

28 October 2010

[REDACTED]

Ofgem
9 Millbank
London
SW1P 3GE
United Kingdom

FAO Margaret Coaster

Dear Margaret,

Logica Response to Ofgem Smart Metering Implementation Programme Prospectus Questions

Logica welcomes the opportunity to participate in this consultation. We have focused our responses on those areas where we believe that our learning from our activities in the utilities, telecoms, security or analogous markets can provide valuable insights to the challenges faced in implementing smart metering in Great Britain. In doing so, we have drawn on our experience from the UK and globally.

Logica provides business consulting, systems integration, and IT and business process outsourcing services to blue chip organisations globally. Logica has a long history of designing, developing, implementing and operating systems that support the operation of competitive markets in many sectors, including utilities. We have significant experience in the delivery of smart metering solutions around the world and Logica systems are currently supporting the smart metering deployments of the majority of the UK's major energy suppliers.

Logica would welcome the opportunity to continue to participate in future discussions.

Yours sincerely,

[REDACTED]
[REDACTED]
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www.logica.co.uk/we-work-in/utilities/succeeding-in-competitive-markets

1. Response to Prospectus Questions

Question 1: Do you have any comments on the proposed minimum functional requirements and arrangements for provision of the in-home display device?

Logica believes that the functional requirements cover most of those required on the IHD. We do, however, believe that additional prepayment information should be considered for inclusion on the IHD. We would expect that the IHD should display whether or not the emergency credit was in use, that the customer is in a non-disconnection period (this would warn them that they will be disconnected at the end of the period) and the debt recovery rate, if any. This data should be available for both the electricity and gas meters.

Question 2: Do you have any comments on our overall approach to data privacy?

Overall Logica welcomes the approach to data privacy outlined within the Prospectus.

We agree that the consumer should be empowered to control access to consumption data beyond that required for regulatory purposes.

However, the process by which the consumer grants access to data, how the DCC is notified of which industry parties have been granted rights of access (or had their right to access terminated), the associated security issues and the implications of this on the end-to-end design of the smart metering system (including the use of the meter or IHD to provide the consumer interface for the granting of access) needs to be considered. We suggest that this should be part of the remit of the Smart Meter Design Group.

Question 4: Have we identified the full range of consumer protection issues related to remote disconnection and switching to prepayment?

No response.

Logica believes that there are organisations better placed to comment on consumer protection issues.

Question 5: Do you have any comments on the proposed approach to smaller non-domestic consumers (in particular on exceptions and access to data)?

Whilst Logica believes that there are organisations better placed to comment on the approach to be taken for smaller non-domestic sites to (i) access data and (ii) be given exceptions for sites benefiting from AMR metering, we offer the following:

- We agree that smaller non-domestic consumers should have a right of access to consumption data and be able to share this data with third parties for advice on energy contract procurement. They should also be able to give access to their consumption data to their energy supplier or third parties for the provision of energy management services.
- We believe the proposed approach to providing exceptions for smaller non-domestic sites that already have AMR meters installed or are part of groups that have contracts in place for the installation of AMR meters to be correct. We cover our views on the longer term approach to AMR sites in our answer to question 12 of this section and in our answers to the non-domestic section.

Question 8: Do you have any comments on the proposals that energy suppliers should be responsible for purchasing, installing and, where appropriate, maintaining all customer premises equipment?

Logica believes that significant elements of the 'Supplier Hub' model could remain applicable in the market arrangements for smart metering. This would support competition in the provision of smart meters and associated smart metering services. It would also reduce the potential level of change in some industry processes.

The supplier would have the obligation to provide metering and associated services, including meter installation and maintenance (the MOp or MAM functions). The supplier could discharge these obligations through in-house capability or through contracts with third party metering agents that have been through appropriate industry qualification processes.

The metering agent (be it a supplier providing metering services or an independent metering agent) would need to establish commercial arrangements for their meters to remain in-situ and ensure that they continue to get paid for the services they provide to the supplier registered to their meter point.

The DCC could potentially fulfil a useful role in facilitating the payment of these metering changes.

Question 9: Do you have any comments on the proposal that the scope of activities of the central data and communications function should be limited initially to those functions that are essential for the effective transfer of smart metering data, such as data access and scheduled data retrieval?

The task in setting up a fully functioning DCC supported by service providers and with which all authorised industry parties are able to interface is a significant undertaking.

Logica believes that the DCC taking on meter registration, and potentially other industry processes that are common to all participants, is vital to deliver the full benefits identified in the Impact Assessment. Whilst this would ideally happen at DCC go live, we believe that the scale of this challenge is such that a pragmatic approach is required. Therefore Logica supports the proposed approach of the DCC's "Day 1" activities being limited to data retrieval, security and access control.

We support a broadening of this basic function to include other functions such as registration and data processing and aggregation. The primary drivers for centralising registration within the DCC is to enable a more efficient dual fuel change of supply process and cost avoidance through decommissioning of the legacy registration systems. The risk of doing this from "Day 1" is that achieving industry agreement on the new processes could become critical path to DCC go-live and, thus, threaten DCC benefits realisation. We recommend that the DCC takes responsibility for registration of smart meters once the new market arrangements for smart metering are stable. We would expect this to be a minimum of 18 months following DCC go-live.

At this point registration for all existing DCC compliant domestic and elected smaller non-domestic smart meters would be migrated to the DCC and the DCC would take responsibility for registration of all new domestic and elected smaller non-domestic smart meters at the point they are installed.

Registration for conventional meters would continue to be managed in the existing market processes, minimizing change to market participant systems associated with existing market arrangements.

We believe that moving registration of conventional domestic meters to DCC is not justified as it

would require the DCC to support an additional set of conventional registration processes and cause unnecessary disruption to participants' processes and systems. We would envisage the legacy registration systems continuing until the majority of smart meters have been installed. Exceptional arrangements for the management of change of supplier would be required for any remaining non-smart domestic meters, but we would expect the volumes of these to be at an economically manageable level.

At this time, we would envisage a "big bang" migration of non-DCC meters (i.e. non-DCC Profile Classes 3 and 4, Profile Classes 5 to 8, half-hourly, >72,000kWh gas) into DCC registration. Given that the DCC will not be responsible for direct communication with these meters (and depending on the agreed smart registration processes) the DCC may be required to run a modified set of registration processes for these meters.

In the case of data processing and data aggregation, we are in favour of these functions being centralised in the DCC for DCC smart meters. In our opinion, the primary drivers for this are improving settlement through more frequent, accurate readings and the avoided costs of updating the systems of multiple existing NHHDC agents to cope with this increase in volume. We also believe that the primary benefits of the current competitive NHHDC/A arrangements is derived from data retrieval rather than data processing. Therefore the centralisation of the data retrieval role in the DCC removes the driver for a competitive NHHDC/A market. However, as with registration, we do not believe realisation of these benefits should threaten DCC go-live and that this centralisation should occur at some point after the core DCC functions are up and running.

We also endorse the DCC extending services to a wider set of stakeholders in order to spread the cost of provision across a larger set of users and transactions, thus bringing down the overall cost to each individual organisation.

We caution against an early extension to the scope of the DCC service until such time as the DCC has demonstrated delivery of the core 'Day 1' services against an agreed set of service levels. We would recommend a "bedding in" period of at least 18 months before entertaining additional stakeholders and services. This would provide sufficient time for the DCC to have been through the "big bang" migration of pre-DCC meters and demonstrated an ability to cope with the rapidly growing numbers for smart meters. Once proven as a stable service, we fully endorse an expansion of activities to maximise the benefits of the smart metering infrastructure.

Question 10: Do you have any comments on the proposal to establish DCC as a procurement and contract management entity that will procure communications and data services competitively?

Logica agrees that the DCC should be responsible for procuring and managing both data and communication service contracts in order to create a competitive market and encourage innovation. The DCC function is monopolistic and, in itself, offers no competitive advantage to DCC users. It should, therefore, be delivered at minimal cost to the industry and regular competitive re-procurement of DCC service providers will ensure that best value is obtained on an enduring basis. As an existing and long standing industry service provider, we understand the value of competitive procurement and how this drives continued improvement in performance against service levels, innovation and reduction in costs.

As an advocate of 'grandfathering' of early deployed smart meters, we envisage the DCC managing additional contracts on behalf of the industry such as a contract with an Interim Interoperability provider to keep non-DCC compliant smart meters operating as smart for the life of the asset. Having an impartial body tasked with efficient, cost-effective procurement of monopolistic services on behalf of the industry is an established and proven model.

As discussed in our later responses to questions in later sections, we believe the pace of

innovation in telecommunications technologies warrants more frequent re-procurement of WAN contracts to ensure that innovation in this space can be harnessed.

Question 11: Do you have any comments on the proposed approach for establishing DCC (through a licence awarded through a competitive licence application process with DCC then subject also to the new Smart Energy Code)?

Logica is in broad agreement with the proposed approach of creating a licensed market entity and making it a party to a dual fuel 'Smart Energy Code'.

We acknowledge the legislative and regulatory timetables that influence the timescale for the creation of the new licence and code, and that there is no obviously suitable current licence under which the DCC could be created through amendment. However, we are also conscious of the challenging timescales for appointing a licensee, managing an effective procurement for the provision of DCC services and then building and end-to-end market testing the DCC market model. Logica would therefore advocate evaluating ways in which the timescale for establishing the licence and code could be shortened.

Question 12: Does the proposal that suppliers of smaller non-domestic customers should not be obliged to use DCC services but may elect to use them cause any substantive problems?

Logica broadly agrees that smaller non-domestic sites should not be obliged to use the DCC communications and data retrieval services. We also note that some non-domestic consumers may have opted to procure their own metering services.

We raise the following potential issues for consideration:

- Clarity needs to be provided around whether meters can be transferred from the DCC to another service provider once they have been adopted by the DCC. Logica's view is that once the DCC has taken responsibility for a site, it should remain with the DCC. We judge the complexity of managing a two-way transfer process for non-domestic sites to present complexity and risk that would be disproportionate to the value created by choice in this area.
- Any transfer of meters into the DCC must be regarded as a transfer of the communication asset. That is, where there is dual fuel metering on a site, then both meters must transfer to the DCC. This is a potential co-ordination issue for dual fuel, two supplier sites.
- Any sites for which the DCC does not provide the communications services may not benefit from a truly "smart" change of supplier process since the DCC will have to source the change of supply reading externally.

Question 13: Do you agree with the proposal for a Smart Energy Code to govern the operation of smart metering?

Logica agrees with the need for a code to govern the operation of the smart metering systems and bring together the relevant parts of existing codes that are affected by the introduction of smart metering.

It should be acknowledged that the impacts on industry governance are not limited to the creation of a new 'Smart Energy Code', and that the majority of existing industry governance will be affected by the introduction of this new code. The creation of a smart energy code creates an opportunity to rationalise the industry governance arrangements.

Question 14: Have we identified all the wider impacts of smart metering on the energy sector?

Logica recognises that the Prospectus primarily focuses on the impacts associated to the creation of the smart metering infrastructure and operation of the competitive market. It is unclear as to whether sufficient focus has been given to the potential longer term impacts on areas such as

settlement, e.g. new Standard Settlement Configurations that will be required, the impact on the integrity of NHH settlement as energy suppliers use the newly acquired detailed smart consumption data to improve profits by optimising their settlement strategies.

We also note the importance that has been placed on the definition of specifications as an enabler for technical interoperability to support competition in the provision of technology. Experience from other sectors such as telecommunications and media demonstrate how the effective use of standards can create a market by enabling competition and innovation in the supply of technology and services. We believe that further work should be done to ensure that the standards defined for smart metering are informed by the lessons from the telecommunications and media sectors in order to ensure they are appropriate to support innovation and competition over the long term, rather than potentially inhibiting it.

Question 15: Is there anything further we need to be doing in terms of our ensuring the security of the smart metering system?

We note that the focus of the System Security section in chapter 3 of the Prospectus is largely on technology security. The security of the end-to-end smart metering systems should also incorporate elements of:

- physical security
 - physical design of components and materials used
 - selection, screening and training of personnel operating and working on the system
- security management processes
 - management of firmware updates and deployment of security patches
- threat modelling and penetration testing
- codes of connection and device testing and accreditation
- supply chain and sourcing
- business continuity and disaster recovery.

2. Response to Communications Business Model (226)

Q1: Do you agree that access control to secure centrally-coordinated communications, translation services and scheduled data retrieval are essential as part of the initial scope of DCC?

Logica agrees that the initial scope of the DCC must include access control to the smart meter communication infrastructure, the industry communication network, meter translation services and scheduled data transfer across the communication networks.

Q2: Do you agree that meter registration should be included within DCC's scope and, if so, when?

We agree that meter registration should be brought within the scope of the DCC. We believe that the DCC being responsible for registration is essential for a smart-enabled optimisation of the Change of Supplier (CoS) process.

The DCC taking on meter registration, and potentially other industry processes that are common to all participants, is vital to deliver the full benefits identified in the Impact Assessment. Whilst this would ideally happen at DCC go-live, we believe that the scale of this challenge is such that a pragmatic approach is required. Therefore, Logica supports an approach of the DCC's "Day 1" activities being limited to data retrieval, security and access control.

The primary drivers for centralising registration within the DCC is to enable a more efficient dual fuel CoS process and cost avoidance through decommissioning of the legacy registration systems. The risk of doing this from "Day 1" is that achieving industry agreement on the new processes could become critical path to DCC go-live and, thus, threaten DCC benefits realisation. We propose that the DCC takes responsibility for registration of smart meters once it has been established that the new market arrangements for smart metering are stable. We would expect this to be a minimum of 18 months following DCC go-live.

At this point registration for all existing DCC compliant domestic and elected smaller non-domestic smart meters would be migrated to the DCC and the DCC would take responsibility for registration of all new domestic and elected smaller non-domestic smart meters at the point they are installed.

Registration for conventional meters would continue to be managed in the existing market processes, minimizing change to market participant systems associated with existing market arrangements. We believe that moving registration of conventional meters to DCC is not justified as it would require the DCC to support an additional set of conventional registration processes and cause unnecessary disruption to participants' processes and systems. We would envisage the legacy registration systems continuing until the majority of meters have been exchanged, the remaining conventional meters proving to be difficult to exchange for a variety of reasons. Exceptional arrangements for the management of change of supplier would be required, but we would expect the volumes of these to be at an economically manageable level.

At this time, we would envisage a "big bang" migration of non-DCC meters (i.e. non-DCC Profile Classes 3 and 4, Profile Classes 5 to 8, half-hourly, >72,000kWh gas) into DCC registration. Given that the DCC will not be responsible for direct communication with these meters (and depending on the agreed smart registration processes) the DCC may be required to run a modified set of registration processes for these meters.

DECC's impact assessment for the domestic rollout of smart meters identifies £1.1 billion of benefits attributable to improved customer switching, some 7.5% of the overall benefits. We would expect some of these benefits to be realised through increased accuracy of readings on

change of supplier and thus reduced customer queries. To realise the remaining benefits will require simplification and optimisation of the existing change of supply process. The design of a smart meter-enabled dual-fuel CoS process should reduce the current 28 day notice period to something much shorter.

Logica's own analysis of a smart CoS process indicates that the critical path is currently the statutory cool-off period of 14 days. Although CoS could in theory happen overnight in smart world, the minimum time to which the notice period could be reduced must accommodate the statutory cool-off period.

Based on our experience of supporting many suppliers and their agents since the introduction of retail competition, we believe there are benefits to be realised in a review of industry processes that extends beyond CoS. Although not directly related to smart metering (and hence not fully captured in the benefits identified in the impact assessment), smart metering could provide a catalyst for a more extensive review that could address long standing process issues that lead to data corruption, exceptions and associated cost. This review and any resulting changes should, however, not impact DCC go-live.

Q3: Should data processing, aggregation and storage be included in DCC's scope and, if so, when?

Substantial effort has been spent introducing competition to the data processing and aggregation functions in the electricity retail market. The primary value created from introducing competition into the provision of metering data services has been in data retrieval. The level of value created from competition in the provision of common industry processes such as data processing and data aggregation is more questionable. The introduction of smart metering, in our opinion, provides a catalyst for centralising these functions.

One rationale for this centralisation of NHHDC and NHHDA is the anticipated higher volume of meter readings submitted to settlement (both SVA and MRA) from smart meters compared with traditional meters. In our experience, most domestic premises are on a quarterly read schedules which results, on average, in around 2.5 readings per year per MPAN (the reduction resulting from failed read attempts due to no-access). With the introduction of smart meters, readings can be reliably obtained, resulting in a greater than 50% increase in the volume of settlement readings, assuming that settlement readings are submitted quarterly.

Were suppliers to follow the example of countries such as Sweden which mandate monthly reads for billing purposes, this would result in NHHDCs having to cope with four to five times the present volume of settlement readings.

The systems currently being used by the majority of NHHDC agents were developed by Logica. Our analysis shows that the majority of these systems will struggle to cope with this increased volume of data they will be required to handle two to three years into an accelerated smart meter rollout. It is also highly likely that new settlement validations may need to be added to BSCP504 to accommodate readings retrieved from smart meters. It would, in our view, make economic sense for one party to carry out the necessary system upgrade to cope with these increased volumes rather than each of the 20 or so currently active NHHDC agents, especially since the key differentiator for these agents (data retrieval) has now migrated to the DCC.

In our view it would be sensible to transfer responsibility for data processing and data aggregation activities for domestic and elective smaller non-domestic meters to the DCC. However, this transfer should not threaten DCC go-live and, thus, should happen only once the core DCC functions are up and running. It may be appropriate to transfer these responsibilities at

the same time as centralising the registration function as described in our response to question 2, above.

Q4: Do any measures need to be put in place to facilitate rollout in the period before DCC service availability and the transition to provision of services by DCC, for example requiring DCC to take on communications contracts meeting certain pre-defined criteria?

Logica believes that interim interoperability arrangements are required to protect the consumer prior to establishment of the DCC service. Without such arrangements, consumers risk smart meters reverting to “dumb” meters on change of supplier and, in the case of prepayment meters, this has the potential to result in an unexpected loss of supply.

As an existing GB smart data service provider supporting over 100,000 domestic smart meters, Logica has long been campaigning for interoperability measures to keep smart meters operating as smart when a consumer chooses to change supplier. Currently, with no such measures in place, the default is for smart meters to “go dumb” on change of supplier which has negative impacts on the customer, meter asset provider, supplier and data service provider alike. We are also concerned that the negative press generated from such events will be detrimental to consumer acceptance of the national mandated smart meter rollout.

In January 2010, we, jointly with ElectraLink, proposed a commercial solution to the pre-DCC interoperability problem which would have addressed the interim period between mandated rollout and start of DCC service provision. It would also have supported change of supplier for currently installed smart meters.

We have also advocated “grandfathering” of pre-DCC smart meters in order to encourage early movers and early realisation of smart meter-related benefits. Our experience shows that the functionality of the smart meters currently being installed is sufficient to deliver over 90% of the benefits identified in the Impact Assessment. We therefore believe that the removal of barriers to early deployment of smart meters to bring forward the realisation of the benefits is justified.

We support the proposed obligation on the DCC to support smart meters installed post-mandated rollout but suggest that this obligation should be extended to support all pre-DCC smart meters that meet a minimum set of criteria. This set of criteria should not be onerous (we don’t want to have to define two sets of smart meter specifications). One approach could be to require the meter’s head-end solution to conform to the interim interoperability requirements, thus ensuring that the meter remains smart during a change of supplier.

Grandfathering will require the interim interoperability arrangements to be run for the life of the assets that they support. Given its proposed contract procurement and management role, it would, in our mind, be sensible and beneficial to the industry for this obligation to fall to the DCC who could let an “Interim Interoperability” contract in parallel with its Data Services and Communications contracts.

Q5: 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?

Logica agrees that the DCC should be responsible for procuring and managing both data and communication service contracts in order to create a competitive market and encourage innovation. The DCC function is monopolistic and, in itself, offers no competitive advantage to DCC users. It should, therefore, be delivered at minimal cost to the industry and regular competitive re-procurement of DCC service providers will ensure that best value is obtained on an

enduring basis.

This is especially true in relation to DCC communication providers. Logica has been involved in many of the technological advances in telecommunications (we were, for example, instrumental in the creation of SMS) and is well aware of the speed of innovation in this sector. Regular re-procurement of communications contracts will ensure that the DCC (and thus ultimately the customer) benefits from technological innovations which reduce operating costs and/or increase service levels.

Clearly, there are challenges with retrofitting WAN technology. However, the pace of telecoms innovation may deliver new technologies that can be adopted within the latter stages of the initial rollout and the decision to modularise the WAN component of the smart metering system increases the options available to the DCC to ensure that the best possible service is delivered at the lowest cost. Should future smart grid requirements demand a change in WAN technology, modularisation of the WAN will enable more efficient and cost-effective upgrades of affected premises.

Q6: Do you consider that DCC should be an independent company from energy suppliers and/or other users of its services and, if so, how should this be defined?

We see the DCC as a service provider, delivering a set of services against agreed service levels in a non-discriminatory way to a set of authorised users. As such, we agree that the DCC should be independent from its customers.

We would expect the DCC services, service levels and authorised users to be defined in the Smart Energy Code. We expect there to be accreditation processes, not least as part of the security strategy, for all users of the DCC services. The opportunity for consumers to appoint third parties to access their consumption data to provide energy management services creates a new category of DCC use that will require accreditation.

We would also expect delivery of service levels to be cost-reflective (i.e. the DCC charging methodology should be fair and equitable based on the use made of the DCC services by different parties). This would encourage efficient and cost-effective use of the DCC by its stakeholders.

Q7: Do you have any comments on the steps DCC would need to take to be in a position to provide its services and the likely timescales involved?

Logica believes that the current rollout plan that allows 6 months for the design, build, test and market trial of DCC services is over ambitious and, as such, presents a major risk of slippage to the DCC go-live date. The investment in providing DCC services is substantial and prevents aspiring service providers from engaging in significant preparatory work prior to contract award in spring 2013. In the case of the smart meter rollout in France, implementation of the AMI infrastructure has so far taken over 2 years and resulted in installation of only half of the 300,000 smart meters involved in the pilot.

Q8: Do you have any comments on the proposed approach to cost recovery and incentivisation for DCC?

Cost recovery

The charges you have proposed are based on common practice in the communication industry and are a fair and sensible way to distribute communication charges. The DCC charges will also have an element of data services. We have listed below the changes we believe you would need

to your proposed charges to accommodate the data service elements of the DCC service.

- **Activation charge:** this charge would not only comprise activation of WAN but also the data service related charges directly attributable to meter and communication module installation at a customer's premise. In our experience, it is vital that the installation engineers do not leave the customer's premise until they have positive confirmation from the DCC that the installation has been successful and the meter can communicate with the DCC. This will require service desk manpower for the situations where automated installation confirmations have not been successful.
- **Standing charge:** This charge should not only recover the costs for rental and maintenance of the WAN connection, but should include recovery of a contribution toward the fixed cost element of the data service, e.g. infrastructure, service desks, application support, operations staff.
- **Volume charge:** you have proposed that the volume charge will recover the charges based on the volume of data transferred and we fully agree that this should be the main driver. However, the volume of data transferred is not the only variable cost that will have to be recovered. In our experience, the other cost drivers that should be charged on a variable basis is:
 - **Meter type charge:** The DCC's data service costs may vary depending on the type of meter that the supplier has chosen to deploy, e.g. one manufacturer's meter may require the DCC to use their proprietary data encryption software to translate messages to and from its meters and this may incur an additional, and potentially significant, charge. In this case, the DCC may choose to reflect these cost differentials.
- **General charges :** The general charges should not only b recover for the cost of the WAN communication module and communication link, but must also include a contribution towards the initial build of the data applications, e.g. headend, access control, security, billing etc.
- **Market entry charge:** We believe that when a party signs up to the Smart Energy Code, there should be a market entry charge. This charge will recover the costs relating to bringing that party onboard as a user of the DCC. This may include basic market entry testing to make the party demonstrate that it can successfully and securely interface to the DCC.

With respect to which of these charges the network operators should be liable for, we believe that at a minimum they should pay:

- **Standing charge:** The network operators should contribute to the standing charge in that they should contribute towards the rental and maintenance of the meter and toward the fixed costs of the data service. The meters will have additional functionality exclusively for network operators and this added complexity will increase the cost of renting and maintaining a smart meter.
- **Volume charge:** The network operators are likely to require much higher volumes of data than the suppliers, especially during times of network balancing activity. The network operators must be charged for the volume of data that they are sending and receiving from the WAN communications modules.

- **General charges:** we agree that the network operators should contribute towards the general charges.
- **Market entry charge:** Each network operator should be liable for the charges relating to them joining the Smart Energy code as a user of the DCC.

In terms of the **activation charge** (i.e. the charge relating to the installation of a meter and WAN module), we believe that this should be fully funded by the supplier as it is mainly dependent on the effectiveness and efficiency of the meter and communication installations team who is contracted by the supplier. It is, therefore, in the supplier's interest to ensure installation and activation is as cost effective as possible.

In section 3.52, you propose that, due to the uncertainty around data and communication requirements to facilitate smart grid, a review should be undertaken as part of the development of the Smart Energy Code to finalise the most appropriate charging mechanism for network operators. We agree that this review is necessary. However we also believe that the industry has an ideal opportunity to gain as much learning as possible on exactly this issue as part of the Low Carbon Network Fund (LCNF) trials. We are having these conversations and debates now between network operators and British energy suppliers. We are working out how the commercial contracts could work, what the suppliers would pay for, what the network operator would pay for and what obligations would need to be placed on network operators and suppliers, i.e. effectively what would need to be catered for in the Smart Energy Code. By ensuring that at least one of the LCNF projects has an element which is trialling simultaneous supplier and network operator access to the smart meters, we will ensure that we have gained valuable learning during the trials to feed into your review of the network operators' charging mechanisms during the development of the Smart Energy Code.

Incentivisation for the DCC

We agree with your statement in 3.55 that incentivisation needs to apply at two levels: that of the DCC and that of the service providers to the DCC. We strongly believe that the incentives on both the DCC and service providers should be closely aligned, if not the same to ensure that all organisations are driving toward the same strategic objective: to deliver an efficient and high quality service.

We believe that the DCC should provide full end-to-end services against agreed service levels and that the incentives should encourage the correct behaviours from both the DCC and its service providers to ensure that these full end-to-end services are delivered.

You describe two incentive mechanisms:

- **Target forecast costs:** this is a good mechanism and will certainly incentivise the DCC to deliver under budget. However, it is vital that the budget set is a reasonable one and is not overly laden with contingency and margin. The DCC will be a monopoly and so there will be no comparative contracts with which to benchmark the budget. We believe that this mechanism should be accompanied by an open book policy, i.e. that the DCC should openly state its labour costs, subcontract costs, contingencies and margin. This is already successfully used in many commercial contracts. Another mechanism that can be used and is successfully delivering savings on contracts is a gain share approach. This approach is similar to the target forecast model, but operates on an ongoing basis. The service continually looks for opportunities to reduce costs or improve service. When an opportunity is identified, the parties agree to jointly fund any investment required, and then jointly share the benefits realised, e.g. it may take an investment of £50k now to

realise an annual saving of £20k, say, 100k over 5 years. The DCC would fund £25k of the investment, but would also then gain £50k of the savings over the next 5 years, reducing their revenues, but improving their margin. A gain share approach generates the right behaviours and results in a service that is continuously delivering improved value for money, with all parties looking for the opportunities to do so.

- **Outputs:** We strongly support the incentivisation against service levels. We believe that this should be against the end-to-end service levels that the DCC has to deliver, and that these service levels and incentives should, in turn, flow down to the service providers. The service levels should be related to the activities within the DCC's span of control.

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3. Regulatory and Commercial Framework (229)

Q1: Have we identified all of the key elements that you would expect to see as part of the Smart Metering Regulatory Regime?

No response.

Logica believes that there are organisations better placed to comment on the regulatory challenges.

Q2: Do you agree with the proposal to establish a Smart Energy Code?

Logica agrees with the need for a code to govern the operation of the smart metering systems and bring together the relevant parts of existing codes that are affected by the introduction of smart metering.

It should be acknowledged that the impacts on industry governance are not limited to the creation of a new 'Smart Energy Code'. The majority of existing industry governance will be affected by the introduction of this new code. The creation of a smart energy code creates an opportunity to rationalise the industry governance arrangements.

Q3: Do you have any comments on the indicative table of contents for the Smart Energy Code as set out in Appendix 3?

No response.

Logica believes that there are organisations better placed to comment on the contents of the smart energy code

Q4: Do you have any comments on the most appropriate governance arrangements for the Smart Energy Code?

No response.

Logica believes that there are organisations better placed to comment on the governance arrangements for the Smart Energy Code

Q5: Do you agree with the proposals concerning the roles and obligations of suppliers in relation to the WAN communications module?

Logica broadly agrees with the proposal that the suppliers should have the obligation for the provision of a suitable WAN module that at installation establishes communication with the DCC (or head-end provider for those meters deployed following the mandate but ahead of the DCC go-live).

We however believe that the supplier could discharge these obligations through third party metering service providers who could procure the meters and communications assets, install the equipment and establish communications with the DCC as part of the installation process.

It would then be in the metering service provider's interest to establish commercial arrangements with multiple suppliers to ensure that they continued to be paid for the provision of the meter and communication asset following a consumer electing to change to a new supplier.

Q6: We welcome views as to which other additional data items should be included in the mandated HAN data set beyond the list for the IHD.

The data items included within the HAN data set focus on those relating to the information to be displayed on the IHD.

The smart metering system connects to other customer premise equipment via the HAN. This includes gross generation metering for one or more micro-generators (photo-voltaics, micro wind, micro CHP) and smart load devices (such as solar thermal heating systems, ground source heat pumps, electric vehicle chargers and smart appliances). The HAN data set should therefore support the addressing, data collection from, and control of these devices.

Q7 Do you agree with the proposal that the WAN and the HAN in customer premises should be shared infrastructure, with the installing supplier retaining responsibility for ongoing maintenance? If not, would you prefer to have an arrangement by which if the gas supplier is the first to install, responsibilities for the common equipment is transferred to the electricity supplier when the electricity smart meter is installed?

No response.

Logica believes that there are organisations better placed to comment on the supplier obligations around the provision of HAN equipment and its on-going maintenance

Q8: Are there additional measures that should be put in place to reduce the risks to the programme generated by early movers?

Logica advocates 'grandfathering' of pre-DCC compliant smart meters in order to accelerate the smart meter rollout and delivery of smart meter-related benefits. A key enabler for this is for the industry to agree on a robust, pragmatic, cost-effective set of interim interoperability arrangements to ensure that early smart adopters are able to change supplier without the risk of the smart meter going dumb. Such arrangements would not only reduce the risk to the programme of early movers but would, in association with appropriate Ofgem derogations on meter asset life, encourage early movers and accelerated smart meter-related benefit realisation.

Even if such derogations and interoperability arrangements were in place, there is a limit to the scale (and associated "risk") of any early movement. However, in addition to early smart benefits realisation, early movement would also provide invaluable learning for the mandated, accelerated rollout in terms of supply chain management, installation process and customer engagement and would also smooth out delivery from a supply chain perspective (including skilled workforce). Smart service providers (i.e. manufacturers, meter operators, data and communication service providers) currently face an inadvertent slow down in activity prior to the agreement of DCC meter and WAN standards, followed by a rapid ramp-up on commencement of the mandated rollout. This makes the task of an accelerated national rollout even more challenging.

Q9. What is needed to help ensure commercial interoperability?

Logica agrees with the consideration of the introduction of changes to data flows and processes to allow meter and communication asset owners to keep track of the market participants using their assets.

If meter and communication asset provision, installation and maintenance is to remain competitive, then the metering service provider will need to be able to ensure that they continue to get paid when a consumer elects to change supplier. The DCC could fulfil a role in managing

these payments; particularly where a meter or communications asset is being used by multiple parties to deliver services to the consumer.

For instance, smart meters have measurement capability that is of primary interest to the DNOs. Therefore, should the DNOs be expected to pay a proportion of the metering and communication asset costs? Equally, where the consumer has appointed a third party to collect interval data on their behalf, it would seem reasonable for elements of the meter and communications asset costs to be picked up by that third party.

In support of interim arrangements, Logica has identified several simple and cost-effective things that can be done, regardless of the enduring solution that eventually evolves. ECOES and SGOES should be modified to indicate when meters are smart and to provide additional basic information such as the identity of the headend. One of the barriers to commercial interoperability is that suppliers do not currently know if a meter is smart. Logica, as the only current volume domestic multi-supplier headend service provider, is already seeing this first hand in the form of approaches from suppliers who believe they have gained smart meters and wish to know if we are the headend provider. This is unnecessary and can be easily remedied.

Q10. Can current arrangements for delivering technical assurance be developed to gain cost effective technical assurance for the smart metering system? If so, how would these procedures be developed and governed?

No response.

Logica believes that there are organisations better placed to comment on the technical assurance of the smart metering systems and associated governance

Q11. Are there any other regulatory and commercial issues that the programme should be addressing?

Smart metering communication infrastructure finally makes the prospect of domestic demand side management a reality. Smart meters will enable near real time access to HAN-enabled appliances and devices, enabling utilities to control reliable and robust reduction in domestic demand. We use the term "utilities" advisedly as this capability has value to many parties including suppliers (managing wholesale positions, active participation in the Balancing Mechanism), distributors (an alternative to network investment) and the transmission system operator (a tool for energy and system balancing).

Providing equitable access to this flexibility for all interested parties is likely to require new commercial arrangements and/or regulatory frameworks. Actions taken by the transmission system operator (via the supplier) may cause the distributor significant problems, similarly an ancillary contract between a supplier and a distributor may not provide realise the maximum value of demand flexibility from the supplier's perspective. We would see these issues being explored and resolved over the coming years as part of Ofgem's LCNF programme.

Q12. What evolution do you expect in the development of innovative time-of-use tariffs? Are there any barriers to their introduction that need to be addressed?

Logica believes that the data and information provided by smart meters will increase competition in the retail market amongst existing suppliers and new entrants. They will enable supplier to differentiate through better understanding of customers' behaviour and needs and offering new smart-enabled products and services tailored to meet these needs.

Innovative time-of-use tariffs will form a key component of these smart products and services. For example, we envisage new time of use tariffs being developed to address Electric Vehicles and heat pumps. Peak/off-peak pricing, traditionally restricted to customers with electric storage heating, will be available to all. A proliferation of "Weathercall-type" tariffs is conceivable in which energy supply is guaranteed to occur over a given period but flexibility as to when, within that period, it occurs remains with the utility. We could also envisage an increase in more dynamic Time of Use tariffs, from tariffs such as the Tempo tariff operating for the past 6 years in France to more dynamic critical peak pricing tariffs.

Whilst groups such as Consumer Focus have expressed some reservations about early Time of Use tariffs, adoption of these tariffs will increase consumer choice and reward behavioural change. They are essential if Impact Assessment benefits are to be realised.

In Logica, we have been considering smart-enabled supplier differentiation from some time and launched the Logica Smart Office service almost a year ago. This is a SaaS-based service that allows suppliers to get to grips with the technology required for true differentiation in a smart retail market.

Currently, we see suppliers focused on the rollout and ensuring that installations are successful and customer service is not degraded. Once installation is underway and stable, we expect to see a rapidly growing interest in how smart meter functionality can be used to create new propositions that meet consumer needs and create differentiation for suppliers. We expect Time of Use tariffs to be at the heart of this.

In our role as ELEXON's service provider, we have given extensive consideration to the predicted growth in Time of Use tariffs and the barriers to their introduction. We believe that NHH settlement is fit-for-purpose for smart metering-related tariffs for the foreseeable future. We would envisage a proliferation of new Standard Settlement Configurations (SSCs) to reflect the behaviour of newly identified customer segments but ELEXON is confident that new SSCs can be developed and released within an acceptable time frame for suppliers wishing to develop new products and services. With the advent of Smart Homes, we would see a migration of premises to HH settlement. We would also envisage the proliferation of new HH-settled MPANs to reflect the new significant changes to domestic load associated with Electric Vehicles, eHeat, micro-generation, etc. ELEXON is currently consulting on the likely impact of moving smaller customers from NHH to HH settlement and we would envisage barriers such as DUoS charges, BSUoS charges and agent fees to be easily addressed.

Q13. Are there changes to settlement arrangements in the electricity or gas sectors that are needed to realise the benefits of smart metering?

As discussed briefly in our response to the previous question, Logica envisage a smart-enabled migration from NHH to HH settlement. That said, our analysis shows that NHH settlement is fit-for-purpose until such times as advanced Time of Use tariffs (e.g. critical peak pricing) make an appearance (most probably associated with a growth in Smart Homes) or significant new load appears on the LV network (e.g. electric vehicles, heat pumps etc.). In the case of the latter, the fact that the load is not easily accommodated in the existing NHH settlement profiles suggests that it should be associated with a new HH-settled MPAN.

As part of its Smart Office initiative, Logica has done some analysis into the use of Business Intelligence (BI) to better understand and segment customers based on their energy consumption. As part of this analysis, we identified a first-mover opportunity for re-profiling segments of the NHH-settled market to realise reductions in supplier wholesale costs. Were this opportunity to be adopted, we could envisage an adverse effect on NHH settlement and we have

shared our concerns with ELEXON. A mitigation of this threat is to perform analysis based on the HH consumption data obtained from the Energy Demand Reduction Programme (EDRP) trial and we have been supporting ELEXON in their request for this data (as yet, unsuccessful). We would urge DECC and Ofgem to make this data available to ELEXON to enable this analysis to be done.

The EDRP data set represents a powerful resource for ELEXON to model the likely impact of smart metering on settlement, not least in terms of the transition from a settlement system based on infrequent manual readings and/or estimates to one based on reliable remote actual readings. We believe there is significant risk of erroneous EACs and AAs during this transitory period, a risk that could be modelled and assessed through use of smart metering data such as the EDRP data set.

Smart metering finally makes the prospect of domestic demand side management a reality. Smart meters will enable near real time access to HAN-enabled appliances and devices, enabling utilities to control reliable and robust reduction in domestic demand. In order to minimise settlement imbalance and thus encourage suppliers to make use of this flexibility, we envisage the need for a new virtual HH-settled MPAN associated with each premise that has flexible load. This would allow the supplier to offer this robust, reliable and predictable flexibility without the risk of having to predict the uncontrollable load associated with the premise.

Q14. What arrangements would need to be put in place to ensure that customers located on independent networks have access to the same benefits of smart metering as all other customers?

No response.

Logica believes that there are organisations better placed to comment on the issues associated to iDNOs and iGTs

Q15. Are there any other industry processes that will be affected by smart metering and which the programme needs to take into account?

No response.

Logica believes that there are organisations better placed to comment on the programme's impact on other industry processes

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4. Response to Non-Domestic Sector Questions (230)

Q1. Are there any technical circumstances where only advanced rather than smart metering would be technically feasible? How many smaller non-domestic customers have U16 or CT meters and what scope is there for full smart meter functionality to be added in these cases?

No response.

Logica believes that there are organisations better placed to comment on the appropriateness and technical feasibility of AMR for certain applications.

Q2. Do you agree with our proposed approach to exceptions in the smaller non-domestic sector?

Logica broadly agrees that smaller non-domestic sites should not be obliged to use the DCC communications and data retrieval services. We also note that some non-domestic consumers may have opted to procure their own metering services.

We raise the following potential issues for consideration:

- Clarity needs to be provided around whether meters can be transferred from the DCC to another service provider once they have been adopted by the DCC. Logica's view is that once the DCC has taken responsibility for a site, it should remain with the DCC. We judge the complexity of managing a two way transfer process for non-domestic sites to present complexity and risk that would be disproportionate to the value created by choice in this area.
- Any transfer of meters into the DCC must be regarded as a transfer of the communication asset. That is, where there is dual fuel metering on a site, then both meters must transfer to the DCC. This is a potential co-ordination issue for dual fuel, two supplier sites.
- Any sites for which the DCC does not provide the communications services will not benefit from a 'smart' change of supplier process.

Q3. Are there technical circumstances that we have not considered that would justify further flexibility around installation of either smart or advanced meters?

No response.

Logica believes that there are organisations better placed to provide comment.

Q4. Do you agree with the proposed approach that use of DCC should be optional for non-domestic participants in the sector?

Logica broadly agrees that smaller non-domestic sites should not be obliged to use the DCC communications and data retrieval services. We also note that some non-domestic consumers may have opted to procure their own metering services.

We raise the following potential issues for consideration:

- Clarity needs to be provided around whether meters can be transferred from the DCC to another service provider once they have been adopted by the DCC. Logica's view is that once the DCC has taken responsibility for a site, it should remain with the DCC. We judge the complexity of managing a two way transfer process for non-domestic sites to present complexity and risk that would be disproportionate to the value created by choice in this area.
- Any transfer of meters into the DCC must be regarded as a transfer of the communication

asset. That is, where there is dual fuel metering on a site, then both meters must transfer to the DCC. This is a potential co-ordination issue for dual fuel, two supplier sites.

- Any non-domestic sites for which the DCC does not provide the communications services will not benefit from a 'smart' change of supplier process

Q5. If use of DCC is not mandated for non-domestic customers, do you agree with the proposed approach as to how it offers its services and the controls around such offers?

No response

Q6. To what extent does our proposed approach to the use of DCC for non-domestic customers present any significant potential limitations for smart grids?

The eventual vision for smart grid includes demand side management although it is recognised that this is some way in the future. Ownership of this capability is unclear at the moment; both suppliers and DNOs could benefit from access to demand side management: suppliers by managing their wholesale position and/or offering flexibility to the system operator and DNOs to manage the load on their networks as an alternative to network reinforcement. There is a possibility that DNO level network balancing may be required. This presents a multi-dimensional challenge.

Participants wishing to aggregate demand side management capability in order to offer the flexibility to the balancing operator, be it at national or DNO level, need to be able to bundle as much as possible and to do so with maximum flexibility. There is a significant risk that this flexibility will be reduced by the different processes surrounding HH meters, mandatory AMR metering (in profile classes 5-8 and where ELEXON is consulting on its transfer to the HH market), DCC domestic metering and a mish-mash of smaller non-domestic meters operated both via the DCC and via other agents. This does not support an active market-based smart grid.

In the long term, we believe that, in order to support the full use of smart grids, there should only be two mechanisms in place: HH metering and DCC metering.

Q7. Is a specific licence condition required to ensure that metering data for non-domestic customers can be provided to network operators or DCC, and should any provision be made for charging network operators for the costs of delivering such data?

No response

Q8. How can interoperability best be secured in the smaller non-domestic sector?

Full interoperability will be difficult to achieve in the smaller non-domestic sector, assuming use of the DCC is not mandated, as is made clear in the Prospectus.

Once a site has been metered via the DCC there should be a requirement for to remain a DCC site. This will prevent the need to develop processes to move control of the meters between the DCC and other data service providers.

Any obligation on the DCC to offer terms to advanced meters, as outlined in section 4.44-4.47 should not be enforced during the initial period of operation. Logica's Instant Energy smart metering head-end supports multiple meter types but we are finding that there is considerable effort involved in adopting each new meter. This has the potential to be a major distraction to the DCC and its service providers during initial operation. We would suggest that any such obligation

should only come into effect once the core, live DCC service is proven to be stable.

Q9. What steps are needed to ensure that customers can access their data, and should the level of data provision and the means through which it is provided to individual customers or premises be a matter for contract between the customer and the supplier or should minimum requirements be put in place?

Logica believe that non-domestic consumers should have a right to access their consumption information. This does not mean that the provision of access to the information should be free of charge. It could however form a component within the energy supply contract should the non-domestic consumer want to take that service from their supplier.

Logica also acknowledges the importance of consumer choice and that consumers will want to receive information in different formats, via different media and at different times. Therefore there is the opportunity to create value for the consumers by offering energy management information services.

One of the challenges that Logica does not believe is being fully addressed within the Smart Meter Design Group is how the consumer gives permission for their consumption data (beyond that required for regulatory purposes) to be accessed by third parties. This is a key design requirement in the end-to-end engineering of privacy into the smart metering system.

Q10. Do you agree with our approach to data privacy and security for non-domestic customers?

Logica broadly agrees with the proposals set out in the document covering the non-domestic sector. We provide more detailed comment on the approach to privacy and security in our responses to the questions in the Data Privacy and Security section.

Q11. Is the proposed approach to rollout (for example in terms of targets and a requirement for an installation code of practice) appropriate for the non-domestic sector?

No response.

Logica believes that there are organisations better placed to comment on the proposed approach to rollout.

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5. Consumer Protection Questions (231)

Q1. Do you have any views on our proposed approach for addressing potential tariff confusion? What specific steps can be taken to safeguard the consumer from tariff confusion while maintaining the benefit of tariff choices?

No response.

Logica believes that there are organisations better placed to comment on addressing the potential for tariff confusion

Q2. Do you agree with our proposed approach for addressing unwelcome sales activities during visits for meter installation?

No response.

Logica believes that there are organisations better placed to comment on unwelcome sales activity

Q3. What do you consider as acceptable and unacceptable uses of the installation visit and why?

No response.

Logica believes that there are organisations better placed to comment on acceptable use of the installation visit

Q4. Do you agree with our proposed approach to ensuring that the IHD is not used to transmit unwelcome marketing message?

No response.

Logica believes that there are organisations better placed to provide views on controls and codes of practice around the allowable messaging via the IHD

Q5. Do you agree that consumers should be able to obtain consumption information free of charge at a useful level of detail and format? How could this be achieved in practice?

Logica believe that consumers should have a right to access their consumption information. It is also reasonable that consumers should expect to be able to receive a minimum standard level of detail via prescribed media as part of their energy supply contract. The primary media for delivering this basic level of information is via the IHD and the bill.

Logica also acknowledges the importance of consumer choice and that consumers will want to receive information in different formats, via different media and at different times. Therefore there is the opportunity to create value for the consumers by offering energy management information services. The challenge is to define the minimum standard level of detail and the media over which it is presented such that the information is useful to the consumer, but does not destroy the attractiveness of the energy management information market to innovators and entrepreneurs.

One of the challenges that Logica does not believe is being fully addressed within the Smart Meter Design Group is how the consumer gives permission for their consumption data (beyond that required for regulatory purposes) to be accessed by third parties. This is a key design requirement in the end-to-end engineering of privacy into the smart metering system.

Q6. Do you consider that existing protections in the licence are sufficient to ensure that consumers are not remotely switched to prepayment mode inappropriately?

We believe that the existing protections are sufficient. There is however a minor issue on change of supplier. Paragraph 3.18 suggests that suppliers may opt to register inaccessible meters with the DCC. We believe that this should be mandatory, for two reasons. From a prepayment perspective following a change of supplier, the new supplier may have a different approach to prepayment and may wish to offer prepayment more widely than the old supplier. It would be very inefficient if they were unable to do this merely because the old supplier had not opted to register a meter as inaccessible, leaving the new supplier uncertain as to whether or not it is accessible.

There is a wider issue. Replacing every meter in the country provides an excellent opportunity to improve the quality of industry data. Logica's experience of managing meter deployments in the Nordics region has demonstrated the importance of rigorous data capture as part of the installation process. To this end the correct location of every meter should be recorded accurately and in a systematic way as it is replaced. The recorded data should include whether or not it is considered inaccessible from a prepayment perspective as well as other notes about accessibility (such as that the meter need stepladders to be accessed or that it is in an unlit cellar).

Q7. Could provision of an appropriate IHD help overcome meter accessibility issues to facilitate prepayment usage?

No response.

Logica believes other organisations are better placed to comment on the appropriateness of the use of the IHD for this purpose.

Q8. What notification should suppliers be required to provide before switching a customer to prepayment mode?

No response.

Logica believes other organisations are better placed to comment on the appropriateness of the existing notification process.

Q9. Do you believe that suppliers should be required to provide emergency credit and friendly credit periods to prepayment customers or whether, as now, this can be left to suppliers?

The provision of emergency credit and friendly credit periods can be left to suppliers as is currently the case. It is possible that the ease of using smart prepayment for both customer and suppliers may lead to an increase in the number of prepayment customers. If this is the case, Ofgem may need to revisit this but the current rules are entirely adequate for the start of the smart market.

Q10. Do you consider that an obligation similar to Prepayment Meter Infrastructure Provision (PPMIP) may be required?

Logica believes that there is no need for a PPMIP obligation to be imposed on suppliers but that the DCC should be responsible for validating prepayment vend requests.

We do not believe that a PPMIP style obligation is required. As you note in the Prospectus the PPMIP obligation grew from the need to allow suppliers operating outside of what were then their core areas of expertise, to support a mix of prepayment infrastructures. In addition, the links from the payment agents were via the PES prepayment systems, which became PPMIPs. This situation does not apply so there is no need to replace the PPMIP obligation.

There would, however, be benefits in centralising some functions in the DCC. Logica's Instant Energy headend currently supports prepayment meters and allows customers to purchase energy via multiple payment agents offering different vending media (over the counter, internet, mobile, etc). When a customer presents a prepayment id card at either of these agents, the card is validated by Instant Energy to check that the supplier on the card is the registered supplier in Instant Energy, that the meter is in prepayment mode and that the Prepayment Administration Number (PAN) is correct. This validation is the same regardless of the supplier and we suggest that the DCC should offer a similar service; the implicit assumption in the Prospectus appears to be that this a supplier issue.

If suppliers are responsible for validating their own transactions when customer attempt to vend, there will be no standard interface for payment agents. The transaction will be validated at supplier systems rather than the DCC which is the master of the relevant data. This will increase cost and decrease accuracy. The lack of central co-ordination would also lose the opportunity to address the costly misdirected payments issue.

We would be happy to discuss our experiences in this complex area is it would be helpful.

Q11. Is the obligation which Ofgem is proposing to introduce on suppliers to take all reasonable steps to check whether the customer is vulnerable ahead of disconnection sufficient? If not, what else is needed?

No response

Q12. What notification should suppliers be required to provide before disconnecting a customer?

No response

Q13. Do you have any views on the acceptability of new approaches to partial disconnection and how they might be used as an incentive to pay bills?

No response

Q14. Do you agree with our approach for addressing issues related to remote disconnection and switching to prepayment?

No response

Q15. Have we identified the full range of consumer protection issues associated with the capability to conduct remote disconnection or switching from credit to prepayment terms? If not, please identify any additional such issues.

No response

Q16. What information, advice and support might be provided for vulnerable consumers (e.g. a dedicated help scheme)? Who should it be provided to?

No response.

Logica believes that there are organisations better placed to comment on support for vulnerable consumers.

Q17. Do you have any comments on our proposals to prevent upfront charging for the basic model of smart meters and IHDs?

No response.

Logica believes that there are organisations better placed to comment on controls around charging for basic IHDs.

6. Data Privacy and Security (232)

Q1. Do you have any comments on our overall approach to data privacy?

We welcome the Data Privacy and Security Supporting Document and the clarity it brings for the Smart Metering Implementation Programme. The document will ensure a consistent level of understanding across all the stakeholders and a shared vision of the way forward.

In particular we welcome that fact that Privacy by Design is being raised at this early stage of the process which will enable the solution to be aware of the need to design privacy in from the grass roots and ensure key privacy principles are adhered to. These are however complex concepts which can be interpreted in a variety of ways. Therefore the use of a Privacy Impact Assessment and associated stakeholder engagement, as outlined, will ensure that there is a common language between all involved. Logica has experience of working with the Information Commissioner's Office on several fronts including being invited as an industry representative on the Privacy by Design workshops. In addition we have undertaken full PIA's for our public sector clients, so understand what is necessary and involved.

We would have a few comments on the overall approach:

1. **Involvement of external stakeholders** in the Privacy and Security Advisory Group – the success of this programme will largely depend on the take up and acceptance of smart meters and users becoming advocates. Involvement of these stakeholders will help identify risks early on and ensure they do not become issues as the programme moves forward. We would advocate inclusion of external stakeholders in this group or as key stakeholders in the PIA process.
2. **The Office of Cyber Security** was mentioned as a body which the programme is in discussions with. Understanding and applying the advice coming out in this emerging area will be fundamental to the solution design. The management of cyber security will be a key component in the approach to the communications networks and maintenance of privacy protection. A concern for the public is the safety of their personal data and the growth of cyber crime is a threat to their positive engagement. The solution will need to be future proofed against cyber crime and guidance in this area around the approach should be welcomed.
3. **Authentication and identification** the balance between these two approaches may be the key in securing the buy in and acceptance of the users of the smart metering services. It might be helpful to explore the opportunities authentication, as opposed identification, offers more fully.
4. **Data sharing** opportunities in the programme are yet to be fully explored. The recent ICO consultation and resulting guidance will provide more clarity around a sound approach. However in the meantime observing good practice from other sectors may be helpful. We have experience in the multi agency information sharing arena in Scotland and England having worked on two such large national programmes. In fact the Scottish one, eCare, was commended by the ICO as good practice at European Privacy and Data Protection awards.

Q2. We seek views from stakeholders on what level of data aggregation and frequency of access to smart metering data is necessary in order for industry to fulfil regulated duties.

No response.

Logica believes that there are organisations better placed to provide input on this question. However, we note the need for this question to be addressed and to be factored into the design of the end to end smart metering system and to the scope of service of the DCC.

Q3. Do you support the proposal to develop a privacy charter?

We support the proposal to develop a privacy charter. When dealing with multiple stakeholders a clear charter outlining what is to be expected by the smart meter user will be a positive step in gaining acceptance and buy in. The challenge will be the communication of the charter and the simplicity of its message. The accessibility of the charter and its obvious application across in the solution will be key to enable the smart meter user to understand the nature of what is being offered and how that is translated into reality.

Q4. What issues should be covered in a privacy charter?

1. Compliance vision with Data Protection Act and European Commission Directive 95/46 and levels of commitment to the smart meter user.
2. The extent of the information to be gathered including the approach to the aggregation of the data and frequency of recording.
3. How the information will be used and the way in which it will be shared with recipients and disclosed to any third parties and the choices that can be made in these processes and the role of consent.
4. The consumer's rights as data subjects and how they can be accessed.
5. Details of the technical and organisational measures put in place to protect the personal data from mishandling or misuse.

Q5. Do you agree with our approach for ensuring the end-to-end smart metering system is appropriately secure?

Logica has reviewed the security approach proposed by the Smart Metering Implementation Programme and agree with the adoption of a security risk assessment based on Information Assurance Standard No.1 (IS1) and the HMG Security Policy Framework.

Since the full risk assessment has not been made available for review Logica cannot determine which risks have been identified and addressed; for example:

- Unauthorised code or meters being used to fake micro generation or reduce payments for financial gain
- Privacy issues outside of Britain and also the European Union for global energy providers

Logica would like the opportunity to analyse the risk assessment fully to provide more detailed feedback on the risks identified.

However, we note that the focus of chapter 4 of the Data and Privacy Document is largely on technology security. The security of the end-to-end smart metering systems should also incorporate elements of:

- physical security
 - physical design of components and materials used
 - selection, screening and training of personnel operating and working on the system
- security management processes
 - management of firmware updates and deployment of security patches

- threat modelling and penetration testing
- codes of connection and device testing and accreditation
- supply chain and sourcing
- business continuity and disaster recovery

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7. In Home Display (233)

Q1. We welcome views on the level of accuracy which can be achieved and which customers would expect, in particular in relation to consumption in pounds and pence.

No response.

Logica believes that there are organisations better placed to provide quantitative data to support the evaluation

Q2. We welcome evidence on whether information on carbon dioxide emissions is a useful indicator in encouraging behaviour change, and if so, how it might be best represented to consumers.

No response.

Logica believes that there are organisations better placed to provide quantitative data to support the evaluation

Q3. We welcome views on the issues with establishing the settings for ambient feedback.

No response.

Logica believes that there are organisations better placed to provide quantitative data to support the evaluation

Q4. Do you think that there is a case for a supply licence obligation around the need for appropriately designed IHDs to be provided to customers with special requirements, and/or for best practice to be identified and shared once suppliers start to roll out IHDs?

No response.

Logica believes that there are organisations better placed to provide input on appropriate IHDs to meet special requirements

Q5. We welcome evidence on whether portability of IHDs has a significant impact on consumer behavioural change.

No response.

Logica believes that there are organisations better placed to provide quantitative data to support the evaluation

Q6. Do you agree with the proposed minimum functional requirements for the IHD?

No response.

Logica believes that there are organisations better placed to provide quantitative data to support the evaluation

Q7. Do you have any views or evidence relating to whether innovation could be hampered by requiring all displays to be capable of displaying the minimum information set for both fuels?

No response.

Logica believes that there are organisations better placed to provide quantitative data to support the evaluation

Q8. Do you agree with the proposals covering the roles of and obligations on suppliers in relation to the IHD?

No response.

Logica believes that there are organisations better placed to provide comments on the supplier obligations in respect of the IHD