Smart Metering Implementation Programme

September 2010

Smart Metering Implementation Programme: Prospectus

Chapter 2. The Consumer Experience

Question 3:

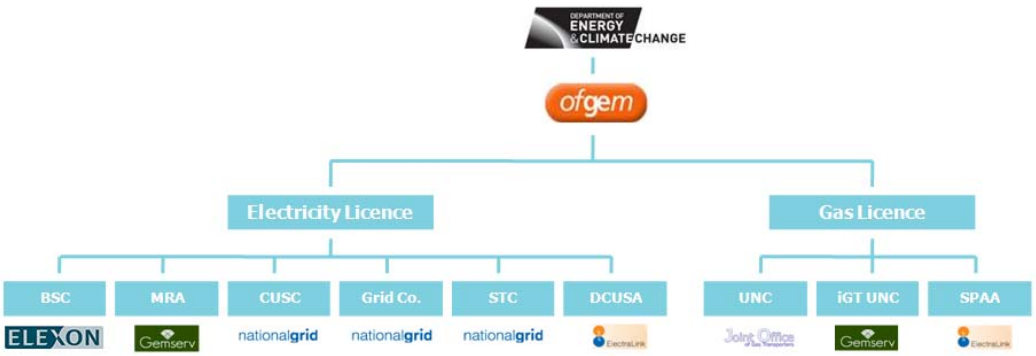
Do you have any comments on the proposed approach to ensuring customers have a positive experience of the Smart meter rollout (including the required code of practice on installation and preventing unwelcome sales activity and upfront charging)?

ELEXON agrees that a positive experience for consumers during the installation of their Smart meter is critical to the overall success of the programme.

We believe that the customer experience is not only defined on the doorstep – but by their experience of the effectiveness and speed of all of their interactions with the industry (e.g. a change of supplier for electricity and/or gas).

The current fragmented nature of the central roles across the gas and electricity markets do little to support consumer experience. We are keen to explore ways in which we could improve this, and already have some suggestions which we would welcome the opportunity to share with you.

Central Energy Market Roles



The code of practice on installation will need to provide an unambiguous explanation of:

- roles and responsibilities
- what each consumer can expect to have happened by the end of the visit, and
- what a fully installed meter means.

There will also need to be clarity on whether the code of practice is mandatory or optional, and it if is mandatory, the implications of non-compliance. We believe that it is important to consider the governance around the CoP and how any subsequent changes would be managed. For example, as the rollout progresses, suppliers will learn a great deal about consumers' preferences and it would be a shame to lose the opportunity to improve their experience, just because the CoP is hard to change.

While this role could be assumed by the DCC, ELEXON could support drafting the CoP and managing the governance mechanism for it, while the rollout takes place. This would prevent the scenario where Ofgem is both defining/assessing a change and approving or rejecting it.

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?

ELEXON has reviewed the Functional Requirements Catalogue, and has not identified any specific issues. The requirements remain at a very high level and we believe that the industry now needs to use this base information to quickly agree the more detailed specifications to prevent any delay to the Smart programme.

Until the detail is in place, there is a significant risk that any Smart meter installed will need to be either replaced before the end of the programme, or need a derogation against some of the agreed functional requirements – neither of which is a desirable outcome for the consumer. A set of agreed and detailed functional requirements is a clear pre-requisite, both for a positive consumer experience, and to deliver the intended benefits of the rollout.

High volumes of non-standard interfaces and protocols also have the potential to stifle innovation. For example, innovators offering Smart home devices would have to adapt their designs to fit a range of HANs (Home Area Networks) that don't comply with all requirements, or limit their addressable market.

ELEXON has significant experience in defining functional meter requirements (we manage all of the current electricity metering Codes of Practice). In our experience, the key to success is getting a balance between ensuring that they are detailed enough to be fit for purpose, but resisting the temptation to over specify. ELEXON encourages specifying the 'what' but not the 'how' – this leaves room for new ways of doing things, and facilitates competition in delivery.

As a user of the data from Smart meters, we will need to make sure that our processes are aligned with the requirements, and will support Ofgem in developing the detailed level requirements, provide timely feedback on any impact on BSC processes, and ways to resolve any conflict.

Question 7.

Do you see any issues with the proposed approach to developing technical specifications for the Smart metering system?

Industry support of the final specifications will be critical to their success and so ELEXON agrees that Option 2 (industry developed, programme facilitated) is the best approach.

Our expectation is that the programme will need to demonstrate strong leadership, to make sure that specifications are developed to achieve the final goals of the programme – including a step change in consumer experience.

Establishing the requirements in a tight timescale will present a challenge. One way to lessen this is to provide an initial view (or 'straw man') at the outset. We also support an intensive, focused requirements development phase to avoid longer timeframes. This should promote delivery without compromising timescales for adequate consultation on the draft specifications.

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)?

By choosing a supplier led rollout, you inherently acknowledge that it will be commercially underpinned. Suppliers will develop their own rollout strategy for the most appropriate customers, which will result in a non-homogeneous distribution of installations as the programme ramps up.

This has the potential to adversely impact settlement.

For example, if Smart metering were to result in distinct classes of consumers being withdrawn from the profiled population, or a significant change in the demand pattern of those remaining in the profile population – this would make the profile less representative. This would in turn impact the correction factors that correct any inaccuracies across the entire profiling suite, leading to increased unpredictability in these energy volumes.

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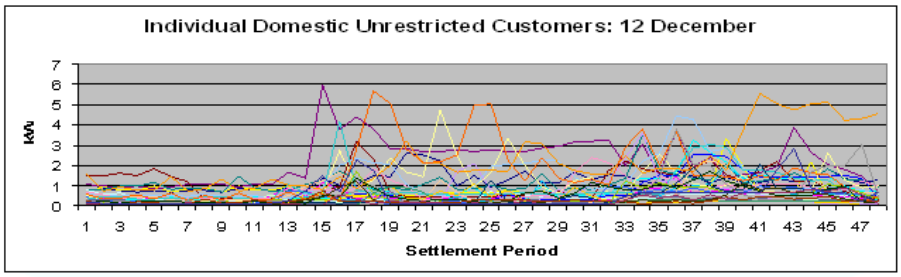
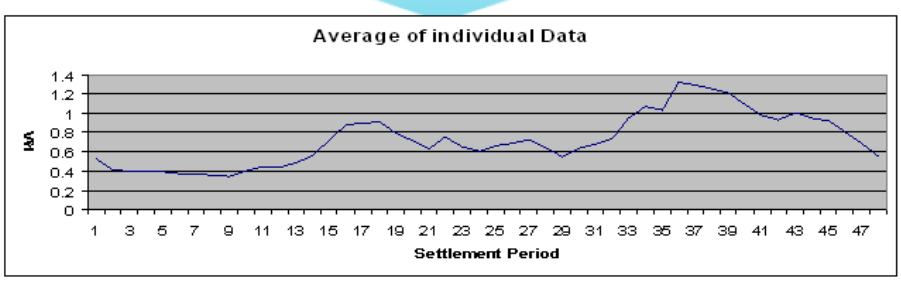


By combining a number of actual half hourly reads, an average profile is created. Removing any one of these customers (and settling them half hourly) makes the profile less representative.



As the custodians of Settlement, ELEXON is already looking to resolve these issues, and is actively modelling the increasing volatility and developing scenarios. We are chairing and facilitating the Profiling and Settlement Review Group, where we are working with industry, to find ways to address a range of profiling issues, including shortening the time between a profile being generated and it being used, which should in itself reduce many of the risks associated 'profiling drift' in a rapidly evolving market.

For targets to be effective, they must link to the benefits to consumers – including reduced consumption and load shifting. ELEXON already has access to many of the market-wide base data sets that would be needed to do this (as they are needed for Settlement). And we are already in discussions about the type of advanced analytics that would be needed to explore these aspects, and we welcome the opportunity to discuss this with Ofgem.

Please contact [redacted] if you would like to discuss the possibilities of advanced analytics further.

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?

ELEXON notes that 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 chooses to change 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.

ELEXON has already had initial discussions with suppliers and Ofgem around 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 a positive consumer experience is to be achieved.

We believe that the proposed timeframe for the new DCC to have their services in place after Ofgem awards the role is unworkable. Given our recent experience with Project Isis, an absolute minimum of 12 months is needed for running a complex procurement. To prevent any delay to the rollout, one pragmatic option would be to extend the interim interoperability solution, to allow the DCC more time to negotiate and specify its services. However, our ideal solution remains to appoint the DCC earlier in the programme as this would reduce the risks associated with migrating significant volumes of meters at the end of the interim period.

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?

ELEXON does not believe that it is possible to significantly bring forward the rollout without damaging the consumer experience.

However, active and independent monitoring of individual suppliers throughout the rollout, with clear interim targets could help to ensure that the programme timescales don't slip. Interim targets will, nonetheless, only be effective if they are rigorously defined and inextricably linked to the benefits of the programme – i.e. to reduce and smooth consumer energy consumption.

We note that a balance needs to be struck between speed and ensuring that no class of consumer or BSC Party is adversely/unfairly affected. For example, if only SMS based meters were rolled out initially, this could lead to a wide geographic variation in the density of Smart meters – which could increase the volatility of Grid Supply Point Group Correction Factor.

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?

ELEXON recognises the need for the programme to put pressure on all parties to make the required expertise available, and it is important that the process designed by the programme to create these specifications reflects the urgency.

We strongly support a 'hot-housing' approach, where expert groups meet daily for short periods of time and where a 'straw man' is provided by the facilitator at the start of the session to focus discussion. This approach is similar to the one used during the Electricity Pool's 1998 Programme.

We have considerable competency in metering and requirements definition, and commit to supporting the programme by making resource available during this crucial phase.

If you would like to discuss interim interoperability further, or hear more about our procurement experiences under project Isis, please contact

[redacted]

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?

Further to the principles set out in the prospectus, ELEXON would like to add some comments.

With regards to the governance of the programme, and recognising the fragmented nature of industry roles and the level of subcontracting expected in delivering the rollout, we would suggest that particular importance is placed on the direct and final accountability of suppliers. Any ambiguity in the roles and responsibilities for the rollout may result in unnecessary delays to the timeline and consumer misunderstanding, leading to disengagement with the intended benefits of the programme.

ELEXON also believes that it is essential for Ofgem to provide leadership (rather than purely facilitation) to the programme. To enable the programme management in performing this role it will require staff with expertise in similar programmes of this size and scope.

Smart Metering Implementation Programme: Statement of Design Requirements

Chapter 3. Overview of the Smart Metering System Functional Requirements Catalogue

Question 1:

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

ELEXON supports the requirement to change the HAN without affecting or exchanging the meter, and notes that this process must not affect the consumer supply.

While exchanging a meter involves interrupting the gas or electricity supply to the premises, exchanging the HAN hardware should not carry the same safety aspects and thus, making it separate from the meter would make it easier (and potentially cheaper) to exchange.

ELEXON recognises that modularising components may increase the overall costs during manufacture and installation; however, we believe that this initial outlay is outweighed by the ability to replace or upgrade only the broken/outdated aspect as the equipment ages.

Question 2:

Are suitable HAN technologies available that meet the functional requirements?

We note that technology providers are best placed to answer this question, nonetheless, our discussions with them, indicate that there are suitable HAN technologies available to meet the functional requirements.

ELEXON also believes that multiple technologies may have to be used to meet the differing site needs such as multi-occupancy buildings.

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 to change out SIMs?

In our discussions with technology providers, we believe that the cost of switching between mobile networks could be minimised by allowing SIMs to be transferable (roam) between networks.

ELEXON notes that other countries have needed to use several different technologies to provide an appropriate level of coverage, and so a mobile (SIM) solution should not be presumed for everyone.

Question 4:

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

ELEXON believes that the Catalogue is at a required level of detail for this stage of the process; however, we believe further clarity and detail will be required in a number of areas when developing the technical specification.

For example, the requirement for the use of Coordinated Universal Time (UTC) for all time stamping needs to cross-reference against DS.5 where the requirement is that local time is used for all displayable times.

ELEXON believes that these detailed level comments are not appropriate for this consultation, and so we will provide a separate document listing the areas for further clarification before 1 October.

Please contact [redacted] if you would like more information.

Question 5:

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

The Statement of Design Requirements explains the process by which proposed functional requirements have been analysed. At ELEXON we have used similar processes to establish mandatory requirements and then prioritised the remaining optional requirements using cost benefit analysis.

We strongly support using a structured approach to ensure that the service / product that is being procured meets the necessary requirements, while avoiding over specification and hence unwarranted costs and project risks.

Question 6:

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

ELEXON does not have any additional or new evidence to support a change to the current list of functional requirements.

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?

Industry support of the final specifications will be critical to their success and so ELEXON agree that Option 2 (industry developed, programme facilitated) is the best approach.

The programme and the industry will need to balance the desire for specifications that are clear, comprehensive and unambiguous, but resist the temptation to over specify. We are encouraged by the approach that has already been taken to assess additional functionalities.

In ELEXON's experience, it is imperative that, once agreed, the specifications be placed under a formal change management process, facilitating the communication and agreement of further refinements to the specification with the industry. ELEXON strongly supports that equipment approval, compliance checking and change management processes will need to be in place prior to the DCC assuming accountability, to prevent any slowdown in the programme.

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?

It is essential that the programme drives, and is accountable for, the specification development process.

Once the specifications are created and the associated Supply Licence Framework implemented, the specifications plus interoperability requirements will need ongoing management until such time as the DCC assumes accountability (potentially a 15 month period from Summer 2011 through to Autumn 2012). For example an assurance regime and change management processes will need to be put in place across this period. The existing gas and electricity governance bodies are well placed to utilise their existing processes and governance regimes to support this service in the intervening period – such short lived support could perhaps be contracted to these bodies pending the DCC Go Live.

ELEXON supports placing a specific obligation for industry to co-operate in the specification development process. This mirrors the approach put in place at the time of NETA and BETTA. The programme needs to be very clear in its expectations of the industry's involvement.

Question 9:

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

Technical issues such as clearly defined interoperability standards, availability of components and training are just some of the issues associated with, but not limited to, the HAN. ELEXON sees this as a critical area in defining what a successful installation looks like from a customer perspective.

The process proposed for developing the Mandated Technical Specification allows for the industry (potential technology providers and suppliers) to engage earlier and for issues to be identified and addressed.

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?

ELEXON supports the proposed approach to the development of the functional requirements; Central to the approach is strong leadership and direction from the programme. The programme plan needs to be unambiguous and clearly communicated.

To expedite the plan, the industry must commit its resource and the expert communities must be engaged. Our experience of a similar approach was that used for the taskforces that established requirements under the Electricity Pool's 1998 Programme.

The technical specification document explains that a comparison with existing documentation has been conducted. The adoption of existing best practice, plus learning lessons from earlier rollouts, is supported by ELEXON both from consolidating requirements and as means of expediting the development.

Smart Metering Implementation Programme: Rollout Strategy

Chapter 2. Approaches to 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?

ELEXON believes there is a need to agree clear, appropriate and measurable rollout targets from the outset. This is a matter for suppliers and Ofgem. Clear and coherent reporting of progress will identify where focus is needed to avoid 'playing catch up' further down the line and disappointing customers.

From a Settlement perspective, careful monitoring (both centrally and by suppliers) of consumers who remain on 'dumb' meters is required. Adopting Smart meters is aimed towards significant changes in consumer behaviour and could (if half hourly data is used) increase accuracy of wholesale Settlement. Together these factors will result in levels of 'profile drift' far in excess of those we've encountered before. We are already addressing this through working with the industry on our Profiling and Settlement Review (PRSG), and we offer to share the output with the programme.

Working to an agreed set of targets will allow ELEXON to understand and prepare the industry for the impacts on Settlement during the transitional period, when large volumes of Smart meters are rolled out and Settlement may be volatile. We can manage an independent monitoring and reporting service to provide assurance around any targets agreed by the programme participants. This could be similar to the current performance monitoring and assurance services we provide using industry data for various standards set out in the BSC.

Question 2:

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

ELEXON's view is that the non domestic and domestic sectors should be treated with the same rollout approach.

As with the domestic sector, the switch between 'dumb' electricity meters and Smart meters has the potential to introduce significant profile drift, if those Smart meters are settled using half hourly data. This situation is potentially made worse by the significantly lower number of non domestic customers, the number of profiles used and higher energy consumption, i.e. the movement of relatively few non domestic consumers could dramatically alter the accuracy of the non domestic profiles. The ongoing rollout of Advanced Meters is already providing insight into this issue and how

Please contact [redacted] for more information about the PSRG.

best to 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 provide a way of measuring success during the transitional period.

Question 3:

Is there a case for special arrangements for smaller suppliers?

From ELEXON's experience managing the Balancing and Settlement Code, we recognise the challenges that smaller suppliers face managing the volume of industry change. Our approach is to provide clear and targeted communications to help, and we encourage that this approach is adopted throughout the programme by governance bodies.

When changes are required to any aspect of the BSC as a result of the programme, we will use our range of communication channels and tailored support services to ensure all parties are informed.

It is also our experience that introducing special arrangements or segmenting players can introduce complexities and gives rise to challenge. The most effective way of achieving balance is through robust and clear rules, recognising the needs of all participants and providing a supportive framework to help meet those needs.

Chapter 3: Mechanisms 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?

ELEXON believes that focussing on the consumer and environmental benefits of Smart metering is crucial to successful consumer engagement.

As we understand from Consumer Focus, consumers need clear information and assurance about why the Government is undertaking this programme, which should help to alleviate their fears of 'footing the bill' and promote understanding of the programme. We support a coordinated approach which overlays individual supplier communications to their customers with timely, independent national and local campaigns.

ELEXON supports the suggestion in the prospectus that additional consumer research is conducted. We believe this should be done as soon as practically possible to test current levels of understanding and buy-in to this Government policy. There may be opportunities for our industry to learn lessons in consumer engagement and other aspects of the programme from any recent large scale rollouts in other sectors,

industries or countries.

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?

ELEXON believes there is a need to centrally define and test how much consumers understand about the programme, the benefits of Smart meters and how they can be realised. Initial results should shape requirements within a customer information code of practice. Repeating the exercise throughout the programme to track customer understanding will measure success, with results triggering any changes needed to the code of practice at later stages. This can be combined with centrally collected energy consumption data to assess the effectiveness of the programme.

As with any code of practice, its purpose and status must be clear (e.g. advisory or mandatory) and appropriate monitoring and sanctions in place for breaches. ELEXON has over 10 years experience in creating, managing, maintaining and assuring a large industry code. We offer our independent support to Ofgem and the rest of the industry to develop the new documents required under the programme.

Chapter 4: Obligations on Supplier to Complete the Rollout

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?

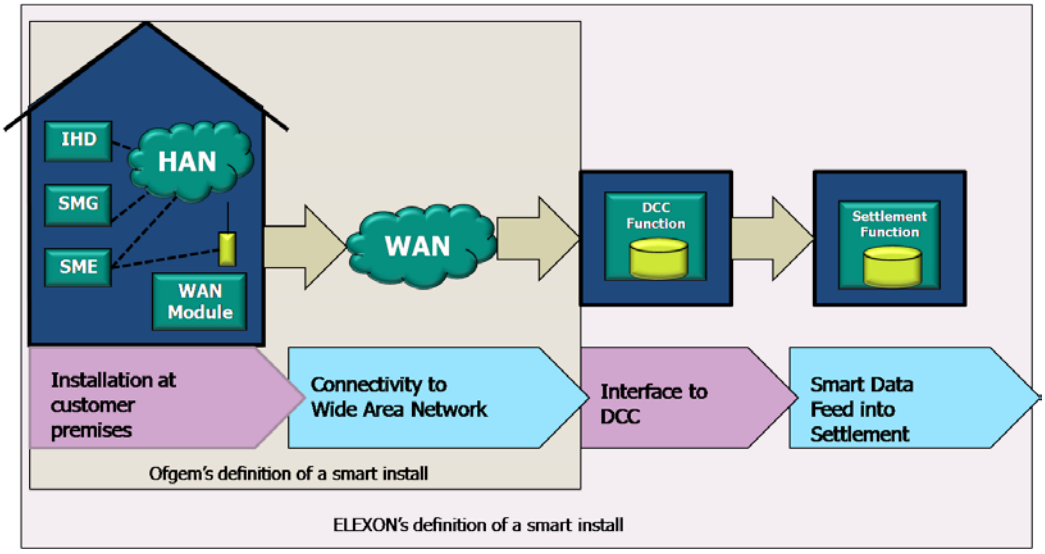
ELEXON agrees with the need for a formal obligation in a supplier led rollout.

We believe there will be difficulties measuring against 'reasonable steps', as the term is open to interpretation. We advise that clear guidance on 'reasonable steps' is included to provide a baseline for the industry and set expectations around install rates. A clear definition of completed installation is key to measuring success of the programme and to ensuring that Settlement data is not compromised during the installation period. It's our experience that without due care, transition can give rise to double counting or loss of data. Controls to avoid this, coupled with monitoring to detection tools, are needed to mange this risk as the DCC goes live and ongoing.

The programme proposes that the definition of a 'completed installation' should ideally comprise:

- operational meter;
- active HAN and WAN link; and
- Smart informed customer.

ELEXON would like to see a final stage added to show that data is being used in Settlement.



While the obligation to register and submit meter data could be excluded from the definition of completed installation, this still needs to be done at the point of changing the meter. Obligations like these need to be captured in a process that is conducted at the same time.

As rollout ramps up, the Settlement of the reducing volume of 'dumb' meters is likely to prove proportionally more expensive centrally and for suppliers. The energy shape for consumers may become more volatile and their settled demand less predictable if an increasing number of meters are settled half hourly. ELEXON believes that modelling the impacts of Settlement data changes based on various scenarios will provide valuable insight and we're keen to discuss this service with the programme, and are already engaging with our customers, BSC Parties.

Question 7:

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

ELEXON believes that interim targets are essential and should be agreed between suppliers and Ofgem; but also that the setting and performance monitoring of these targets should be set with the end consumer in mind.

If the programme is to be successful, it must not only build positive engagement with consumers prior to and during the rollout, but must also have an ongoing, in-programme system for ensuring the intended consumer experience and benefits are being delivered.

Based on ELEXON's experience with monitoring electricity supplier Settlement performance, and the pace of the rollout programme, we are of the opinion that it is both feasible and prudent to receive automated performance data feeds, and to formally review performance on a regular (monthly) basis. This regular review will ensure any issues are quickly dealt with, without causing significant impact on the overall programme.

ELEXON would consider taking an independent role in assisting in the monitoring of rollout targets and KPIs, as well as making performance data available to all parties in an efficient manner. We have a history of working with industry to set and manage against performance targets – e.g. PARMS (Performance Assurance Reporting and Monitoring System), ELEXON's framework for managing supplier and agent performance. We also believe that our Settlement systems are adaptable and provide the central view necessary to get a regular, whole of market view of Smart meter rollout events. We would welcome further discussions with programme participants on this topic.

Please contact [redacted] if you would like more information.

Question 8:

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

ELEXON's view is that interim targets are essential and should be agreed between suppliers and Ofgem. We believe that any targets should be reviewed monthly and based on supplier data that is compiled at regular intervals (most likely through an automated centralised process) to track the number of meters installed.

Question 9:

What rate of installation of Smart meters is achievable and what implications would this have?

ELEXON believes this matter is for suppliers and their service providers to consider and will be based on a range of factors. However, the peak installation rates referred to in the Impact Assessment seem challenging. This makes the need for strong programme management with clear targets particularly important.

From a Settlement perspective, ELEXON also sees a potential risk arising from possible differences in the speed at which meters could be registered by the DCC and deregistered from current processes. Significant gaps in this area could have a major impact on the accuracy of Settlement, through either energy volumes not being reported from non-registered meters or the possible double counting of energy volumes reported from meters registered with both old and new systems.

Chapter 5: Prioritisation of Specific 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?

In addition to consumer welfare considerations, the prioritising of particular consumer or meter types could also have an impact on ELEXON Settlement systems and processes. Losing unrepresentative shares of the meters settled in a profile class could compromise its accuracy and lead to greater volatility within Settlement.

Chapter 6: Reporting Arrangements

Question 11:

Do you agree with our proposed approach to requiring suppliers to report on progress with the Smart meter rollout?

What information should suppliers be obliged to report and how frequently?

ELEXON agrees that is important for suppliers to report on progress at regular intervals, ideally with monthly performance reviews.

We see it as possible to receive the required data to measure progress – meters installed; demographic and geographic mix – via automated data feeds, many of which are already received and processed by ELEXON.

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?

ELEXON believes that the existing protection measures could be strengthened. In addition to the considerations already made by the programme, we would stress that it is crucial that the standards for the installer visit (standards, security measures, etc.) are clearly communicated to consumers.

Special attention will also be required in ensuring the timings and scope of meter visits are in line with consumer expectations, something which should be reflected in the installation code of practice. ELEXON is available to share learning from its experience working with its Technical Assurance Agent, which has faced challenges gaining access to meter sites.

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?

ELEXON supports the programme's proposal to require suppliers to develop a code of practice around the installation process and a complementary code of practice for 'smaller non-domestic' customers who will certainly require the installation process to be tailored to their needs.

Smart Metering Implementation Programme: Implementation Strategy

Chapter 2: Programme management and governance

Question 1:

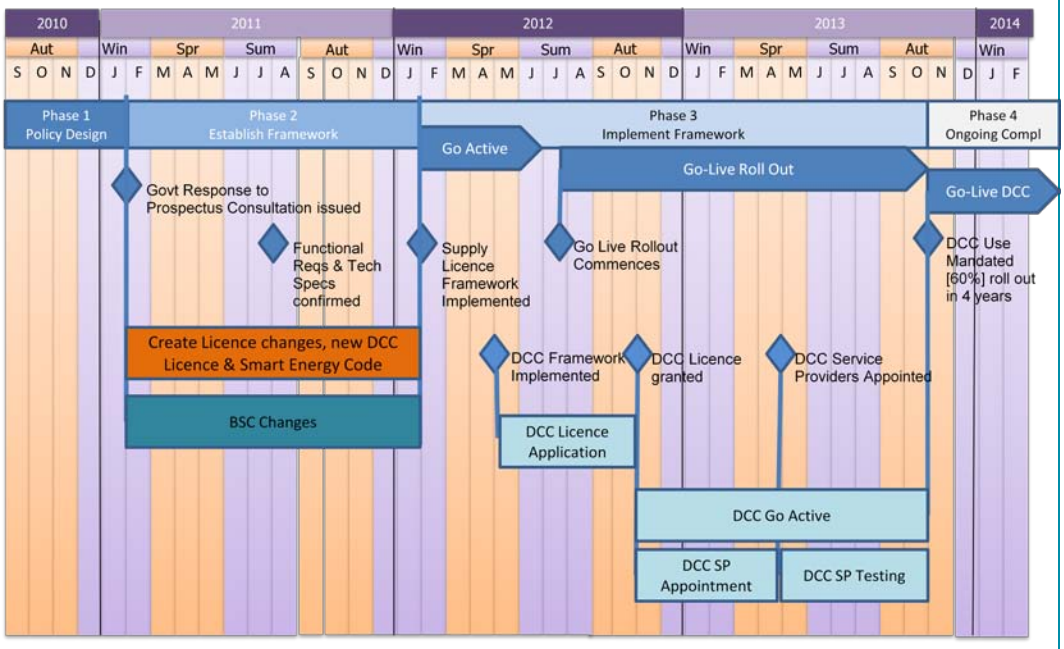
Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?

Overall Programme

ELEXON supports the need for strong central programme management and reporting coupled with clearly defined responsibilities for the individual work streams and supports the approach adopted by the programme to date.

The Implementation Strategy rightly records the programme as being one of the largest and most complex changes undertaken by the energy industry, and will be completed against the background of significant changes in our sector which go beyond Smart metering. ELEXON supports the adoption of good common practices and notes the adoption of the principles and procedures of the Office of Government Commerce cited in the Prospectus.

The scale of the programme is such that full transition will of necessity take several years during which the existing market mechanisms will need to adapt and data quality will need to be maintained, while at the same time ensuring that the end customer sees real benefits.



Phase 1 – Policy Design

The proposed approach for the remainder of Phase 1, with its strengthened stakeholder engagement seems appropriate. The need for expert, as opposed to partisan, input at these groups is very important. Strong leadership of the groups by the programme team will expedite the process. Similarly, timely publication of group materials will promote inclusiveness and help disseminate ideas. The creation of 'expert communities' to assess the emerging design will help test ideas and enable potential suppliers to provide input. ELEXON is fully committed to making its expertise available to support this, and all other aspects of, the programme.

Remainder of the Programme

The need for programme governance structures to mirror and evolve with the changing programme is well made. The sequencing of policy design, framework establishment, framework implementation, with defined milestones identified for the phases is welcome. The establishment of clear governance and management arrangements for Phase 2 during the later part of 2010 should promote clarity around the programme and communicate the responsibilities of the various participants.

Impact on Existing Codes (specifically the BSC)

In terms of the regulatory framework, ELEXON will support the programme by identifying the impacts on the Balancing and Settlement Code (BSC) systems, procedures and processes, and will manage the changes required for the introduction of the Smart Energy Code. We will also monitor the performance of the existing BSC arrangements, across the transition to Smart metering and if necessary seek changes to existing 'dumb' metering arrangements (e.g. the operation of profiling in the non-half hourly market) to maintain the accuracy of Settlement. We are working with the industry to establish a clear vision of the future. We have initiated a series of investigations and consultations via our Profiling and Settlement Review Group. Later this year we will consolidate our findings into a report to inform and steer the important debate on whether the industry should use the available full half hourly data, or continue to submit lower resolution interval data.

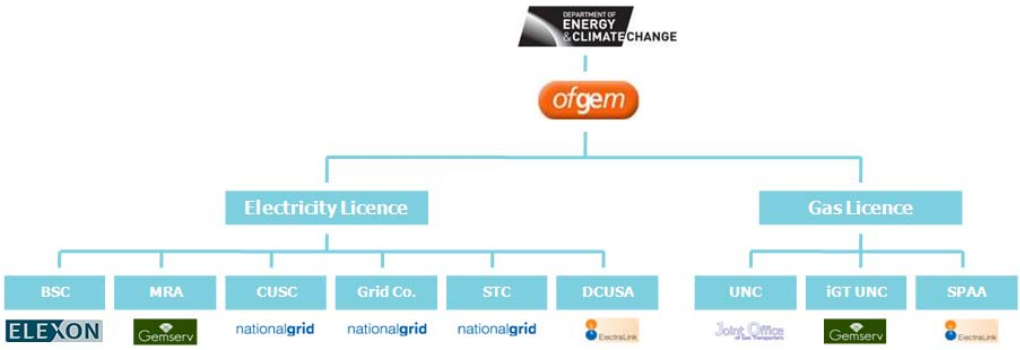
Impact on Existing Codes – a wider vision

ELEXON believes that the current central market arrangements in energy are fragmented and inefficient. While we fully agree that Smart metering offers the prospect of process and system simplification, convergence and consolidation, we would urge extending that aspiration to the Codes and Agreements that govern our industry. The introduction of a new Smart Energy Code is an opportunity to provide a framework around which to consolidate and simplify governance arrangements over time. While we concede that it may not be possible to achieve this for the planned Smart Energy Code implementation date, we should all commit to this longer term goal.

Please contact [redacted] for more information about the PSRG.

This opportunity should not be overlooked, as it presents significant scope for streamlining of process and cost reductions which would improve customer experience.

Central Energy Market Roles



Governance of the SEC prior to DCC Go Live

We note that:

- The Functional Requirements and Technical Specifications will be confirmed in Summer 2011;
- The licence modifications mandating rollout are expected in early 2012;
- The Smart Energy Code is expected to be finalised in spring 2012; and
- The DataCommsCo Licence is likely to be granted in autumn 2012.

Governance arrangements will need to be established around both the specifications and the SEC. We believe this may prove problematic as the body which will eventually be accountable for delivering this (the DCC) is planned to be in place 6-12 months later.

While the Prospectus states that suppliers can commence the rollout with certainty following delivery of the technical specifications, the exact status of the SEC is not explicitly recorded. We assume that given the SEC governs the relationship between the DCC and users of its service; it will not come into full force until the DCC is appointed. Some aspects of the SEC relating to the rights and obligations of suppliers could however be applicable and their 'go live' desirable from its creation. These aspects of the SEC will either need to be implemented directly in Spring 2012 or another governance solution will have to be found.

Similarly, it is unlikely that the SEC will remain static during the six month period. Changes may be required following the experience of the SMIP or desired by suppliers. Accordingly, a clear means for addressing modifications to the SEC would be desirable. Given the stated adoption of the processes developed under the Code Governance Review, interim changes to the SEC could be addressed by using existing channels and processes. We want to explore these possibilities with our fellow Code Administrators and Ofgem.

During this intervening period the governance model will still have to be managed and

delivered by an organisation. ELEXON has experience and a proven track record of undertaking a pre-Go Live role for the NETA and BETTA Programmes. Our organisation is an expert in this field. We believe the DCC closely matches ELEXON's existing model and that we would be well placed to deliver the code governance services of the DCC and an interim interoperability solution in the period prior to DCC Go Live.

Chapter 3: Programme Activities

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

We fully support the need for the programme to lead on key cross-cutting activities that include:

1. Establishing a means of measuring and tracking benefits realisation;
2. Managing core risks and issues;
3. Promoting consumer engagement; and
4. Establishing the Smart Energy Code (SEC) and thereby defining stakeholder responsibilities.

This list reflects that listed in paragraph 4.27 of the Prospectus.

Chapter 3 of the Implementation Strategy provides an expanded list which also includes the important aspects of Consumer Protection and Data Privacy and Security. Given the depth of data made available through Smart metering we see these as essential elements. The list additionally commits to communicating with stakeholders and seeking expert advice and views which are facets of an engaging and engaged programme.

ELEXON is well placed to operate the pre DCC governance elements of activity four above. We are a skilled and experienced code administrator. The results of the Code Governance Review have demonstrated our expertise in this area, with many of our existing working practices that we have championed included in the code administrators' code of practice and now viewed as industry best practice. We believe ELEXON could deliver the interim operations of the SEC, reporting in to the programme.

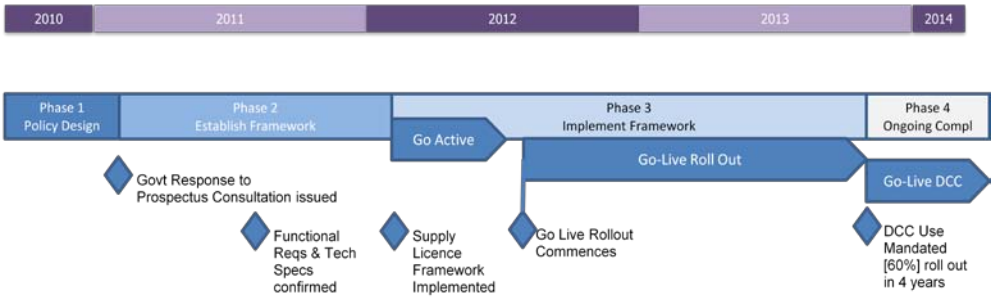
We additionally believe that the programme should ensure that the intellectual property that it is creating is adequately protected. This is to both protect the inherent value for the industry and to ensure that it is engineered that the IPR resides with the appropriate body. We have experienced these issues under the BSC and would like to share our insight with the programme.

Please contact [redacted] if you would like more information.

Chapter 5: Implementation plan for regulatory framework changes

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?

The need to fully define the requirements for consumer protection, interoperability, minimum functional requirements and technical specifications prior to the start of the mandated rollout is essential. We recognise that licensees and their service providers will need time to prepare for mandated rollout, and that six months is proposed. ELEXON believes that the appropriateness of the six months, and the subsequent rate of take on, is a matter on which these stakeholders should advise.



We note the proposal that the DCC services will be established about a year after the start of the mandated Smart meter rollout. There clearly are risks and benefits to this approach which are highlighted in the Implementation Strategy (paragraphs 5.9 to 5.11). The use of licence obligations to address some of these risks is a sensible approach and partially mitigates the risk. However we remain concerned that, unless addressed, interoperability problems could compromise the effectiveness of early Smart meters for both industry participants and the end consumer. Similarly while we would agree that licence obligations should facilitate the transition to using the DCC services, there is a need to carefully consider what provisions need to be specified with respect to the communications services and associated contracts that are agreed by suppliers pre the DCC. Early clarity on the shape of the communications service that will be operated by the DCC will minimise possible disruption when moving from the supplier appointed communications agent to the DCC appointed agent.

Metering Codes of Practices, meter approvals and derogations are all areas in which ELEXON has deep technical knowledge. We would be more than willing to contribute to the definition of appropriate standards and the development of a process which caters for the millions of meters likely to be introduced early.

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?

The Implementation Strategy (paragraph 5.11) records the interim risks associated with:

1. Interoperability issues;
2. Suppliers procuring a communications service; and
3. The DCC being hindered by earlier communications contracts.

The suggested means of managing these (paragraph 5.12) are commercial arrangements and licence obligations that ensure:

1. Supplier compliance with framework requirements; and
2. Obligations on the suppliers and the DCC to facilitate transition to the DCC services.

The management actions are stated only at a very high level. Their effectiveness will be dependent on the quality of the control documents (e.g. the interoperability requirements). Issues surrounding the interim supplier procured communications arrangements and how compatible they are with the enduring DCC procured communications arrangements will be lessened by the SMIP delivering clear communication requirements early in the process.

The overall scale of the risk will in part be determined by the number of meters installed prior to the DCC service go-live. Any action to reduce this interval will reduce the numbers of meters and hence the risk.

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?

ELEXON believes that fundamental to an accelerated rollout and avoiding programme delays is the need for early agreement of technical specifications. We believe this can only be achieved by driving industry agreement to these specifications rather than playing a purely facilitation role.

With technical specifications agreed, suppliers will be able to begin preparatory work in advance of the rollout and the supply licence framework implementation date.

We suggest consideration be given to the charges arising from operating under the existing arrangements and under the new Smart arrangements. For example, our work under the Profiling and Settlement Review has illustrated how the range of charges (e.g. Settlement, Use of System etc) and the mechanics of Settlement (e.g. the application of correction factors) can themselves influence suppliers' views on whether to use Half Hourly or Non Half Hourly data in Settlement. Systematically reviewing how charges and existing processes will be impacted will give an insight into any incentives and barriers that there might be to suppliers accelerating the rollout. We anticipate concluding our Settlement and Profiling Review during December 2010.

Please contac[redacted] or more information.

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?

The need for a six month period between the licence obligations taking effect and the start of the mandated rollout is a question best addressed by suppliers in conjunction with their service providers. While the supply licence changes mandate the start of the rollout, certainty on the technical specifications will be achieved prior to this and could arguably trigger preparing for the rollout.

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

Phase 2 – Establish Framework (Winter 2011 – Winter 2012)

The changes to the existing Licences and the creation of the new DCC Licence and Smart Energy Code are scheduled to take one year. While we appreciate the exacting nature of this work, looking at the challenging nature of the overall programme timescales we would suggest that all means of expediting this work (notably the drafting of the documents) be investigated. Our experience of the BSC is that having a clear hierarchical architecture for the documents prior to starting drafting aids both the drafters and the users. Primary obligations should be contained within the Code with secondary obligations contained within subsidiary documents. Adopting such a structure aids change and delivers a proportionate regulatory burden.

Furthermore the documentation should avoid undue prescription and focus on the 'what' is required, rather than the detail of 'how' it is to be delivered. Adopting a service-based approach will encourage innovation and help deliver best value.

Finally the Implementation Strategy states that the new Smart Energy Code will be implemented during Phase 2 (see paragraph 5.35). This being the case we would reiterate the need to clarify the status and management of the Code pending the appointment of the DCC (see our answer to Question 1).

Phase 3 – Implement Framework (Winter 2012 – Autumn 2013)

We do have considerable concerns over the DCC timings proposed during Phase 3. The current proposal is:

- Spring 2012 – DCC Framework Implemented
- Autumn 2012 – DCC appointed
- Spring 2013 – DCC Service providers (central data and communications) appointed; and
- Autumn 2013 – DCC testing completed.

This allows six months between the DCC being appointed and the DCC having selected its Data Collection and Data Management service providers. We do not believe that this allows sufficient time for a competitive, robust procurement.

We do however believe that it is important that the DCC is the contracting party. If the

SMIP was to conclude the DCC service provider procurements, it would mean that the DCC would 'inherit' contracts that they had not negotiated, and the DCC service providers would be in a commercial relationship with a DCC they had not negotiated with. This may have an adverse effect on the enduring relationship between the contracting parties as contractual interpretations may differ.

Recognising the competing desires of expediting the implementation of the full DCC service and the DCC concluding the procurement of its service providers, we have identified and assessed 3 options:

Option 1 – Allow more time for the DCC to undertake all aspects of the DCC service provider procurement (start to finish)	
Strengths	Weaknesses
• DCC will have developed and run all aspects of the agent procurement and therefore has full accountability for delivering commercial value.	• Delays delivery of the full DCC service. • Increases the duration of the interim arrangements and hence number of metering systems in this phase

Option 2 – Require prospective DCCs to establish framework agreements with potential DCC service providers	
Strengths	Weaknesses
• Provides Ofgem with a view of the high level cost of running the full DCC Service as part of the DCC appointment process. • Undertaken by potential DCCs in parallel with their DCC appointment activity, it potentially enables the full DCC service to be delivered to planned timescales.	• All DCC bidders would need to enter commercial negotiations with all organisations that wish to provide services to the DCC – an appreciable burden. • Establishing DCC / DCC agent partnerships (shrink wrapping) would dilute the commercial advantages that are sought through open procurement of these services.

Option 3 – The SMIP initiates the DCC service provider procurement	
Strengths	Weaknesses
• Undertaken by the SMIP in parallel with the DCC appointment activity, it potentially enables the full DCC service to be delivered to planned timescales.	• The DCC inherits contract obligations derived by the SMIP that may not align with the DCC's outsourced service management approach, risk profile or commercial model. • commercial value from the procurement process as the ownership of the contracts is compromised.

Recommendation

Having reviewed the strengths and weaknesses, we would propose that Option 3 (the SMIP initiates the DCC service provider procurement) is adopted. In doing so, we further recommend:

- Advancing the appointment of the DCC – thereby promoting the accountability of the DCC;
- The point of transfer and hence responsibilities should be defined by the SMIP – we recommend that the DCC should issue the ITT as this marks the point of service provider engagement.

In terms of SEC governance, this particular responsibility could be taken on by the DCC from when the relevant service provider is appointed. A DCC capable of delivering this service (directly or via partnership) could assume this responsibility on their appointment (in Spring 2013) and thereby avoid a further procurement.

Testing

In the absence of clarity over the exact scope of the central data and communications service (e.g. does it include registration) we are unable to judge whether six months would be necessary or sufficient to adequately test systems prior to them going live. We would however observe that under our Isis project, six months was taken for the ELEXON Host transition, and therefore we support the use of six months as a planning assumption.

Phase 4: Implement Framework (Autumn 2013 onwards)

The desire to move the ongoing monitoring and compliance activities to under the normal licence and code compliance requirements and governance arrangements is supported.

The opportunity to deliver subsequent benefits (para 5.53) should not be lost and establishing an indicative timetable for these activities would encourage their resolution.

It is our experience that measuring and using a business benefits based approach can help shape and drive a programme. Recognising that this is a transformational programme, it is important that it is not solely viewed as a technology programme (i.e. one of installing and implementing a new metering technology).

Question 8: Do you have any comments on the outputs identified for each of the phases of the programme?

The section on Phase-by-phase details give a clear overview of the activities which will be undertaken during the programme stages (paragraphs 5.23 to 5.57). It is inevitable that more clarity can be given on the earlier stages. The commitment to deliver earlier decisions (paragraph 5.28), where possible, is welcomed, and were this achieved it will help to resolve uncertainty and promote confidence in the overall programme.

It is our experience that achievement of any phased programme is dependent on a clear definition of what success looks like for each phase, supported by clear milestones, deliverables and an overall set of KPIs. Rigorous monitoring and reporting on these is essential.

Please contact [redacted] if you would like to discuss our view of the outputs identified for each phase of the programme.