Consultation Response

By email to smartermarkets@ofgem.gov.uk

Ref: 174/11

6 March 2012

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Dear Harpal

ELEXON's response to 'Promoting Smarter Energy Markets' consultation

We embrace the view that smart metering provides a platform for transforming key aspects of the energy market and thereby enhancing the overall consumer experience. We have previously shared our thinking with Ofgem, DECC and industry on the limitations of several existing settlement processes and practices, and how these could be addressed with the advent of smart metering. Notwithstanding the challenges that the roll out of smart metering will pose, we believe that the industry should seize this unique opportunity to transform the underlying markets and ensure that it extracts the maximum benefit for both industry and its customers. This strategic consultation is therefore a very timely intervention and we at ELEXON are committed to its success.

We have focused our response on those propositions where changes will be required to the settlement (BSC) processes. We have built on our existing thinking around propositions 1, 2 and 5-8. Whilst we recognise and support the benefits that new consumer services can bring, we have not responded to propositions 3 and 4 as they have no immediate impact on the BSC.

General comments

In considering the propositions as a whole we make the following broader observations:

The interaction of the propositions.

Some of the propositions are either dependent on other propositions or would be significantly enhanced if they were introduced in parallel with other propositions.

For example propositions 1 and 2 work well in parallel as Demand Side Response (DSR) is likely to be associated with a Time of use (ToU) tariff. There would appear to be additional industry changes required to deliver DSR, but the processes for capturing data to accurately reflect usage across the different types of ToU are largely the same as

for DSR. We therefore believe that Ofgem should consider the interactions between different propositions when deciding how to package up the work this summer.

The advent of the Smart Energy Code provides a unique opportunity to consider Code consolidation

Ofgem's Industry Codes Review considered code consolidation, but recognising the scale of the task and the limited appetite for this change, concluded that this was not the right time to embark on this. Across the electricity and gas markets we currently have multiple codes and agreements. There is substantial change earmarked for this industry, which unless addressed through expanding existing arrangements, is likely to spawn further documents. The new Smart Energy Code will cut across several of the existing arrangements and is planned to extend into other areas (e.g. registration). Its introduction provides a unique opportunity to rationalise arrangements.

The industry codes review noted that whilst the existing industry codes change processes are generally good at incremental change, they are not as effective in delivering wholesale changes. Recognising this limitation Ofgem introduced the Significant Code Review (SCR) process. Code consolidation is similarly an area where Ofgem should drive the change.

Our thoughts on the type of consolidation that is possible are set out below in our response to Proposition 8.

Smarter markets are for those who embrace the smart world.

The basis for this consultation is that there is a substantial rollout of smart meters across Great Britain to enable the proposed market changes. We would not expect the industry to be mandated to provide such offerings to customers with legacy (non-smart) meters if this required significant changes to non-smart systems and processes or the application of complex workarounds. This is particularly important given the consumer can decline having a smart meter.

It could be argued that the benefits sought by the smarter markets initiative should only be applicable to those that have embraced smart metering. Under this approach the smarter markets benefits accruing to smart metered consumers may drive adoption of smart metering. Whilst this view reflects the key dependency of this initiative, Ofgem needs to be clear about what happens to non-smart metered consumers (both those awaiting installation of a smart meter during the roll out and those who reject the technology).

Committing to a timetable for introducing smarter markets

There is a need to develop a realistic roadmap for introducing these initiatives that will scope the industry's smarter markets work for the coming few years. However any roadmap needs to be matched by a commitment to drive to it or else it risks becoming merely an academic exercise. We would therefore urge Ofgem to consider how it will promote and ensure delivery of the selected propositions, be that through industry or Ofgem led initiatives.

We are currently developing a roadmap for settlement with industry through our profiling and settlement review work. We are keen to share the emerging picture with Ofgem, to ensure it dovetails with the work of smarter markets.

Managing changes associated with settlement

We describe in our response the detailed work we have undertaken with regards to the future of electricity settlement. We will continue to progress this area and wish to discuss with you how we can marshal our efforts to align with your work.

If you would like to discuss any areas of our response, please contact me on 020 7380 4337, or by email at chris.rowell@elexon.co.uk.

Yours sincerely

Chris Rowell
Smart Programme Director

A consultation on Promoting Smarter Energy Markets

Proposition 1: Time-of-use tariffs should help many consumers lower their energy costs, but improved engagement will be needed to help all consumers make informed choices.

Question 1: Do you agree with the proposition?

Yes.

ELEXON agrees that Time-Of-Use (ToU) tariffs can help some consumers lower their energy costs. We believe that following the smart metering roll out, ToU tariffs are increasingly likely to be offered by suppliers as a means of encouraging demand reduction and reshaping across day demand. Importantly the smart technologies will enable metering to be remotely configured to reflect changing tariffs, In Home Displays will inform customers of the costs they are incurring, as they occur, and signals can more readily be transmitted to manage the consumption of in home appliances.

The real benefits for 'all' consumers are likely to arise from the ability to reduce and reshape demand and thereby reduce the need and costs of system reinforcements. This is likely to be achieved using a combination of:

- price incentives, from the suppliers;
- real time load control instructions, from distribution businesses and/or Transmission System Operators; and
- use of intelligent devices in the home.

All of these can be facilitated by smart metering if industry can agree a defined set of common processes.

Reactive ToU may allow for the introduction of more intermittent renewable generation (e.g. wind) without the need to carry more reserve. However, clear definition on the rights, roles and responsibilities of networks, suppliers, consumers and third party participants must precede any attempt to manage significant and distributed generation in this way. Such clarity will avoid the situation where, there is increased costs driven by 'uncertainty' of system usage and power flows and an impact on the security of supply.

ELEXON has already considered how the BSC arrangements can support ToU tariffs and has produced a

thought leadership piece on tariff innovation and the use of Non Half Hourly and Half Hourly data. The paper outlines the impacts, challenges and changes required: ELEXON Smarter Settlement.

Question 2: Have we identified the elements of the current market arrangements that could help or constrain the realisation of benefits for consumers?

Yes.

ELEXON believes that one of the key elements that could constrain the efficient utilisation of ToU tariffs is the arrangements for central coordination between the various actors. Supplier actions (e.g. load or tariff switching) have system implications for Distribution Businesses and Distribution Business actions have commercial implications for suppliers (e.g. settlement imbalance). This is discussed further under our response to proposition 2 on DSR.

Outline of ELEXON's findings

ELEXON has been facilitating discussion on the wider issues and the settlement implications of more dynamic tariffs for Non Half Hourly customers that could be offered under the smart metered world. We have done this as part of the broader discussions on the future for settlement, through the Profiling and Settlement Review Group (PSRG) that reports to the Supplier Volume Allocation Group (SVG) and the BSC Panel. We welcome Ofgem's ongoing support to the PSRG initiatives. The work has highlighted the need for co-ordinated activity across Codes (in particular the BSC and DCUSA). If introduced, these cross code changes should enable an appropriate framework to be created both for ToU and DSR.

ToU can already be accommodated in settlement for both Half Hourly and Non Half Hourly markets, however, this is for largely static tariffs (i.e. ones where the switching intervals are constant). We envisage the introduction of more dynamic tariffs in the future. The ability for settlement to manage many and varied ToU will be constrained by the current Non Half Hourly settlement processes and complex changes will be required.

It should be noted that there are a number of known issues with the current dynamic teleswitching arrangements that could be resolved at the same juncture, thereby delivering more robust arrangements. The Non Half Hourly settlement processes will require data from each tariff meter that is dynamically controlled by suppliers. The meter data from these tariff meters will require some form of aggregation (e.g. by supplier, GSP, Profile class and tariff) prior to its use in the BSC central systems. This will require new infrastructure or obligations on each supplier to provide such aggregated data, which may lead to increased costs to support such tariffs.

There are also constraints in the existing Non Half Hourly processes and systems on the number of

tariffs that can be supported. For example, the standing data (Market Domain Data) administered by ELEXON contains industry data items which will have a limited number of potential new variants due to constraints on field lengths and interactions with other industry data items. For instance, Line Loss Factor Class ids which are used to distinguish Distribution Use of System tariffs are a component of a full MPAN and therefore cannot be addressed in isolation since they have significant implications for many parties. Furthermore, new standing data items are likely to be required and these may have IT System and process implications for both suppliers and Distribution Businesses. Ofgem will need to consider any resultant impacts on the Common Distribution Charging Mechanism (CDCM), due to a proliferation in new tariffs.

By contrast we believe that Half Hourly settlement provides fewer barriers to implementing dynamic ToU tariffs. This is because the half hourly meter data directly reflects the shape and volume of energy consumed by customer. Within the constraints of a half hourly resolution, this accurately records how the customer has responded to a tariff and this can then be employed in settlement and reported in aggregate to the relevant authorised industry players. It also removes the complexity of the arrangements required to support non half hourly settlement, which could have a positive impact on supplier competition. This is discussed further in our response to proposition 5.

Question 3: Have we identified the key issues, such as the timescales for any changes to market arrangements?

ELEXON believes that the key issue in delivering an expanded ToU market is establishing robust arrangements and processes and agreeing interactions between the various players.

In addition consideration should be given to the following issues:

- Customers will need to be able to assess if they would benefit from the variety of tariffs on offer. To do this they will need a simple way of making such comparisons and easy, cost effective, access to the historic consumption data stored on their meter; and
- Suppliers may need access to representative half-hourly data to design such tariffs. While larger suppliers may be able to generate this information by analysing data from historic customers or smart trials, smaller suppliers and new entrants will not have such ready access to a wealth of historic data.

Question 4: Are there additional opportunities for development in retail energy markets that we should include in the scope of our work?

Whilst ELEXON feels the codification of industry processes to support ToU is necessary, we would not

favour creating yet another Code. Instead ToU interactions can and should be delivered within the existing codes.

Proposition 2: More efficient use of demand-side response can lower overall energy costs, but this will need coordinated changes to regulatory and commercial arrangements.

Question 1: Do you agree with the proposition?

Yes.

ELEXON agrees that there is a need for coordination between the many different actors (customers, suppliers, aggregators, Distribution Network Operators (DNOs) and Transmission System Operators). These different actors will have different and potentially conflicting interests in utilising DSR. Efficient use of DSR will be facilitated by having a single set of market arrangements where all these interests can be considered, aligned and a common approach applied across the country. This central co-ordination will be more efficient than any bilateral contracting or a DNO area specific approach and could incorporate any findings from existing supplier/network studies (or LCNF trials).

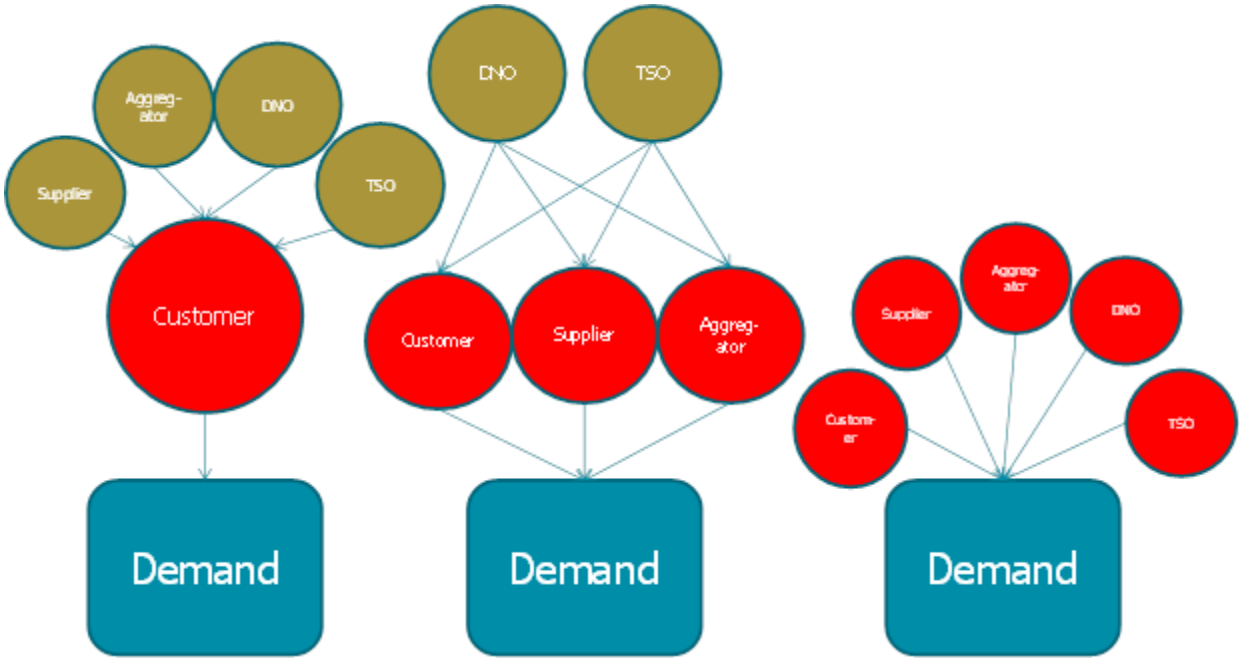
Question 2: Have we identified the elements of the current market arrangements that could help or constrain the realisation of benefits for consumers?

Yes.

ELEXON believes that the key issue for the current market arrangements that constrains the efficient utilisation of DSR is the lack of a central coordination mechanism between the various actors.

The diagrams below shows the various actors who could or would be interested in utilising DSR. The three diagrams display a number of different options under which these actors either:

- directly instruct DSR (e.g. via smart meter communications) - shown in red; or
- indirectly influence demand response (e.g. via a supplier's ToU tariff) - shown in khaki



Under the current regulatory and commercial arrangements (prior to smart metering roll out) the end customer and in some cases the customer's supplier (via teleswitching for example) has direct control of a customer's demand.

To fully utilise the potential for demand we should explore the various interests that the different actors have in DSR and then establish arrangements and principles to resolve any conflicts of interest that prevent efficient utilisation (for example third party control of customer demand might cause a BSC-based 'energy imbalance' exposure for that customer's supplier). The arrangements should be codified. Uncertainty in the arrangements for DSR can lead to inefficient outcomes, e.g. a network reinforcement when DSR would be a more cost effective outcome.

Question 3: Have we identified the key issues, such as the timescales for any changes to market arrangements?

Yes, but ELEXON also believes that for a DSR market to flourish there needs to be clarity around how each of the actors instruct DSR actions and how these are in turn reflected in the various market arrangements.

From a BSC perspective there is a need to consider whether the BSC should recognise the increasingly active role of DNOs in smart grids and in particular any call-off by DNOs of DSR. Currently the BSC recognises demand response actions by the Transmission System Operator (TSO) in the Balancing Mechanism and through use of adjustments to Balancing Services volumes, but this does not currently

extend to DNO actions. We believe the DNOs also need to be active players.

Introducing a Distribution Balancing Mechanism

ELEXON believes that it may be possible to apply 'balancing mechanism' type arrangements to distribution. There currently exists a GB wide balancing mechanism that allows National Grid, the TSO, to manage the Grid through agreeing actions to be taken by parties (mainly generators). DSR at grid level is limited but gradually increasing, however at a local distribution level there is likely to be a broader blend of DSR and embedded generation that could be incentivised to help manage distribution issues and act as a viable alternative to system reinforcement. As part of Ofgem's strategic work, we propose an industry discussion on the viability of an extension of the national 'balancing mechanism' down to a regional level (thereby allowing all the relevant actors to interact at a distribution network level).

We believe that any arrangements should be made consistent across all networks (and codified) to avoid having local variations that would make it less efficient for actors who operate in multiple distribution networks. We believe that adopting a common methodology will help facilitate GB wide competition in DSR services. This is consistent with the approach that was taken to ensure there was Common Distribution Charging Methodology under the DCUSA.

Question 4: Are there additional opportunities for development in retail energy markets that we should include in the scope of our work?

Whilst ELEXON feels the codification of industry processes to support DSR is necessary, we would not favour creating another additional code. Instead DSR interactions should be delivered within the existing codes.

Proposition 5: Settlement arrangements should use actual daily (gas) and half-hourly (electricity) meter reading data in order to improve their accuracy and efficiency.

Question 5: Do you agree with this proposition?

Yes.

ELEXON believes that at some point in the future settlement data should be based on the more granular Half Hourly data that is available from smart and advanced metering. In the case of electricity, Half Hourly settlement was envisaged as a future goal when developing the 1998 arrangements. The Non Half Hourly arrangements were considered to be an interim solution until an economic Half Hourly

metering solution could provide suitable data. This will be the case with smart and advanced metering.

ELEXON has been working on the current costs, benefits and barriers to Half Hourly settlement through the Profiling and Settlement Review Group (PSRG). Our work has resulted in 2 cost benefit analyses reports and 2 Modifications (P272 and P280) that promote an increasingly smarter set of market arrangements.

We believe that valuable lessons have been learnt from the PSRG work to date which can be used in the development of Proposition 5 (for example the disincentive to employing Half Hourly metered data that arises from the current Half Hourly Distribution Use of System charges). We believe that Half Hourly settlement will help to ensure we have the right 'meter to bank' process for all parties, including the end consumer.

ELEXON believes that the future settlement arrangements should continue to be progressed by the PSRG. The group already plans to give further consideration to roadmap for Non Half Hourly settlement as well as assessing any alternative approaches that could be considered, if we do not move to Half Hourly settlement for all. We recognise the need to liaise with Ofgem to ensure that the timetable for this work meets the needs of the smarter markets initiative. All our preceding work is published on our wevbsite:

http://www.elexon.co.uk/Pages/profilingandsettlementreviewgroup(psrg).aspx

Question 6: Have we identified the right sources of costs and benefits associated with achieving this proposition?

Yes. ELEXON's analysis supports the following benefits:

- improvements to cost allocation between suppliers;
- improved links to billing;
- facilitates the management of dynamic ToU tariff;
- enables further simplification of the settlement arrangements;
- allows for the reduction of the current settlement timescales; and
- DNOs would have better information for network planning and management.

However, the second PSRG cost benefit analysis report for mandating Half Hourly settlement for domestic and smaller commercial customers (Profile class 1-4) concluded that, at present, the costs and benefits could not be identified because industry was unable to quantify the costs as the future business

processes around the smart metering solution and particularly the scope of the DCC services were undefined (and consideration has yet to be given to whether further changes e.g. will Data Collection and Data Aggregation form part of the DCC services in future). Whilst industry felt that there could be benefits in using Half Hourly data, it was not clear that these benefits would outweigh the costs of mandating Half Hourly settlement. Ultimately, whilst industry recognised the longer term aspiration to adopt half hourly settlement, they were unable to conclude when this should occur at this stage.

As the smart GB solution becomes clearer it should be possible to re-perform the analysis and provide a view on the quantitative costs and benefits.

In the meantime we are considering whether pseudo-Half Hourly solutions should be adopted for those customers that will still retain legacy metering after the Smart Metering roll out completes. These customers would continue to be settled on the basis of profiles and meter advances and these would be used to generate Half Hourly values that would be passed through the Half Hourly systems. This approach may enable industry to remove the Non Half Hourly arrangements and reduce costs. Any solution would be dependent on the volume of metering systems / energy that remains on legacy meters following the smart meter roll out.

Settlement systems already use aggregated Half Hourly data therefore costs for changes to central BSC systems are not likely to be significant (as the aggregated data is sent by suppliers' agents and we do not envisage any major changes to this process).

Question 7: Have we identified the key issues, such as the timescales for any changes to market arrangements?

Yes, ELEXON believes you have identified some of the key issues including the ability of suppliers and settlement to access Half Hourly data from smart meters and the need to ensure the privacy policy framework can be flexed to accommodate this.

Additionally, we recognise the need to:

- Investigate other initiatives such as sophisticated 'real time' profiling. This could be an interim step to Half Hourly settlement (or long term solution) that would require access to a sample of Half Hourly data from smart meters and potentially new infrastructure. This could help to maintain robust settlement arrangements until a full Half Hourly settlement solution can be implemented; and
- Determine whether exported energy from micro-generation should be required to be settled. Current arrangements do not require the registration of export metering systems and energy

'spill' from these systems may need to be accounted for in the future if settlement accuracy is to be maintained.

With regards to network charges, you observe that Distribution Use of System Charges may be higher for Half Hourly settled meters and this may be a disincentive to moving to Half Hourly settlement. Please note that Pending Modification P280 seeks to introduce new measurement classes which will go some way to resolving these concerns as it facilitates aggregated billing and reduces some of the impact on distribution businesses in facilitating Half Hourly settlement.

ELEXON has been progressing work with industry on the road to achieving Half Hourly settlement and has kept Ofgem abreast of progress. The current focus of the work of ELEXON and the PSRG is focussed in three areas:

1. How to maintain the accuracy of the existing profiling and settlement processes in a smart metered world and how to maintain a cost reflective, equitable and robust settlement process that facilitates competition and is efficient;
2. What features of a smart metered world can be supported by the current profiling and settlement arrangements and what changes to processes and systems are needed, so that the BSC arrangements do not constrain the benefits of smart metering; and
3. Considering longer term changes to settlements through strategic assessment of the shape of the future, including understanding what is necessary for DSR and smart grids.

ELEXON and the PSRG will be addressing these areas over the coming months which will help to provide insight in these key issues and looking to identify a 'road map' for changes to settlement from the present through foundation to a point when perhaps data processing (DC) and data aggregation (DA) services are provided centrally.

We would welcome further discussions with Ofgem on how ELEXON and the PSRG could progress and facilitate further consideration of these market issues and propositions.

Question 8: Are there additional opportunities to reform market processes that we should include in the scope of our work?

ELEXON has sought to improve the existing arrangements over the years by assessing various aspects of the settlement arrangements. We note the following two areas may also benefit from the introduction of

smart:

Credit: We have investigated the potential for improvements to the existing credit arrangements several times. This has been both to improve the accuracy of the calculations pending the receipt of actual data, and to ensure that the credit arrangements remain robust whilst avoiding tying up excessive amounts of money. The quicker availability of accurate information from smart metering is an opportunity to improve the accuracy of the credit checking processes and may also allow participants to conduct and close settlement sooner and thereby limit their exposure and hence credit burden. This may benefit smaller players and new entrants who find it more challenging to lodge credit (as cash or a letter of credit).

Assurance: We have developed the BSC assurance arrangements, moving to a risk based approach, reducing the burden on BSC participants to demonstrate compliance. The potential to reduce the reconciliation timetable, coupled with the rapid access to accurate meter data, may allow for further refinement of how we deliver assurance and for identifying emerging industry problems (and solutions!). If industry moved to centralised DC and DA functions this could further improve the data transfer and data quality in the industry, further reducing the breadth of the existing assurance arrangements.

Unmetered supplies: We will also need to review the arrangements for unmetered supplies (UMS) alongside other market improvements. ELEXON has already explored potential options for accommodating small Non Half Hourly UMS in the Half Hourly settlement model (see link): http://www.elexon.co.uk/ELEXON%20Event%20Documents/SVG130_08.pdf

Proposition 6: The change of supplier process should be reliable and fast, so that customers can confidently switch supplier on a next day basis.

Question 5: Do you agree with this proposition?

Yes.

The design of the current BSC (and MRA) processes already allows for transfers to take place on a next day basis (subject to any cooling-off period and the supplier objection window). The transfer of liability in the registration system is relatively straightforward, but as Ofgem rightly identifies, the complexity of the processes for transferring data between agents in order to process an accurate change of supplier (CoS) reading and issue a final (and initial) bill to the customer can result in delays. Whilst errors occur in only a small proportion of cases, our understanding is that suppliers allow time for the agent appointment, data transfer and reading validation processes to take place and thereby carry out the transfer process in slower timescales than they would if they were fully confident of the accuracy of the

data.

We believe that the roll-out of smart meters will deliver a number of improvements to the CoS process:

- The availability of actual readings from smart meters will reduce the reliance on estimates;
- The ability to obtain more frequent readings at sites which had poor access for pedestrian reads will lead to improved reading histories against which CoS readings can be validated, which will reduce validation failures and disputed change of supplier readings (and provide better estimates in the event that a change of supplier reading cannot be obtained);
- The risk of transposing readings on multi-rate meters should reduce as a result of the automated addressing of registers;
- The number of readings which cannot be processed because of inaccurate meter technical details issues should reduce (assuming that the process for distributing meter technical details for smart meters is well designed and effective).

In relation to the objections process, there are different models for managing cooling-off periods in other industries – for example, backing out a transfer as if it had never occurred or allowing the customer to transfer back. We have no strong opinions on the best method. Given that the timescales for settlement are more generous than those for retail billing, we can accommodate various approaches and will be happy to assess any changes that Ofgem may propose.

The current CoS process allows time for the agent appointment process, transfer of reading histories on concurrent change of supplier and data collector and meter technical details on concurrent change of supplier and meter operator. We agree that centralised DC and DA will facilitate shortened timescales.

Question 6: Have we identified the right sources of costs and benefits associated with achieving this proposition?

ELEXON believes that suppliers are best placed to respond about the costs of resolving billing disputes and erroneous transfers.

Improving the accuracy of CoS meter readings will result in more accurate settlement. A reduction in the number of disputed CoS readings will also be beneficial to settlement, because the process for resolving these disputes can cause delays in withdrawing erroneous consumption data or can delay the processing of subsequent readings by the new supplier's agents.

Question 7: Have we identified the key issues, such as the timescales for any changes to market arrangements?

Yes.

Whilst changes to market arrangements may be required to better align electricity and gas processes, to reform objection processing and to minimise erroneous transfers, significant benefits are likely to arise from the improved quality of reading data from smart meters (i.e. without the need for process change).

Any improvements arising from having a smart meter will not be available to all customers during the roll-out period. However, a two-tier process could serve to highlight the benefits of smart meters to consumers.

Question 8: Are there additional opportunities to reform market processes that we should include in the scope of our work?

None that we have identified.

Proposition 7: Electricity data processing and aggregation services should be procured centrally in order to reduce costs and support fast customer switching.

Question 5: Do you agree with this proposition?

Yes.

ELEXON believes that there is a good case for a central DC/DA service. As you rightly identify in paragraph 4.50, currently Non Half Hourly DAs use common centrally developed software, which is provided by ELEXON. DA is a highly prescribed activity and there is little scope to differentiate services and this perhaps accounts for the low levels of competition in DA. Suppliers appoint the same agent for DC and DA services for over 88% of Metering Systems[1].

Much of the functionality of DA systems (in particular Non Half Hourly DA) consists of ensuring the completeness of data across multiple DAs and registration systems. The need for these controls will reduce with a central registration function (if this is provided by the DCC alongside its registration responsibilities). The scope of the DA system would be limited to its core function of aggregating consumption values in accordance with the registration data and applying appropriate default values where gaps in the data are identified. Arguably, DA would cease to be a service in its own right, and could be more properly considered as a function of data processing.

As you note in paragraph 4.46, the DC role can be broken down into its two main functions of data

[1] This figure is virtually identical for Non Half Hourly and Half Hourly Data Aggregation.

retrieval and data processing. The Non Half Hourly data processing function can be further split into:

- reading validation;
- the calculation of Estimated Annual Consumption (EAC) and Annualised Advance (AA) values; and
- the transfer of data to the appointed DA.

Currently, Non Half Hourly DCs use the same software, provided by ELEXON, to calculate EAC/AA values. Data retrieval will not be required for DCC-serviced sites and the transfer of data to DA would be considerably simplified by centralised DA at the DCC. Improved data from smart meters should lead, in the fullness of time, to reductions in the scope of the reading validation process, or at least in the manual effort required to review 'suspect readings'. The de-scoping of the DC role will make it less attractive as a competitive service, thus strengthening the case for centralisation.

Arguably the provision of centralised services will make it easier for new entrants as it removes another appointment process that they need to undertake.

Question 6: Have we identified the right sources of costs and benefits associated with achieving this proposition?

ELEXON agrees that avoiding the agent appointment process will provide benefits in terms of the speed with which CoS readings can be processed.

Additionally the costs of exception handling would reduce significantly under a centralised model. As a consequence of the distributed systems architecture, which requires the transfer of data between multiple DC, DA and registration systems, we need controls to ensure that there are no gaps or overlaps in the metering systems accounted for in settlement. These controls give rise to DA exception reports. At the last BSC Audit, there were 2.9 million Non Half Hourly DA exceptions. Although a large proportion of these would have had no material impact on settlement accuracy, suppliers and their agents can incur considerable effort and cost in resolving DA exceptions.

Question 7: Have we identified the key issues, such as the timescales for any changes to market arrangements?

Centralisation creates a single point of failure and hence a higher settlement risk. ELEXON will need to contribute to discussion over how this risk is managed.

Ofgem recognises the potential for centralised DC and DA services to be provided by parties other than the DCC, such as ELEXON. Our initial view is that the assurance that all metering systems are accounted

for is best achieved by a close coupling of the registration and aggregation functions. All options can be assessed to determine the best approach.

Ofgem has noted that a shrinking market for DC and DA may have impacts for the non-domestic sector. We are interested in understanding what effects centralisation will have on that part of the non-domestic sector that has elected not to use DCC services, as well as the Half Hourly metered sector and unmetered supplies.

Of course, if reduced availability of agency services outside the DCC led to an increased use of DCC services outside the domestic and smaller non-domestic sectors, this would clearly have implications in terms of the services that the DCC might be required to provide.

We note that some reduction in the contestable market may occur, in any case, as a result of centralised data retrieval via DCC. This could be a problem for suppliers, if they struggle to find cost-efficient agency services.

Question 8: Are there additional opportunities to reform market processes that we should include in the scope of our work?

None that we have identified.

Proposition 8: The Smart Energy Code should be used as a vehicle to consolidate existing industry codes dealing with retail issues in gas and electricity to facilitate market development and reduce administrative burdens.

Question 5: Do you agree with this proposition?

SEC as a home for retail arrangements

ELEXON believes the Smart Energy Code (SEC) should be used as a vehicle to consolidate existing codes dealing with retail issues in gas and electricity to facilitate market development and reduce administrative burdens.

We have previously supported code consolidation, and still do, on the basis that access to and an understanding of codes for existing and prospective new entrants should be as simple, straightforward and efficient as possible.

Our initial preference would have been to incorporate what are essentially meter reading/data collection functions into an existing code(s) rather than to establish a new code, not least because of the need to deal with legacy issues within those existing codes. However we recognise that one of the drivers

behind the SEC model is to consolidate gas and electricity processes in one place and believe this to be a sensible initial step in the right direction. We have therefore sought to avoid unnecessary splitting and duplication of requirements between the emerging SEC and the BSC: as a result some metering requirements will move from the BSC to the SEC.

We note the proposals to incorporate registration functions within the SEC at some future date and would suggest that there may be merit in examining whether further, closely aligned elements within other gas and electricity codes such as DC/DA procedures should also be subsumed in to the SEC.

Wider code consolidation

We would suggest however that the horizon should be lifted to start thinking about industry functions within a smart grid world where roles and responsibilities, certainly operationally, may be very different. We recognise that there are legislative, commercial and operational hurdles to further code consolidation but it would be unfortunate if potential benefits to consumers, industry participants and the environment were not fully realised simply because the existing complex and diverse industry processes presented a barrier.

It would be possible to 'cut the code cake' in a number of ways and, given the diverse membership, different liabilities and obligations amongst code signatories, there may at least be merit in looking at the division of labour from an operational, commercial, wholesale and retail perspective. Translated into the BSC, the code with which we are most familiar, this would broadly result in a wholesale - retail split. For example, wholesale functions, principally balancing, pricing and imbalance settlement related activities could be aligned with those of the CUSC and the retail facing functions including metering, data collection and settlement could be absorbed into an expanded SEC.

Within shorter time horizons it may be possible to review industry change procedures. For example, the current proposal under the BSC to require Half Hourly metering for Profile Classes 5 - 8 has a measure of support in industry but many hold a view that such change should not be progressed until issues within other codes and charging methodologies have been resolved.

Wider code consolidation allows for:

- co-ordinated/simplified entry processes;
- streamlining of back office functions;
- examining duplication of data; and
- the establishment of a central industry design authority (particularly important in a demand side environment).

There are a number of additional industry processes which supplement/enhance/duplicate code procedures and obligations including MoCoPA, various industry agreements, ERA codes of practice and it may be sensible to take these into account if reviewing wider code and governance structures.

None of these proposals are simple or straightforward and clear direction from the centre will be needed to optimise the cost and value of change but that does not mean to say that more radical change should be discounted.

We would be happy to discuss our thoughts further and to share our experience and knowledge of BSC systems and processes with you.

Question 6: Have we identified the right sources of costs and benefits associated with this proposition?

ELEXON believes it is likely that it will be easier to identify costs for existing users than benefits to existing and new users, and therefore this initiative must be driven by a vision for what the future market needs. When this is understood we can assess the longer term costs and benefits.

Question 7: Have we identified the key issues, such as the timescales for any changes to market arrangements?

ELEXON believes this initiative must be driven by a vision for what the future market needs. When this is understood we can assess the timescales and impacts.

Question 8: Are there additional opportunities to reform market processes that we should include in the scope of our work?

See our response to proposition 5, question 8 regarding wider market processes that may be improved.

For more information on our response, please contact:
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