potential innovation arising from not obliging non-domestic customers to use the DCC are clear. However, providing options as part of the meter-to-bank process adds complexity to processing and validation criteria. This, in turn, increases the chance of errors and the associated cost of assurance. Because, in settlement, we are only aware of aggregated volumes, we might not be aware of any duplicated or missing data.

Diagram 4: Increased complexity in data processing



Question 13.

Do you agree with the proposal for a Smart Energy Code to govern the operation of smart metering?

We agree with the proposal for a Smart Energy Code (SEC) to govern the operation of smart metering. We also advocate wider code consolidation and believe that the SEC should be developed from a cross-industry perspective with the aim of consolidating the codes. The dual fuel focus of the SEC should also help to transition to common processes and systems.

In structuring the SEC, there is an opportunity to learn from ELEXON's experiences of drafting and managing the BSC. In particular, to ensure the SEC does not make industry processes more complex or cause excess administration due to an overly prescriptive governance framework. We welcome further discussion on this topic.

[redacted]7

Question 14.

Have we identified all the wider impacts of smart metering on the energy sector?

In terms of wider impacts of the smart meter rollout, ELEXON has concerns about the transition period, where both smart and dumb meters will operate.

During the rollout, central processes and systems such as those within settlement and its associated assurance regime will incur additional cost and complexity. For an extended period, dual standards and assurance processes will be required to service both meter types, and extra safeguards will be required to maintain data quality from the mix of sources.

ELEXON also asks that the planned status of the SEC during the period before DCC go-live is clarified, because we expect a governance framework will be required for the already live mandated rollout. This will greatly help to manage the issues involved in managing a mix of smart and dumb meters.

In our answer to the previous question, we said that we believe the rollout of smart meters and the associated governance framework presents an opportunity to consolidate codes and simplify processes that will improve consumers' experience.

We welcome further discussion in this area.

Question 15.

Is there anything further we need to be doing in terms of our ensuring the security of the smart metering system?

It appears from the detail provided by the programme that the relevant security issues have been identified. However we would also welcome further open discussion of these issues and the opportunity to contribute to the debate. To date, we do not believe we have been asked to formally assess any security risks from the perspective of settlement systems and processes.

We believe that the related, although separate, issues of privacy, security and data integrity are at times confused in the context of the programme. The key stakeholders of the policies being developed in each of these areas are different. The programme's approach should reflect this by involving the correct parties in relevant discussions.

Please contact [redacted] for more information.

Smart Metering Implementation Programme: Communications Business Model (CBM)

Chapter 2. Scope of DCC

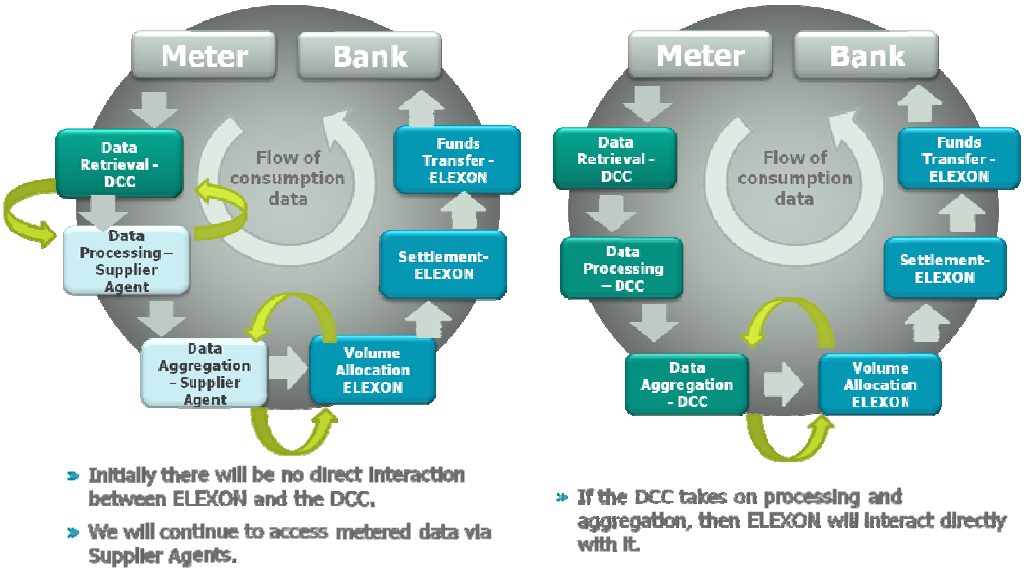
Question 1.

Do you agree that access control to secure centrally-coordinated communications, translation services and scheduled data retrieval are essential as part of the initial scope of DCC?

ELEXON agrees that all three elements - secure communications, translation and data retrieval - need to be part of the initial scope of the DCC.

We will continue to need meter readings to flow into settlement. While we may not initially need direct access to DCC data (if the DCC only carries out data retrieval, and data processing and aggregation remain with Supplier Agents); we may well interface with the DCC directly in the long term – for example if data processing and data aggregation were included in the DCC's scope.

Diagram 5: ELEXON/DCC interface



We believe that the latter is the best long-term model as it could result in the most significant cost savings in settlement. For example, we focus many NHH Performance Assurance techniques on the complex NHHDC and NHHDA roles and on checking that each company has submitted the expected data. If the DCC were to supply all this information, we anticipate that we could significantly scale back our assurance activity.

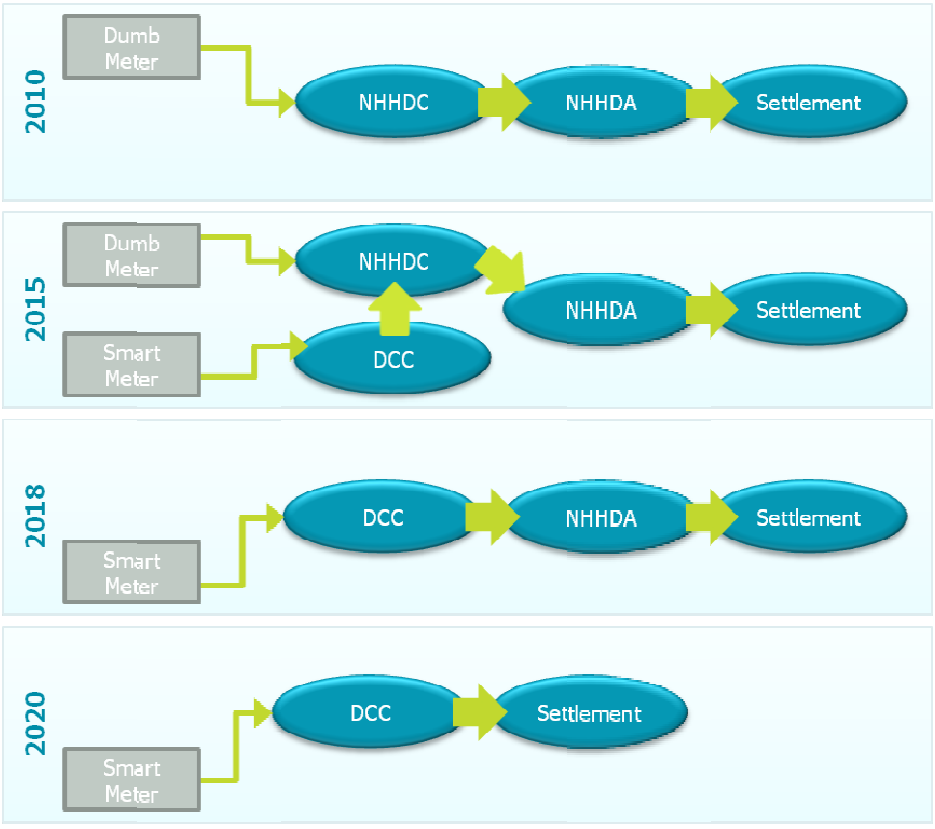
The programme will need to define the service levels for scheduled data retrieval clearly, if an efficient DCC is to be realised. The communications infrastructure needed will be

significantly greater if a supplier can request a meter read on an ad-hoc basis at very short notice, because the level of traffic on the communications lines will be more unpredictable. We would therefore propose a model where suppliers can choose the timeframe for the DCC to poll the meter, with longer time windows rewarded by a lower cost.

Given that ELEXON (as BSCCo) is one of the key users of metered data, we are keen to support the programme in defining the data retrieval requirements. To realise all of the potential benefits of smart metering - including dramatically shortening the settlement timetable, and thus significantly reducing the cost of credit cover - we believe that the impact of these requirements on settlement should be considered early on.

We acknowledge that the rollout will make data flows into settlement more complex in the short term. However, in the long term, we firmly believe that installing smart meters can make this process simpler by reducing the number of organisations that the data needs to flow through.

Diagram 6: Changing data flows into settlement over the next 10 years



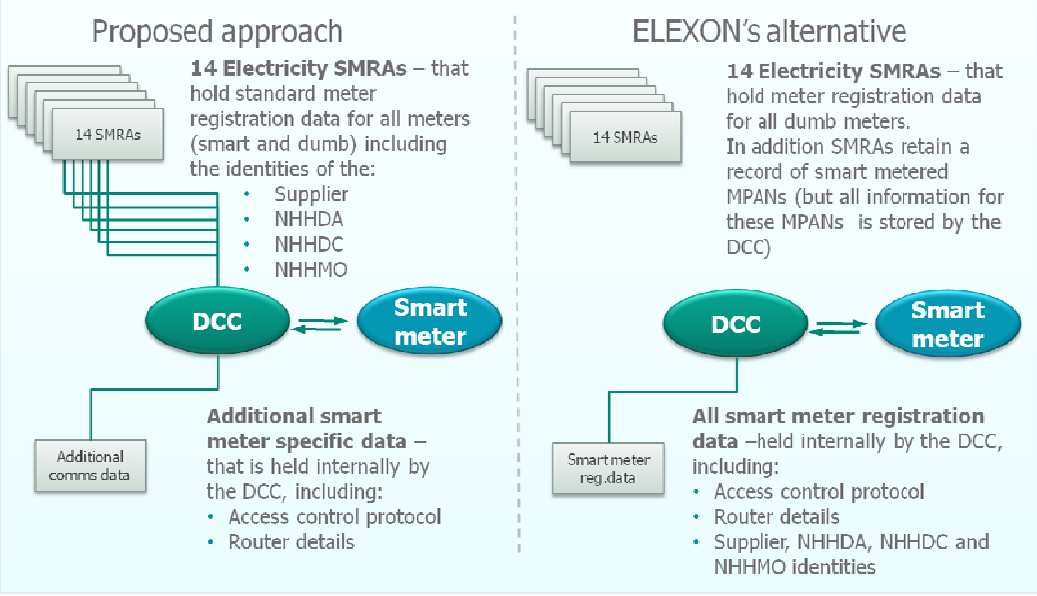
Question 2.

Do you agree the meter registration should be included in DCC's scope and, if so, when?

ELEXON agrees that meter registration should be included in the scope of the DCC, as the DCC will in any case need a copy of the meter registration details to be able to retrieve meter data. And, in our experience, it is better to have a single version of the truth, rather than several copies of what should be the same information.

From the outset of the DCC's operations, there will be a requirement to manage smart meter registration data; it therefore appears logical to make the DCC fully responsible for registering all new smart meters installed. If this is not done, there is a heightened risk of losing or duplicating data due some smart meter registration data being held in one system, and other elements of the same meter's information being held in another. Legacy meter registration could be brought under the management of the DCC at a later stage in the rollout to minimise the risks and costs of migrating such a large volume of data.

Diagram 7: DCC access to registration data



In addition, we fully agree that a dual fuel registration system, managed by the DCC, will encourage a simpler change of supplier process – critical to improving consumer experience. We have already done considerable work to look at how the change of supplier process could be simplified and have shared some of this with you.

Unambiguous and complete registration of who is responsible for each point

of connection is a prerequisite of settlement. Therefore, ELEXON is keen to ensure that the term 'meter registration' is clearly defined.

Only domestic customers will be included within the scope of the DCC, and so many of the existing arrangements for the non-domestic sectors (and unmetered supplies) will continue to operate under legacy data collection and processing arrangements. For these sites, we believe that the principal aspect of Meter Registration should continue to be, at least for the medium term, the responsibility of the Distribution System Operator. However, in the long term, it would seem more efficient to make the DCC fully responsible for meter registration.

Question 3.

Should data processing, aggregation and storage be included in DCC's scope and, if so, when?

ELEXON believes that data processing, aggregation and storage should be included in the DCC's scope, as soon as realistically viable. Including these processes within the DCC will simplify existing non half hourly data processing arrangements, as smart meters will deliver more accurate and frequent reads. Moving these processes into the DCC provides the impetus needed to change them more quickly, and would therefore allow the potential benefits of smart meters (e.g. reduced assurance) to be realised sooner.

Question 4.

Do any measures need to be put in place to facilitate rollout in the period before DCC service availability and the transition to provision of services by DCC, for example requiring DCC to take on communications contracts meeting certain pre-defined criteria?

ELEXON sees the following measures as necessary to facilitate rollout in the period before DCC service availability and transition to provision of services by the DCC:

Interoperability before the DCC goes live

Early rollout, while supporting early delivery of the benefits, puts the consumer experience at risk during change of supplier. At a minimum, we must make sure that smart meters maintain their functionality if the consumer changes supplier. We believe that an interim interoperability solution, in place between the rollout starting and the DCC services going live, is the best way to achieve this.

We have already had initial discussions with suppliers and Ofgem on an interim interoperability solution which doesn't detract from existing or enduring arrangements. While any interim solution is a compromise, it will be essential if the aggressive rollout timescales are to be met, and to achieve a positive consumer experience.

Bringing forward the appointment of the DCC

ELEXON believes that bringing forward the appointment of the DCC would significantly benefit the programme by shortening the rollout timetable and reducing costs. It would also mitigate the risk of imposing pre-defined service provider or communications contracts on the DCC. Not allowing the DCC to fully own the end-to-end procurement process for its service providers would lack commercial sense and is likely to result in unclear accountabilities, potentially causing service performance to suffer.

Impact on settlement

We believe that the impact on settlement must be minimised during this interim period, and are keen to be involved in the detailed planning to ensure that we achieve this.

Chapter 3. Structure & Realisation of the DCC

Question 5.

Do you agree that the licensable activity for DCC should cover procurement and management of contracts for the provision of central services for the communication and management of smart metering data?

We agree with the proposed scope of licensable activity for the DCC with regard to procurement and management of contracts. A centrally managed model is preferable: not only because it is simpler and will result in lower costs with less complexity, but also because we believe that Ofgem will have a more robust regulatory framework from which to monitor the market.

However, the DCC must be involved in any prequalification discussions with its service providers to avoid the risks of pre-defined contracts. Appointing the DCC earlier in the rollout timetable would enable this.

Question 6.

Do you consider that DCC should be an independent company from energy suppliers and/or other users of its services and, if so, how should this be defined?

The independent status of the DCC is critical to its success. We believe that while a competitive licence award process will bring benefits, it is essential that the licence award criteria consider key factors that will determine the long term success of the DCC and alignment of its objectives with those of the programme. Factors to consider include:

- Independence from service providers and wider commercial interests
- Energy industry credibility and the ability to deliver commercial arrangements through major change and manage the subsequent development
- Track record in successfully delivering critical central systems through

a regulated business model
- Ability to deliver class-leading industry governance and change management procedures and protocols
- Organisational values that align with the objectives of the programme

Question 7.

Do you have any comments on the steps DCC would need to take to be in a position to provide its services and the likely timescales involved?

ELEXON believes that, to ensure a robust and rapid process, the DCC must take several key steps before initiating the procurement. Upfront planning and a clear understanding of the services being procured are essential to ensuring the long term success of any procurement. These include:

- **Requirements Definition:** All contractual and operational documentation (PQQ, ITT, Agreement and Schedules) must be complete and signed off before advertising or commencing the procurement. Although this demands resource up front, it saves significant time and risk towards the end of the process. However, we recognise that the requirements will inevitably evolve. Therefore, it is critical to have a clearly defined operational baseline and a robust operational and commercial change management process in place from the start.
- **Procurement Strategy:** The DCC must consider the overall contract shape and procurement strategy. For example, considerations would include the ability for consortia arrangements on particular services, using prime/subcontract service provision, and a potential requirement for independent contracts for specific specialist services. We have learned from previous procurement processes that these arrangements can be complex and time-consuming. The DCC would have to evaluate and undertake due diligence on sub-contractors depending on the ratio of services that is being sub-contracted.
- **Due Diligence:** The DCC must build in enough time in the procurement process to undertake due diligence of the bids and validate the bidders' solutions. Timescales for due diligence would be subject to a thorough understanding of the outsourcing model and the number of likely bidders. The success of this activity is key to providing the service successfully in the long-term.

The timescales required for the DCC to prepare for the procurement process will depend on the level to which the programme has defined the requirements before establishing the DCC, and the commercial and technical experience and expertise that exists in the organisation selected as DCC. We would be pleased to share lessons learnt from our recent experiences from recent procurements at the appropriate time.

Please contact [redacted] for more information.

Question 8.

Do you have any comments on the proposed approach to cost recovery and incentivisation for DCC?

ELEXON agrees that a commercial incentive would drive DCC cost efficiency and performance quality. We see this as an improvement to the existing ELEXON/BSC model.

In our experience, the BSC funding model – under which all surpluses are returned to BSC Parties at the end of each year – has been a barrier to long-term business effectiveness. The within-year investment profile has discouraged investing in strategic innovation of the central systems.

We fully support the dual focus of the incentives, on internal cost efficiency and effective contract management. And, given the rapidly changing landscape, we agree that reviewing these incentive mechanisms in five years makes good sense.

We support the combination of flat- and volume-related fees, because it incentivises suppliers to consider how they submit requests for meter reads to optimise their costs. ELEXON believes that the detailed implications of each charging methodology will need to be carefully considered if they are to be truly effective. For example, a few larger consumers account for significant volumes of energy. A move towards a pure 'pay-per click' model for system usage would see increased charges for servicing smaller consumers.

There is a risk that the proposed incentive scheme will be disproportionate and ineffective if it is applied only to the DCC's own operational cost base. We believe it would be more effective to incentivise the DCC to drive down all of the costs that users will fund and which the DCC has the ability to influence.

It would therefore be appropriate to incentivise the DCC by allowing it to share any savings achieved through effective contract management in addition to its own internal efficiency improvements.

Smart Metering Implementation Programme: Regulatory and Commercial Framework

Chapter 2. Smart Metering Regulatory Regime

Question 1.

Have we identified all of the key elements that you would expect to see as part of the Smart Metering Regulatory Regime?

ELEXON supports the regulatory regime proposed by Ofgem and DECC, with respect to the new Licence Obligations establishing the Smart Energy Code and Codes of Practice. We also embrace the seven 'principles of good governance' established under the Code Governance Review and carried forward into the Prospectus.

Having worked in the BSC regulatory regime for ten years, we have clear views on how to make the SEC a truly effective and efficient vehicle that supports the needs of government, the regulator, industry parties, and the end consumer. We would welcome the opportunity to share these views and summarise our key thoughts below.

Code Consolidation

The new regulatory regime will require suppliers and other industry parties to comply with new documentation, and deal with yet another administrative body. We believe that consolidating codes and administrative functions should be the longer-term objective for the industry. As a dual fuel code, the Smart Energy Code offers a unique opportunity to start this consolidation process and ultimately enhance the consumer experience.

Settlement Requirements and the Smart Energy Code

We understand that the programme currently proposes that, where a function transfers to the DCC (e.g. Data Retrieval), the SEC will record the rules governing that process for the impacted metering systems. It is vital to understand that electricity settlement is a distributed meter-to-bank process underpinned by an unambiguous view of all supplier meter registrations. The diagram over the page shows this.

Please contact [redacted] or more information.

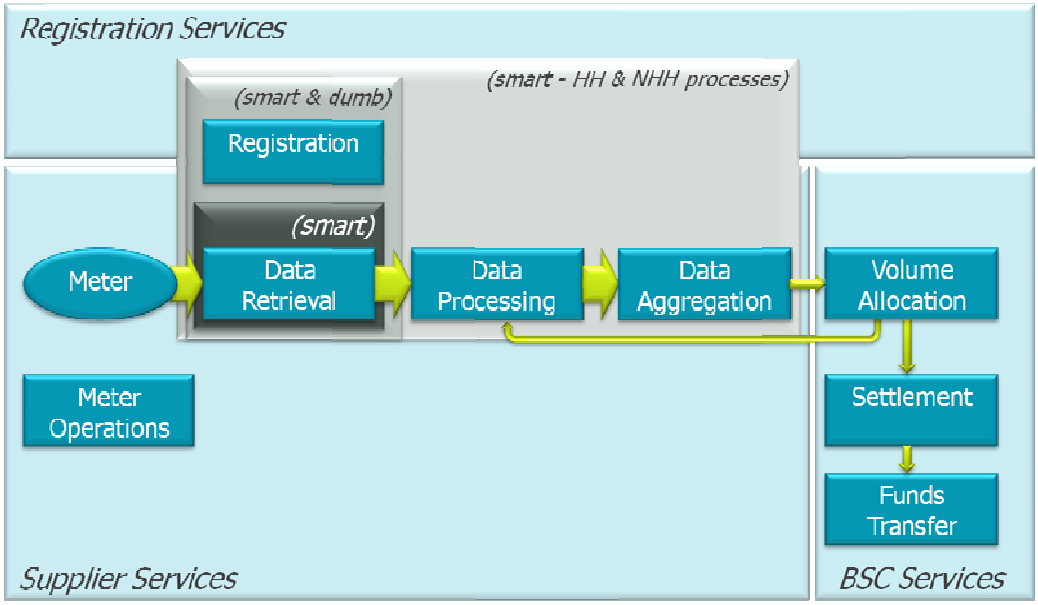


Diagram 8: Meter to bank process, with overlaid new smart processes

Under the various options, the DCC will undertake activities that currently touch settlement; i.e. Data Retrieval, potentially Supplier Registration, Data Processing, and Data Aggregation for part or all of the market. These activities may also run in parallel with similar activities in the non-smart market.

Whatever the delivery mechanism, it's vital for the integrity of settlement to ensure activities are carried out according to prescribed rules. We believe that overarching responsibility for electricity settlement processes should remain under BSC governance until it is fully assumed by the SEC. With this in mind, we would urge that the settlement aspects of the SEC should be subjected to 'priority provisions', as currently applied to settlement aspects in the MRA.

We believe that adopting such an approach:

- Supports efficient change management
- Promotes rigorous, high quality analysis of the case for (settlement) changes
- Results in a proportionate regulation

Identifying BSC Changes

The consequential change to other licences and codes resulting from introducing the SEC should be fully considered. To effectively implement smart metering, we need to recognise the changes to the broader range of industry processes and avoid focusing exclusively on the challenges of the meter rollout. We have already started considering the impacts on settlement and will provide a more detailed assessment in our response to the DCC Scope Information Request.

Once the final shape of the regulatory regime is known - i.e. the start of Phase 2 - we will work with the programme to identify and progress specific BSC Changes. We also anticipate progressing a series of secondary changes as part of adapting settlement processes to reflect the changes in data submission and consumer behaviours.

We will work with BSC Parties:

- Independently and objectively
- Promoting inclusive, accessible and effective consultation
- Using rigorous and high quality analysis
- Cost effectively.

Adopting a clear architecture for the Smart Energy Code

We believe that Codes should cover only high-level Party obligations – the 'what'. Supporting detail – the 'how' - should be covered in subsidiary documents. Under this model, the change processes should be proportionate, with self governance in place for all subsidiary documents and, where possible, areas of the Code.

Voluntary Codes of Practice

We note that the codes of practice will be either compulsory or voluntary. In our experience, a 'voluntary' guidance document can be confusing. These documents are often accompanied by unclear governance and change mechanisms, which can dilute their effectiveness. We recommend that the programme carefully considers the use of voluntary codes of practice.

Chapter 3. Smart Energy Code

Question 2.

Do you agree with the proposal to establish a Smart Energy Code?

ELEXON supports the rationale for establishing a Smart Energy Code. We agree it is essential to support smart metering and deliver its benefits. The SEC's support for a dual fuel market is a key step in transforming the central market, and will allow the industry to introduce efficiencies across other codes and processes.

Establishing the SEC should be the starting point for co-ordinated change and, as with previous industry codes, it will not remain static in its initial stages. The new governance introduced with smart metering should support industry's desire for change and continuous improvement to maximise the benefits for all parties.

Key to the success of implementing the SEC will be establishing the relationships between the DCC and industry participants, and clearly defined roles and responsibilities in the SEC. This should include the role of the DCC in supporting the new entrants that smart metering will bring to our industry.

Making the DCC responsible for administering the SEC code, as ELEXON administers the BSC, could add significant value. In our experience, code administration overlaps significantly with managing corresponding systems and processes. Having one organisation responsible for these key areas will increase accountability, reduce complexity and duplication of processes, and so improve the customer experience and promote competition by removing barriers to entry.

Question 3.

Do you have any comments on the indicative table of contents for the Smart Energy Code as set out in Appendix 3?

ELEXON believes that the indicative high-level content of the SEC set out in Appendix 3 is a good starting point on which the programme can build. We note the similarities with the SEC and BSC framework and offer our support as the programme drills down into the specifics.

There is a need to strike an appropriate regulatory balance to create arrangements which are effective and robust. Excessive rules and restrictions can stifle innovation, and create difficulties in adapting to new ways of working and responding change. Defining governance to the appropriate level and providing the industry with an opportunity to comment will be key – we would emphasise the need for the SEC to specify the 'what' but not the 'how'.

The Prospectus states that Ofgem expects the DCC to contract with an independent service provider to deliver code administration and secretariat support. This results in a gap between establishing the SEC and appointing the DCC. Therefore, there is a need for an independent intermediary and an opportunity to speed up rollout before the DCC is in place. This interim role could also facilitate interim changes to the SEC.

Establishing a new but short lived-interim body is likely to be uneconomic and divert SMIP resources unnecessarily. Therefore, we are keen to discuss how we might support or manage interim arrangements, and/or modify the BSC to support early rollout.

Question 4.

Do you have any comments on the most appropriate governance arrangements for the Smart Energy Code?

ELEXON supports Ofgem's view that a key feature of the SEC arrangements should be the ability to respond to an evolving energy industry. The BSC and its modification procedures are built on objectives and principles, and we welcome adopting this for the SEC. We have driven the drafting of the Code Administration Code of Practice and welcome the opportunity to share our experiences with the programme.

Cross Code Changes

The SEC will govern processes that span settlement activities. There is a risk that the requirements of the Smart Energy Code, the BSC and other core industry documents will become misaligned over time. These risks can be avoided by ensuring a robust change management procedure is in place, and our suggestion in Question 1 of adopting a 'priority provisions' approach would help in this area.

The DCC and Code Administration

Based on our experience of managing the BSC, we do not believe that supporting code administration should be separated from the DCC. Keeping code administration integral to the DCC ensures that one company is responsible for assessing change, defining requirements, overseeing implementation and managing the processes. This gives much greater accountability.

Please contact [redacted] for more information.

Chapter 4. Roles and responsibilities at customer premises

Question 5.

Do you agree with the proposals concerning the roles and obligations of suppliers in relation to the WAN communications module?

The prospectus indicates that the preferred approach is for suppliers to procure, and be responsible for, the WAN communications model and for the DCC to be responsible for the communications network. There has already been considerable discussion on this topic and we acknowledge that there are pros and cons to each approach. We do not have a strong preference for one or other. However, in our experience, it is critical that the accountabilities are clearly defined, so that there can be no argument about where responsibilities lie between two parties. Therefore, we recommend clear and detailed arrangements are put in place under SEC governance.

Question 6.

We welcome views as to which other additional data items should be included in the mandated HAN data set beyond the list for the IHD.

We do not currently have further views on the mandated data set required for the HAN, however we urge that the underlying principles for how data is managed and presented promote consistency and integrity of data flows throughout the smart metering system, particularly with regard to settlement.

Question 7.

Do you agree with the proposal that the WAN and the HAN in customer premises should be shared infrastructure, with the installing supplier retaining responsibility for ongoing maintenance?

If not, would you prefer to have an arrangement by which if the gas supplier is the first to install, responsibilities for the common equipment is transferred to the electricity supplier when the electricity smart meter is installed?

We prefer the second option, where responsibility for the equipment transfers to the electricity supplier when the electricity meter is installed. As with all aspects of this complex programme, defining responsibilities clearly in new and existing governance arrangements is vital, to align with suppliers' processes and to achieve clear messaging on the consumer experience.

Leaving responsibility with the installing supplier may confuse consumers when there are multiple changes of supplier, or multiple owners of the property.

With any arrangement, we need to assess and mitigate the risks to gas and electricity settlement. Installation could disrupt gas or electricity supply, and result in lost energy data which could impact data entering settlement. We're keen to share our thinking to discuss how gas and electricity processes may need to align under the existing codes in the initial stages of the smart rollout and beyond.

Please contact [redacted] for more information.

Chapter 5. Other regulatory and commercial issues

Question 8.

Are there additional measures that should be put in place to reduce the risks to the programme generated by early movers?

ELEXON agree with the measures proposed. We are particularly concerned to ensure that data from 'early-mover' sites continues to be recorded in settlement. The key risk comes from sites that change supplier, or where a new meter is incorrectly installed or configured. Robust interim interoperability and agreeing technical standards early should help mitigate this.

In our experience, agreeing technical standards early is hugely beneficial, and we would urge the programme to give this significant resource. Getting the requirements right first time saves considerable effort and will speed up the rollout of smart meters by creating a firm foundation on which Suppliers can plan.

The programme will need to strike a balance between the level of detail, the degree of consultation, and overall speed. One way to balance these is to agree the higher level requirements early, and define the detailed requirements in a second phase. This could allow a 'grandfathering' style arrangement, where the DCC can accept meters which do not comply with some of the detailed requirements, but comply with all of the high level requirements.

Question 9.

What is needed to help ensure commercial interoperability?

We see commercial interoperability as, at a minimum, enabling change of supplier without a change of meter. However, true commercial interoperability would go much further. For example, it would include ensuring that the meter owner continues to receive rental income after change of supplier and providing the communications protocols to the new supplier so that they can use the full meter functionality.

We have already spoken to Ofgem about interim interoperability, and we have a view about how meter asset tracking and rental income settlement could be conducted. We would welcome the opportunity to share these.

Please contact [redacted] for more information.

Question 10.

Can current arrangements for delivery technical assurance be developed to gain cost effective technical assurance for the smart metering system?

If so, how would these procedures be developed and governed?

We believe that the current arrangements can be easily and simply adapted to take account of smart meters.

ELEXON operates the BSC Performance Assurance Framework (PAF), which assures the industry that the values we use in settlement are accurate from meter to bank.

We can adapt PAF techniques based on the level of risk. These include site visit checks, where an auditor will go out to check a half hourly meter, and more remote checks, where suppliers are required to submit data to show how their agents are performing.

Given that considerably smaller volumes of energy are flowing through domestic smart meters compared to existing half hourly meters, there is considerably less risk to settlement per meter.

Therefore, we would recommend:

- Robust pre-approval testing for new meter types. A consistent error across a high percentage of meters would create a much larger error than an error on only one meter.
- Highly automated validation on every reading (checking each reading taken against an average for the customer type and against previous usage, and further analysing these).
- Limited actual meter sampling to check that the value on the meter matches the value coming out of the DCC.

We firmly believe that the existing PAF can be adapted to provide cost-effective, meter-to-bank assurance in a smart world. We would welcome the opportunity to discuss this with you in more detail.

Question 11.

Are there any other regulatory and commercial issues that the programme should be addressing?

ELEXON believes that the current list is comprehensive.

Chapter 6. Impact on wider industry processes

Question 12.

What evolution do you expect in the development of innovative time-of-use tariffs?

Are there any barriers to their introduction that need to be addressed?

ELEXON fully expects that time-of-use tariffs will become increasingly popular as the smart meter rollout gathers pace. We anticipate that time-of-use tariffs may result in suppliers entering more readings into settlement as their total consumer demand predictions become more accurate, so as to limit their exposure to GSP Group Correction Factor.

This, combined with the expected changes to consumer usage patterns, will put non-half hourly settlement under strain. We are already working to fully understand all the potential effects. We believe that, as noted in the prospectus, the BSC can be adapted using existing change mechanisms to incoporate these changes. We are already actively monitoring settlement to ensure that this is the case, and we do not believe that there are any barriers that would prevent adopting time-of-use tariffs.

Please contact [redacted] for more information.

Question 13.

Are there any changes to settlement arrangements in the electricity or gas sectors that are needed to realise benefits of smart metering?

Overall, we see two potentially major areas of change for settlement:

Reduced settlement timetable – this should become easily achievable once most Non half hourly meters can be read remotely. We see this as a key benefit of smart meters. It should reduce the cost of credit cover for suppliers, and simplify some of the most complex settlement processes - Estimated Annual Consumption and Annualised Advance calculation.

Increase profiling accuracy and more rapidly applied changes – the Profiling Settlement Review Group is already working to understand how to adapt the current profiling arrangements. We expect to revise our profiles frequently throughout the smart rollout to match the changes in consumer behaviour, and to account for the submission of increasingly accurate non half hourly data into settlement. We will respond to the programme's information request on DCC Scope Options separately.

Question 14.

What arrangements would need to be put in place to ensure that customers located on independent networks have access to the same benefits of smart metering as all other customers?

ELEXON does not envisage any issue for consumers connected to independent electricity networks. We believe that there may be issues for consumers connected to independent gas networks, but gas transporters, shippers and suppliers are best placed to address these.

Question 15.

Are there any other industry processes that will be affected by smart metering and which the programme needs to take into account?

ELEXON will describe the impacts on all settlement processes and systems in line with the options outlined in the DCC Scope Options Information Request.

More broadly speaking, we expect the impact of smart metering, particularly when combined with smart grid aspirations, to be truly market wide. To realise the benefits that changes of this scope offer, we believe that it is crucial to consider how central codes and processes might be consolidated now – for example, by using the Smart Energy Code as a framework. While it is not realistic to consolidate codes in time for planned implementation of the SEC, we believe that drafting the SEC to enable such changes over time is achievable.

Smart Metering Implementation Programme: Non-Domestic Sector

Chapter 3. Flexibility for installations of advanced and smart meters

Question 1.

Are there any technical circumstances where only advanced rather than smart metering would be technically feasible? How many smaller non-domestic customers have U16 or CT meters and what scope is there for full smart meter functionality to be added in these cases?

Suppliers and their agents are best placed to answer this question.

Question 2.

Do you agree with our proposed approach to exceptions in the smaller non-domestic sector?

ELEXON agrees with the approach that, at this stage, there is no case for exceptions. To fully justify this, each exception listed in the Prospectus will need to be reviewed in turn with suppliers and metering experts as part of the programme. Given the length of time for full rollout, there is time to resolve those exceptions or agree alternative approaches to them, and step towards a fully smart world in the non-domestic sector.

The nature of this sector provides challenges for site access. ELEXON can share learning from its experience working with its Technical Assurance Agent, which has faced challenges gaining access to meter sites in the larger non-domestic sector.

Question 3.

Are there technical circumstances that we have not considered that would justify further flexibility around installation of either smart or advanced meters?

Suppliers and their agents are best placed to answer this question.

Please contact [redacted] for more information.

Chapter 4: Use of DCC to communicate with meter in the smaller non-domestic sector

Question 4.

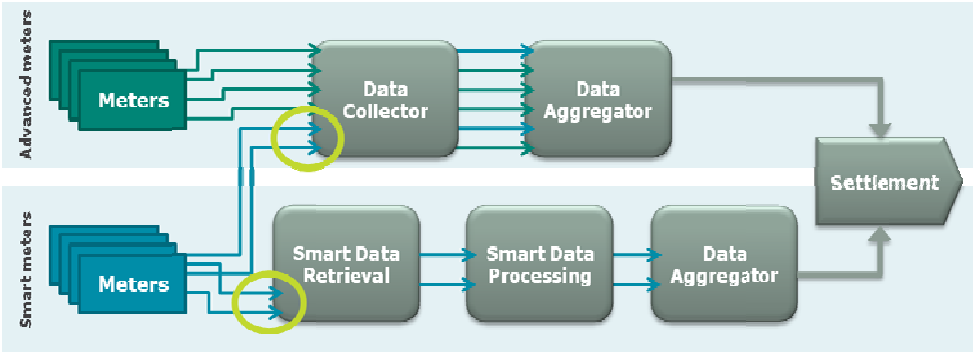
Do you agree with the proposed approach that use of DCC should be optional for non-domestic participants in the sector?

ELEXON recognises that the approach has been proposed based on evidence gathered to date and stakeholder feedback. However, we firmly believe option 2, where the DCC is optional for non-domestics, will not provide the best model.

Interim interoperability for pre-DCC smart meters in the domestic market has been a hotly debated topic, and we believe that agreeing an enduring interoperability solution for the non-domestic market would be just as contentious.

In our experience, setting up two sets of parallel processes to do broadly the same thing - in this case the DCC processes for domestic meters and competitive services for non-domestic meters - is inefficient and adds unnecessary complexity, particularly given that the alternative process will cover only 8% of the total number of meters. This complexity could also damage the consumer experience.

Diagram 9: Increased complexity in data processing



- Providing options, as part of the meter to bank process adds complexity, to both the processing and validation criteria
- This increases the chance of errors, and would increase the cost of assurance
- Given that Settlement only sees aggregated volumes, we would not have visibility of duplicated or missing data

We advocate adopting option 1 (mandated use of the DCC). We acknowlege that this will reduce the scope of competition in some agency services by removing the data retrieval and processing elements. But it will firmly protect full retail competition in electricity and gas supply for small non-domestic consumers.

A single, clear meter-to-bank process for each type of consumer is preferable from

a settlement perspective. It means that meters cannot switch between processes and inadvertently be excluded from settlement for a period of time. This is a particular issue for non-domestic meters, because the consumption per site is higher than that of domestic consumers, and could lead to larger settlement errors.

Question 5.

If use of DCC is not mandated for non-domestic customers, do you agree with the proposed approach as to how it offers its services and the controls around such offers?

ELEXON agrees that the DCC should have to offer its services on the same basis for non-domestic and domestic meters, taking into account the likelihood that Suppliers will need readings for non-domestic sites more frequently.

Question 6.

To what extent does our proposed approach to the use of DCC for non-domestic customers present any significant potential limitations for smart grids?

We agree with the programme that smart grids are the logical next step after the rollout of smart meters, and that they will bring real benefits by allowing network operators to better focus network upgrades and to localise some elements of system balancing.

We believe that allowing suppliers to opt out of the DCC for some of their non-domestic meters will have an impact on smart grids, unless there is an alternative way to provide real-time, detailed data to network operators. Because these sites consume relatively large volumes of energy, they will have a more significant impact on the network than might initially be assumed.

Question 7.

Is a specific licence condition required to ensure that metering data for non-domestic customers can be provided to network operators or the DCC, and should any provision be made for charging network operators for the costs of delivering such data?

Current obligations sit within the DCUSA, and we are not convinced of the arguments for including this type of obligation in the licence instead. However, we believe that Network Operators are best placed to answer this part of the question.

Question 8.

How can interoperability best be secured in the smaller non-domestic sector?

Most of the ways to secure interoperability are being discussed as options for interim interoperability for domestic meters. We understand that these options will shortly be subject to a smart programme impact assessment, and we believe these results could also be applied to the enduring non-domestic solution.

ELEXON uses a single head-end solution for profile classes 5-8, which works effectively given the lower number of meters. In our experience, this has worked well and could be extended to profile classes 3-4 - i.e. the smaller non-domestic market.

However, including these consumers in the scope of the DCC is by far the simplest solution.

Chapter 5: Other issues related to non-domestic customers

Question 9.

What steps are needed to ensure that customers can access their data, and should the level of data provision and the means through which it is provided to individual customer or premises be a matter for contract between the customer and the supplier of should minimum requirements be put in place?

The smaller non-domestic market encompasses a wide range of consumers, whose needs differ greatly. Therefore, signficantly increased flexibilty is needed in this market.

The best way to deliver this, we believe, is to set only basic minimum requirements. For example, consumers should be able to access a full year's actual consumption data in less detail as well as their current – or close to current - consumption. Consumers can choose how they use this information. Any additional services can differentiate between suppliers and between energy management companies.

Question 10.

Do you agree with our approach to data privacy and security for non-domestic customers?

We agree that a pragmatic approach is to use the same principles as for domestic consumers.

Question 11.

Is the proposed approach to rollout (for example in terms of targets and a requirement for an installation code of practice) appropriate for the non-domestic sector?

The same approach to rollout is appropriate for non-domestic and domestic sectors.

As with the domestic sector, the switch between dumb electricity meters and smart meters could introduce significant profile drift if those smart meters are settled using half hourly data. Three factors could make situation worse: the significantly lower number of non-domestic customers, the number of profiles used and higher energy consumption. Even if relatively few non-domestic consumers moved, it could dramatically alter the accuracy of the non-domestic profiles. The ongoing rollout of Advanced Meters is already giving us insight into this issue and how we can best manage it.

The features of the sector can also result in particular challenges around access and installation. As with the domestic sector, we believe that working to, and reporting on, appropriate targets will support the rollout and give us a way to measure success during the transition.

Please contact [redacted] for more information.

Smart Metering Implementation Programme: Consumer Protection

Chapter 2. Developing services for consumers

Question 1.

Do you have any views on our proposed approach for addressing potential tariff confusion? What specific steps can be taken to safeguard the consumer from tariff confusion while maintaining the benefit of tariff choices?

Suppliers and consumer groups are best placed to answer this question. However, we support development and innovation in tariffs, given that it will be one of the key incentives for consumers to reduce their energy use. We also agree that consumers will need to recognise and understand how the new tariffs work before they can benefit from them.

We will work to monitor and adapt settlement to enable suppliers to introduce these new types of tariff.

Question 2.

Do you agree with our proposed approach for addressing unwelcome sales activities during visits for meter installation?

We believe that the proposed approach documented is sensible. We note that the programme must agree the amount of selling or marketing allowed during the installation.

Our key concern is that each installation is fully completed, so that data continues to enter settlement from the newly smart site. Each installation must include fully functioning communications and a completed registration to enable change of supplier and to ensure that the data remains in settlement.

Question 3.

What do you consider as acceptable and unacceptable uses of the installation visit and why?

Consumer groups and Suppliers can best answer this question.

Question 4.

Do you agree with our proposed approach to ensuring that the IHD is not used to transmit unwelcome marketing messages?

This question is best answered by Suppliers and consumer groups, but we agree that excluding unwelcome marketing messages will greatly contribute towards a positive experience for consumers.

Question 5.

Do you agree that consumers should be able to obtain consumption information free of charge at a useful level of detail and format? How could this be achieved in practice?

Consumers should be able to obtain and use their own past consumption information. This will help them to understand trends in their energy use, and to compare different tariffs based on their personal usage patterns.

Consumers could benefit more from their consumption data if they could compare their usage to consumers with similar usage patterns. In itself, this could help to reduce demand. We have significant experience in profiling, and our independent position and market-wide view ideally position us to provide these 'average consumption' comparisons. We would welcome a more detailed discussion with you in this area.

The proposed approach set out in 2.34 is pragmatic, and past consumption data must match consumers' bills. If any differences arise, consumers must understand which version is considered to be correct. This is important for settlement, as material errors could cause a supplier to raise a Trading Dispute.

Please contact [redacted] for more information.

Chapter 3. Prepayment and remote disconnection

Question 6.

Do you consider that existing protections in the licence are sufficient to ensure that consumers are not remotely switched to prepayment mode inappropriately?

Consumer groups and suppliers can best answer this question.

Question 7.

Could provision of an appropriate IHD help overcome meter accessibility issues to facilitate prepayment usage?

This appears to offer a solution, because a consumer can add prepayment credit to the meter via the IHD and HAN network. However, suppliers and technology providers are better placed to answer this question in detail.

Question 8.

What notification should suppliers be required to provide before switching a customer to prepayment mode?

Consumer groups and suppliers can best answer this question, although we agree that the most obvious mechanism is via the IHD.

ELEXON envisages that, as smart meters are rolled out, prepayment will go from being a credit management issue to a lifestyle choice. This potential for the growth of prepayment enabled by smart meters will bring innovation and increased competition to energy retailing, with consumers eventually buying their energy from a supplier of their choice for each 'top-up', selecting on the best price or terms offered. Under this type of model, consumers may wish to change supplier quite frequently. Therefore, we recommend that any notifications allow for the scenario where a prepay consumer wishes to change supplier frequently, and remain a prepay customer after each transition.

Question 9.

Do you believe that suppliers should be required to provide emergency credit and 'friendly credit' periods to prepayment customers or whether, as now, this can be left to suppliers?

The programme should agree any obligations around additional credit with suppliers and consumer groups.

Question 10.

Do you consider that an obligation similar to Prepayment Meter Infrastructure Provision (PPMIP) may be required?

The programme should agree any obligation around PPMIP with suppliers and consumer groups.

Question 11.

Is the obligation which Ofgem is proposing to introduce on suppliers to take all reasonable steps to check whether the customer is vulnerable ahead of disconnection sufficient? If not, what else is needed?

Consumer groups and suppliers can best answer this question.

Question 12.

What notification should suppliers be required to provide before disconnecting a customer?

Suppliers and consumer groups are best placed to fully answer this question, but we agree that the IHD seems the most obvious route to notify the consumer. However, as IHDs are optional from a consumer perspective, there will need to be alternative routes.

To be able to accurately allocate and estimate a consumer's energy consumption to the half hourly slots required for settlement, suppliers should alert the DCC or Supplier Agents each time a disconnection or reconnection occurs.

Question 13.

Do you have any views on the acceptability of new approaches to partial disconnection and how they might be used as an incentive to pay bills?

We do not have a strong view on the acceptability of these new approaches. However, if this type of approach is taken, meters must continue to be read regularly and must not be marked as 'disconnected' within registration. Either of these could stop data entering settlement and reduce its accuracy.

Question 14.

Do you agree with our approach for addressing issues related to remote disconnection and switching to prepayment?

We agree that it seems sensible to minimise costly site visits, but we believe that this is a question for suppliers to answer.

Question 15.

Have we identified the full range of consumer protection issues associated with the capability to conduct remote disconnection or switching from credit to prepayment terms? If not, please identify any additional such issues.

ELEXON has not identified any further issues.

Chapter 4: Vulnerable consumers and fuel poverty

Question 16.

What information, advice and support might be provided for vulnerable consumers (e.g. a dedicated help scheme)? Who should it be provided to?

ELEXON notes that defining the level of additional support for vunerable consumers is for the programme to agree with suppliers and consumer groups.

Chapter 5: Cost of recovery and monitoring of costs

Question 17.

Do you have any comments on our proposals to prevent upfront charging for the basic model of smart meters and IHDs?

ELEXON agrees that your approach seems robust, and we note that an increase in tariffs has caused smart metering programmes in other countries to be derailed. However, this is a matter for the programme to agree with Suppliers.

Please contact [redacted] for more information.

Smart Metering Implementation Programme: Data Privacy and Security (DP&S)

Chapter 3. Data Privacy

Question 1.

Do you have any comments on our overall approach to data privacy?

We support the overall approach to data privacy: consumers should have control over how their consumption data is used, except where suppliers need to fulfil regulatory requirements.

Engaging consumers appropriately is key to assuring them that their 'lifestyle data' privacy is protected. What happens to the data recorded in the smart meter needs to be clearly explained, based on consumers' choices when signing up to new products and services. Whether third parties are involved must also be clear.

We assume that those 'regulatory requirements' discussed in the Prospectus include the data required to meet settlement obligations. We would like to discuss with the programme what those data sets should include – this will to help to define 'regulatory requirements'. The appropriate bodies must receive the appropriate data within required timescales to ensure industry processes are fulfilled.

Question 2.

We seek views from stakeholders on what level of data aggregation and frequency of access to smart metering data is necessary in order for industry to fulfil regulated duties.

We expect that the 'regulatory duties' noted in the Prospectus include the data required for BSC settlement. Under the current BSC arrangements, we receive aggregated consumption data from qualified Data Aggregators on behalf of each supplier. This data includes a mix of actual and estimated consumption values at low-resolution intervals.

With smart metering, the quality and frequency of actual consumption data entering settlement should significantly improve, and half hourly (and hence more accurate) settlement will be possible in the domestic sector. Through our Profiling and Settlement Review, we have been consulting with the industry on this. Later this year, we will report our findings. We believe this will steer the important debate on whether the industry should use the available full half hourly data for settlement. We look forward to sharing this output with the programme.

Depending on the scope of the DCC services, responsibility for areas like data aggregation for settlement may change. We will amend BSC processes accordingly, for example, it may be more efficient to allow central bodies such as ELEXON to have

Please contact [redacted] for more information.

direct access to the DCC, rather than rely on data submission from Suppliers and their agents.

Question 3.

Do you support the proposal to develop a privacy charter?

ELEXON supports the proposal to develop a privacy charter to address privacy concerns associated with the rollout of smart meters. This will be key to positive consumer engagement and alleviate fears around unwelcome or unnecessary intrusion.

Question 4.

What issues should be covered in a privacy charter?

Given the depth of data smart metering will provide, ELEXON recognises that a privacy charter is an essential element for the success of the rollout. We agree that the charter should be built on the legally binding principles of the Data Protection Act and that the programme should consult with the relevant experts and stakeholders to develop it.

Chapter 4. Smart Metering System Security

Question 5.

Do you agree with our apporach for ensuring the end-to-end smart metering system is appropriately secure?

We agree with the proposal for end-to-end security, and are encouraged that the programme is consulting with a range of experts in this field, in addition to following the Government's Security Policy Framework and Information Assurance processes.

ELEXON would expect the security of central systems to be considered in the security approach for each aspect of the end-to-end system.The security requirements need to fully cover how data travels from meter to bank over communications networks and industry systems. Appropriate levels and types of security at each stage will protect consumers' data and the IT infrastructure.

From a settlement perpective, we will need to work with the programme to design security arrangements which impact settlement systems or processes. We recently presented our views on a secure smart metering infrastructure at the Metering Europe conference, and we welcome the opportunity to share our thoughts and presentation materials with the programme.

Please contact [redacted] for more information.

Smart Metering Implementation Programme: In-Home Display

Chapter 2. Functional Requirements of the IHD

Question 1.

We welcome views on the level of accuracy which can be achieved and which customers would expect, in particular in relation to consumption in pounds and pence.

Providing usage information in pounds and pence will help the consumer, and creates a common 'monetary language' for gas and electricity. The accuracy of financial data clearly depends on using current tariff data as well as accurately metered consumption. The DCC service must be capable of transmitting and applying tariff changes quickly.

Consumption data will update periodically, and these intervals represent fractions of a billing period. Consumers are more likely to use this instantaneous data to help understand the relative costs of devices around their homes, rather than to check their overall bill.

ELEXON believes that allowing access to past data should enable consumers to identify opportunities to be more energy efficient, and act on them. However, as with the consumption profiles we manage for settlement, trends in the raw data are often driven by external factors, e.g. external temperature and daylight hours, as much as individual behavioural changes.

Question 2.

We welcome evidence on whether information on carbon dioxide emissions is a useful indicator in encouraging behaviour change, and if so, how it might be best represented to consumers.

ELEXON's settlement systems provide a unique and independent way to match supply with energy contracts. This could help consumers match the electricity they use to its source and change their behaviour. Different consumers will want to explore their energy consumption using different metrics, including CO^2 emissions. We recognise the need to account for the generation source when determining electricity-driven CO^2 emission levels.

Question 3.

We welcome views on the issues with establishing the setting for ambient feedback.

Rather than specifying a particular format for ambient IHD feedback, ambient feedback should differentiate between IHD offerings. Suppliers should be responsible for advising and guiding their customers on the IHD when they are installed. This will reduce the risks which Ofgem has highlighted - for example, vulnerable customers being frightened into turning down appliances based on traffic light displays.

Question 4.

Do you think that there is a case for a supply licence obligation around the need of appropriately designed IHDs to be provided to customers with special requirements, and/or for best practice to be identified and shared once suppliers start to roll out IHDs?

ELEXON supports the need for smart metering and its benefits to be opened to all consumer groups. While most energy suppliers already support this objective, a licence obligation would reinforce the requirement. We also agree that over-specifying the requirements is likely to hamper innovation.

The option of identifying and sharing best practice potentially offers benefits. However, how this information is captured and reapplied to the rollout needs to be clarified.

Question 5.

We welcome evidence on whether portability of IHDs has a significant impact on consumer behavioural change.

Suppliers and consumer groups are best placed to answer this question.

Question 6.

Do you agree with the proposed minimum functional requirements for the IHD?

ELEXON agrees with the minimum requirements set out in the document.We also recognise that over the extended lifetime of the IHD, the displayed information may need to change. For example, electric vehicles may require a vehicle charge indication. We believe that new IHDs should be flexible enough to support such innovations, rather than trying to anticipate all of the possible needs at this stage, and holding up provision of IHDs.

Chapter 3. Nature of the Mandate on Suppliers in relation to the IHD

Question 7.

Do you have any views or evidence relating to whether innovation could be hampered by requiring all displays to be capable of displaying the minimum information set for both fuels?

We support the view that suppliers should be able to differentiate their offerings through their IHD. In cases of a consumer with two suppliers, we support mandating a minimum level of information to support the basic needs of the second fuel type.

Question 8.

Do you agree with the proposals covering the roles of and obligations on suppliers in relation to the IHD?

The roles and obligations surrounding the IHD need to be clear to the industry. Making this a supplier obligation is consistent with a supplier-led role out and builds on the established supplier/consumer relationship.

We recognise that IHD failures will occur, and in these circumstances the consumer must know who to contact. We welcome the programme assessing how best to fulfil this requirement and adopting a 'one call' function for logging and actioning faults which may occur at the consumer's home.