

**Question 1: Do you agree that access control to secure centrally coordinated communications, translation services and scheduled data retrieval are essential as part of the initial scope of the DCC.**

British Gas agrees with Ofgem's proposals that these three functions must be included within the initial scope of the DCC and we will set out our rationale for the inclusion of meter registration services and further data processing activities in our answer to question two.

**Question 2: Do you agree that meter registration should be included within DCC's scope and if so when.**

We believe there is a case for the inclusion of registration processes from day one. We have already made clear our appetite for the earliest introduction of the Data Communications Company, and it is in this context that we believe that it may be easier and faster to introduce registration processes into DCC from the outset.

It is not clear to us that any exclusion of reform to registration processes will delay the implementation of an enduring solution because, to date, Ofgem has not published any analysis of comparing the critical path for the delivery of DCC with or without registration process reform. That analysis is fundamental to any decision on when registration processes should be reformed and must be undertaken as a matter of urgency.

Suppliers need the ability to communicate with the DCC and, if registration systems are not included, the DCC will need interfaces, in any event, to be able to communicate with the registration companies (14 electricity systems, 1 system for large gas network owners, and 5+ for Independent Gas Transporters). The cost of excluding registration may be significant.

Changes to industry data flows and processes are required anyway. This is especially problematic with regard to electricity because of the complexity in

the design that requires multiple interdependent data flows to be exchanged across numerous parties. Put simply, building on a green-field site may be far easier and faster than building on a cluttered brown-field site.

In addition, there are risks and costs associated with introducing a further implementation phase beyond 2013. Probably the biggest of these risks is that it does not happen at all and that our industry is left with a sub-optimal design and that, as a result, improvements in customer service do not rise in the way that is expected by customers and anticipated in the IA.

The DECC IA attaches £1.031 billion benefits to improvements of the change of supplier process arising from smart meters. The only benefit we have identified, that arises from Option A, is a reduction in the volume of disputed change of supplier readings.

By taking our current volumes of disputed reads and the operational costs to resolve them (and assuming costs are driven by market share) we can extrapolate the costs for the industry for the twelve year duration of the IA. If we make the generous assumption that all disputed reads will be eradicated, we are still left with **an IA benefits shortfall of over £1 billion**.

Further, the deployment of smart meters will increase the volume of data passing through industry processes. This has the potential to increase the number of exceptions that we receive and will be required to process. So without reform to industry processes there is potential for additional costs that could further erode the benefits set out in the IA.

Ensuring the alignment and synchronisation of many data items across multiple industry systems is problematic today. This is because there are multiple databases and multiple data flows required to populate them, which provide multiple opportunities for data to be processed out of sequence, corrupted and misaligned. Ownership for this data and responsibility for processing data flows is dispersed, so accountability is fragmented across various industry parties.

Failure to successfully align data on industry systems due to poor industry design and processes results in the following:

- Poor customer service – increased customer calls, escalations and complaints
- Delayed bills and consequential revenue loss
- Debt build up and bad debt write-offs
- Back office processing costs
- Management overheads including Supplier hub and agent management costs
- Misalignment between energy settlement and billing that manifests as imbalance

We have set out below how three key industry processes; Change of Supplier, Meter Read Utilisation and Meter Exchange are affected by the introduction of smart meters.

### **Change of Supplier**

The present industry change of Supplier processes, require the provision of numerous industry interactions across multiple industry participants.

Currently, following the acquisition of a customer, before billing and other activities can commence, meter asset data must be obtained from third parties with whom the new Supplier has no contractual relationship. This requires the exchange of multiple, sequential data flows. There are currently no incentives on third parties to provide these flows in a timely manner.

This issue will not be resolved by the introduction of smart metering and will continue to be problematic without reform:

- the incoming Supplier will continue to rely on the provision of asset information from the outgoing Supplier's agent

- issues will still be encountered where a meter exchange occurs at the same time as change of Supplier
- data will continue to conflict across different industry systems

Once an energy Supplier has access to a smart meter, they should be able to interrogate it and establish the meter details and readings that are necessary to enable billing. However, today's industry arrangements prohibit the full legitimate use of the data and readings unless:

- they agree with historical data related to the meter
- the data is first passed through a daisy chain of agents that includes Meter Operators, Data Collectors, and so on

In our view this fundamental design issue will mean that ultimately only a proportion of the potential customer transfer issues and disputes will be resolved. If the present industry design remains we will still be dependent upon the receipt of data from our competitors and their agents before we can finally complete the change of supplier process.

### **Meter Read Utilisation**

Meter read provision and utilisation requires the collection and processing of meter readings onto Supplier billing systems and industry databases such that:

- they are processed in chronological order
- only accurate readings are processed
- they are permitted and processed within defined timeframes
- the overall energy use recorded on billing and settlement systems is the same.

Any misalignment between those systems will result in misallocation of costs between Suppliers. For example, if the industry data used to populate central Settlement systems is different to that used for billing purposes then there will

be a difference between the energy use billed to customers and the energy use apportioned to Suppliers.

If meter readings are processed out of sequence, are inaccurate or conflict with previous read history, customers bills can be either be delayed or inaccurate. However today's industry read validation regime can result in delay to meter readings being processed onto billing and industry systems. This delay creates a risk of subsequent sequencing issues. As the volume of readings increases, the risk of sequencing issues proliferates.

Smart meters will enable the collection of greatly increased volumes of meter readings. However many of these may be wasted if the present industry arrangements remain unaltered as:

- only readings that agree with historical, legacy read data can be utilised
- good smart meter readings will be blocked by poor legacy data
- increased volume of readings will produce an increased volume of exceptions
- more meter exchanges will create more meter reading and meter asset conflicts

Until existing industry arrangements are amended it is expected that only for a proportion of smart meters will the reads obtained be able to be processed without either delay or exception.

A significant amount of resource and effort is currently undertaken to resolve exceptions resulting from the procurement of meter readings. For example we currently process 20.7m electricity meter readings per annum, of which 250k fail validation by the third party Data Collector and result in an exception.

We anticipate that the volume of smart meter readings procured will increase significantly. Without changes to the industry design, we expect the volume

of meter readings that will ultimately result in an exception will also increase equivalently. Costs associated with the resolution of these exceptions will also increase.

Customers with smart meters expect, and have been promised, the provision of accurate energy bills. Our experience has been that whilst outdated industry arrangements persist, smart meter reads will be blocked or compromised by industry arrangements (and particularly a validation regime) that is no longer fit for purpose.

### **Meter Exchange**

In order to complete the processing of data further to exchanging a meter we must ensure that at least thirteen data flows have been successfully transferred between six different industry parties. Until this is done subsequent meter readings cannot be processed.

Due to these complexities there is a large volume of meter exchanges that results in either a delayed bill or an exception. We incur significant costs in resolving these issues, including direct operational costs of resolution and indirect costs such as debt build up, customer complaints, etc.

We believe that as the volume of meter exchanges and data traffic increases in line with the increase of smart meters, so will the level of exceptions. This is because the synchronisation processes that already struggle today will not be able to keep up in the future, especially with the increased mismatches between meter asset data and meter reading data.

The ability provided by smart meters to upload meter readings and meter details direct from the new meter asset will not prevent or reduce the degree of exceptions and data misalignment described. Under Option A, the progression and validation of these readings will continue to follow existing industry processes, so outgoing meter asset details and meter readings will only be useable if they agree with legacy meter asset and reading history.

This means that new smart meter readings will be blocked until the legacy issues have been resolved.

This will be especially problematic during the rollout phase because of the high volume of poor quality legacy data. An approach to resolving legacy data issues will need to be developed in support of any industry solution.

It is not clear to us that any exclusion of reform to registration processes will delay the implementation of an enduring solution because, to date, Ofgem has not undertaken any analysis of to compare the critical path for the delivery of DCC with and without registration process reform. That analysis is fundamental to any decision on when registration processes should be reformed and must be undertaken as a matter of urgency.

### **Question 3: Should data processing aggregation and storage be introduced in the DCC scope and if so when?**

British Gas believe that data processing aggregation and storage should be included within the DCC Scope from DCC Go Live. Centralisation of these processes will vastly reduce the level of industry complexity and remove the pinch points which cause so many of today's issues. Many of these issues are described in our answer to Question 2.

Incorporating data processing and aggregation in to the DCC further reduces the need for multiple parties to exchange data. In addition, the independent collection of data, to be used ultimately for settlement purposes by the relevant settlement bodies, improves the accuracy and integrity of Settlement and reduces the governance and performance assurance that is required when individual suppliers perform such functions.

The migration of the roles undertaken by the various existing data processing, data collection and data aggregation agents into the DCC would streamline

industry processes and vastly reduce the number of existing industry data hand-offs. In electricity the DCC would ultimately be responsible for:

- the scheduling of meter readings for key industry-related purposes such as Settlement and change of supplier activities.
- the provision of a gateway to enable supplier-defined meter reading activity.
- ad-hoc meter read provision, meter configuration and messaging services, enabling suppliers to make contact with the meter (and the customer) as and when required.
- the processing and validation of meter readings, for Settlement and other industry processes, in accordance with existing industry validation rules.
- undertaking the existing electricity data aggregation role in accordance with industry rules and providing appropriate output into the existing electricity Settlement function.
- the storage of basic meter read history, i.e. reads utilised for Settlement, change of supplier and other industry-related activities.

These functions are already disaggregated and well defined; they can therefore be incorporated into the DCC design relatively easily. This could be delivered by making the DCC the accredited DC and DA that Suppliers are obligated to use for sites with smart meters.

In gas centralisation of gas data retrieval, data processing and data aggregation activities will enable a more efficient and cost-effective approach to be undertaken. This provides the opportunity to streamline processes and prevent the duplication of data across industry systems. Provision of gas data aggregation by the DCC could result in the output of an energy value for a specific period, which would be issued to xoserve to undertake Settlement, akin to the arrangements in electricity. This would substantially reduce the level of smart meter related functionality required within gas industry systems



and reduce the amount of data that needs to be transferred to and held by xoserve.

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- the provision of a gateway to enable supplier-defined meter reading activity.
- ad-hoc meter read provision, meter configuration and messaging services, enabling Suppliers to make contact with the meter (and the customer) as and when required.
- the processing and validation of meter readings, for Settlement and other industry processes, in accordance with existing industry validation rules.
- the provision of a gas data aggregation activity, which calculates and provides an energy value output into the existing gas Settlement function. (Subject to gas industry Settlement reform and requirements under gas replacement system project.) The storage of basic meter read history, i.e. reads utilised for Settlement, change of supplier and other industry-related activities.

To achieve this outcome there will need to be a disaggregation and re-aggregation of xoserve's central industry systems. This could be achieved through the creation of a similar Licence obligation upon all Gas Transporters to provide centralised registration services via the DCC or obligations could be removed from Transporters and commercial contracts could be struck with xoserve. There may be potential for phasing the delivery of changes to xoserve until after a critical mass of smart meters has been deployed. However, in the interim, changes would be necessary to ensure that both gas and electricity customers received a consistent "harmonised" service.

For the avoidance of doubt we believe that only data necessary to support industry processes should be stored centrally. This reduces the cost and data privacy risk of holding data that is not required to support agreed industry processes.

**Question 4: Do any measures need to be put in place to facilitate the rollout in the period prior to DCC service availability and the transition to the provision of services by the DCC e.g. requiring the DCC to take on communications contracts which meet pre defined criteria?**

We are supportive of the proposed facility to novate communications contracts to the DCC as this should provide Suppliers (and communication service providers) with sufficient certainty to enter into longer term contracts in advance of DCC set up. This proposal should not fetter the DCC's ability to procure the most competitive range of communication contracts.

A requirement for Suppliers to be able to participate in the accelerated roll out prior to DCC service availability is the provision of fit-for-purpose interim interoperability arrangements. Interoperability solutions must maximise the range of smart metering functionality supportable after a customer has changed Supplier whilst minimising implementation effort and procurement complexity.

British Gas welcomes the work that Ofgem has facilitated on the development of interim solutions that can improve interoperability prior to the implementation of the DCC.

British Gas has published details of a solution that means that the full range of smart metering functionality can be used after a change of supplier. These arrangements facilitate continuity of connectivity in communications and appropriately-governed secure access to the metering system through a central translation / head end intermediary service. A central service can be

set up to manage transactions with smart meters on behalf of Suppliers once a change of supplier event has occurred.

Our solution minimises implementation effort by enabling suppliers to communicate with competitor-installed meters through the same instructions and data flows that they use with smart meters that they themselves have installed. Because our solution is not required in the enduring model it is temporary and carries less procurement complexity or risk of undermining that enduring model.

We note that alternative methods to delivering interoperability have been suggested but believe that these either seek to undermine the delivery of a phased implementation approach, or do not go far enough to facilitate interoperability. We shall respond separately to Ofgem's request for further information on these options.

We are supportive of enabling, wherever possible, the continuing use of smart meters installed in advance of the mandate coming into effect.

**Question 5: Do you agree that the licensable activity for DCC should cover procurement and management of contracts for the provision of central services for the communication and management of smart metering data?**

Yes we agree that the DCC's licensable activity should cover these functions. The structure of the Licence must ensure that the correct incentives are placed upon the Licence Holder to ensure that contracts are procured and managed in a manner that ensures efficiency and value for money over the life of the contracts. Commitment to contestability in service provision must be embedded within the DCC Licence.

### **Question 6: Do you consider that the DCC Licence holder should be an independent company from Suppliers or other Licence holders?**

We support the creation of a licensed entity with direct accountability to Ofgem. It is important that there is proper regulatory oversight of such a critical industry function; we therefore fully agree that it is not appropriate for the DCC to be created on the back of existing industry licenses, such as, for example, the way Elexon's obligations fall out of National Grids Licence.

We are concerned as to the relationship between the DCC and the administrator of the Smart Energy Code. The administrator must be completely independent of the DCC so as to avoid the services and industry rules specified in the code being unduly influenced by the DCC. For example, if the DCC has a disproportionate role in the funding or control of the code administrator then this might result in the creation of processes and rules that increase DCC revenues or reduce obligations.

Energy suppliers have a natural incentive to reduce costs such that they can remain competitive. Regulated entities have a natural incentive to increase revenues whilst minimising the services or service levels that they need to provide to earn them. Therefore energy suppliers must be afforded the greater influence over the services that they receive because this will create a natural move towards higher services levels and improved value for consumers.

### **Question 7: Do you have any comments on the steps the DCC would need to take to be in a position to provide its services and the likely timescales involved?**

The core activities the DCC will need to undertake are as follows:

- Draft contracts which contain the services, service level agreements etc required from the various service providers

- Determine the assessment criteria to be used to assess the output of the competitive procurement exercise
- Undertake a competitive procurement exercise to appoint the service providers
- Appoint the service providers (systems integrators and communication service providers)
- Facilitate controlled market entry, assurance processes and industry testing including managing the accession of parties to the Smart Energy Code

The earlier that certainty can be provided on the scope of the services to be delivered, the sooner service providers will begin to develop contract packages. Service providers in the market today (in data and communication services) will be assessing whether or not to bid in for DCC services. Industry testing is likely to be the lengthiest part of the implementation programme and therefore any actions that expedite activities 1-4 should be taken. Finalising the Smart Meter Technical Specification is fundamental to expediting certainty on the services that will be procured and then managed by the DCC. Once the specification has been finalised, Suppliers should be obligated to install meter that are compliant with the technical specification. This then accelerates the development of the Smart Energy Code which will contain the detail of the DCC services.

The Smart Energy Code will need to be developed in detail in advance of the DCC commencing procurement of its service providers. The service providers will need business requirement specifications and functional specifications in order to complete their responses to the competitive procurement. These specifications can only be developed once the services have been agreed and documented.

The drafting of the Smart Energy Code should be completed by the start of the mandated roll out if not earlier i.e. Q4 2011. The majority of the Code

could be developed by Suppliers as part of the interim interoperability implementation.

### **Question 8: Do you have any comments on the proposed approach to cost recovery and incentivisation?**

**The contestability of communications services is key to ensuring and efficient and effective smart metering infrastructure.** We fully support Ofgem's proposed model for the creation of a Data and Communications Contracting vehicle. This provides the ability to renew contracts and change service providers for different parts of the common industry infrastructure.

It would not be desirable to create a monopoly that leaves energy suppliers stuck with a single service provider that is less likely to respond to change and deliver value for customers. The DCC must remain open to new and lower cost technologies that become available in to the future, within sensible commercial parameters.

Given this it is important that the DCC is properly incentivised to make purchasing decisions that deliver that value and flexibility. Ofgem must provide a regulatory framework that ensures that the DCC establishes a supply chain that does not form a series of unregulated monopolies.

**It is essential that the recipients of the DCC services drive requirements rather than vendors.** Energy suppliers have a natural commercial incentive to ensure solutions provide value for money and enable them to deliver high quality service to customers. Vendors however have a natural incentive to maximise their revenue and propagate solutions that minimise cost to them. For example, some vendors might argue for a regional deployment of smart metering, whereas suppliers and Ofgem have already established that national capability on day one is required. Ofgem can do more to provide Energy Suppliers with confidence that fundamental user requirements will not

be compromised through pressure from one (or several) potential service provider(s).

The charges for DCC services and for the administration of the Smart Energy Code should be equitable and cost-reflective. This does not simply mean apportioning costs by market share. This is a fundamental principle.

The Prospectus suggests that the DCC should be allowed to charge higher rates to address the higher costs of provision of additional services. We agree that the DCC should have the ability to provide different services to different users but believe that the principle of cost-reflective charging needs to be set out more clearly. This should be clarified in the final decision document.

Whilst we broadly support the structure of charges proposed in the cost recovery approach, we believe that there is significant work to do in order to ensure cost reflectivity of charges. For example, one user's requirements could have a significant impact on costs because of the additional incremental capacity needed.

The extent to which Network Owners contribute to general charges should depend upon the level of influence to be afforded network owners over decisions that could affect those charges. If network owners have the ability to influence such costs then ensuring that they make a contribution to them will provide incentives on them to ensure cost drivers are appropriately managed.