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28 September 2010

Dear Margaret,

Smart Metering Implementation Programme: Prospectus and supporting documents – response to consultation

CE Electric UK Funding Company (CE) is the UK parent company of Northern Electric Distribution Ltd (NEDL) and Yorkshire Electricity Distribution plc (YEDL).

We welcome the opportunity to respond to Ofgem's consultation on the smart metering implementation programme prospectus. This letter and its appendices respond to all aspects of the consultation (other than the Consumer Protection document, on which we have no comments), both those with a 28 September deadline and those with a 28 October deadline. Appendix 1 contains our response to the open letter from Ofgem on rollout policy of 7 September.

Appendices 2-10 contain detailed responses to the issues raised in the prospectus documents. We set out below key issues of importance to us as a distribution company.

CE Electric UK welcomes the significant step forward represented by the publication of the smart meter prospectus and generally supports the proposals set out in it. We welcome the recognition in the document of the need for smart meters to support the development of smart grids. CE Electric UK had been closely involved in the work of the Energy Networks Association to develop the DNOs' perspective on smart meters, including detailed analysis of the Smart Meter Functional Specification. We shall continue to play an active part in this work.

Our key areas of remaining concern are as follows:

Commercial

Issues of commercial and technical interoperability need to be resolved early to minimise the risk to early movers of asset stranding. In particular, whether installation costs should be wrapped up in the meter rental or treated as a transactional charge outside meter rentals needs to be decided and applied consistently.

We propose a multiparty agreement between meter asset providers (MAPs) and suppliers similar to DCUSA to reduce the costs of multiple bilateral agreements for meter asset provision. Addressing this within the commercial interoperability framework should assist nationwide operations and smaller suppliers.

CE ELECTRIC UK FUNDING COMPANY

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Scope of the Data Communications Company (DCC)

We have some reservations about the inclusion of supplier meter registration services within the initial scope of the DCC. Meter registration is an essential foundation of the settlements process and underpins the accuracy of settlements data. Any change in this process should be carefully considered. There may be simpler ways to improve the customer's experience of the change of supply process than centralising the supplier meter registration. The scale of this exercise needs to be fully considered and then compared to the current time line for smart metering rollout. We do not consider that a secure centralised registration service can be achieved within this time scale. Furthermore, if suppliers to non-domestic customers are not to use the DCC, this weakens still further the case to use the DCC. Whilst we would not be keen on transferring the registration service in the initial scope, there would be value in including a central meter asset register in the initial scope of DCC to ensure it is clear across the industry who owns a meter and whether or not it is smart, recorded by MPAN.

Roll out

It is widely recognised that the smart meter roll out will lead to a wave of service alteration and replacement work for DNOs to carry out. Suppliers should have an obligation to liaise with DNOs to co-ordinate any DNO works. An accelerated rollout of up to 60-80% of meters in four years could be delivered, so long as it is accepted that premises at which operational investment on the DNO's assets is required will take longer than that to resolve.

Cost recovery

All industry stakeholders should make an appropriate contribution to the costs of the operation of the DCC. There needs to be provision for recovery of DNOs' costs in the price review mechanism, since the timing and amount of benefits on network investment from smart meter information is uncertain.

Accessibility and privacy of data

Addressing issues of data privacy and security to the satisfaction of both customer and industry is key to the successful implementation of a smart meter programme. We agree with the principle that consumers should be able to choose how their consumption data is used and by whom, except where the data is required to fulfil regulated duties. Since Section 9 of the Electricity Act 1989 places an obligation on DNOs to "...develop...an efficient, co-ordinated and economical system...", we consider that accessing data needed to deliver smart grids is consistent with that principle.

Whilst the specification of smart meters may be consistent with the data requirements of DNOs to facilitate smart grid developments, it is important that the data actually transmitted to the DCC and that made available to DNOs should also be consistent with these requirements. The information requirements of suppliers and DNOs are likely to be different (although of course there will be some areas of overlap). There therefore needs to be a requirement placed on suppliers to make available such information from smart meters as may be reasonably required by DNOs for smart grid, settlement and outage management purposes.

Non-domestic customers

We understand the reasons proposed for not requiring suppliers to non-domestic customers to use the DCC, at least initially. However this may make the development of the smart grid more difficult to achieve. Some smaller non-domestic customers may have a significant role to play in implementing smart grids, because of the higher capacity of their supplies, the variety of their electricity profiles and a commercial interest in managing their energy requirements. DNOs will therefore wish to have access in due course to the same data sets (e.g. half hourly consumption) as for domestic customers. There is a danger that, if use of the DCC is optional, this information may not be made available or only in an inconsistent format, and customers themselves could lose the opportunity to benefit. It needs to be made clear to meter operators and data collectors what the initial data requirements are and how they might increase in due course as smart grids functionality is required. It will then be for the meter operators and data collectors to decide

whether to develop their own data communications apparatus or to use the services of DCC.

Please let me know if there are any aspects of our response that you would like to discuss.

Yours sincerely,

[Redacted signature block]

[Redacted name]

[Redacted title]

Appendices

Appendix 1	Response to Ofgem letter of 7 September on accelerated roll out
Appendix 2	Response to Prospectus
Appendix 3	Response to Statement of Design Requirements
Appendix 4	Response to In-home Display
Appendix 5	Response to Communications Business Model
Appendix 6	Response to Data Privacy and Security
Appendix 7	Response to Implementation Strategy
Appendix 8	Response to Rollout Strategy
Appendix 9	Response to Regulatory and Commercial Framework
Appendix 10	Response to Non-domestic Sector

Appendix 1 – Response to Ofgem letter of 7 September on Rollout Policy

We believe that accelerated rollout of up to 60-80% of meters in four years can be delivered, so long as it is accepted that premises where service alterations are needed may take longer than that to resolve.

We note the request for information on accelerated rollout in Ofgem's open letter of 7 September. From the DNOs' perspective, an accelerated rollout is likely to lead to an early peak in the number of service alterations required. However, if these requests are "banked", to be dealt with as resource permits, and allowance made accordingly in the rollout programme, then we believe that the accelerated target can be met without the need to carry out service alterations providing an undue constraint.

It is hard to gauge how many prospective meter exchanges will require intervention from distributors. Our estimate is based on the facts that:

- Currently, CE Electric UK replaces around 10,000 cut-outs per year where meter fixers report issues;
- CE Electric UK has around 3.8 million services. Assuming an average 15-year period between meter fixer visits (for whatever reason), this implies around 250,000 meter exchanges each year;
- These two figures suggest an intervention rate of 1 in 25, or around 4%;
- We expect the proportion of meter exchanges that raise network issues to increase with accelerated rollout. This will come from a combination of having to address the installations where service alterations are needed, and from an influx of newly-qualified meter fixers who do not have the experience and competence to work around issues they find. Our range estimate is:
 - If the rate of meter exchanges doubles, as required for 60% of meters to be smart within four years, the intervention rate could increase by half to 6%;
 - If the rate of meter exchanges triples, as required for 90% of meters to be smart within four years, the intervention rate could double to 8%;
- On these estimates, the number of cut-out issues alone would increase from 10,000/yr to 30,000/yr at a 60% target and 60,000/yr at a 90% target. These levels of activity are not deliverable from the current resource pool, whether direct labour or contract;

We also expect issues to be raised over the accessibility of both individual and communal service positions. Even with the specific funding allowed by Ofgem for risers and laterals, we currently run only modest programmes in these areas. A major constraint here will be the need to negotiate with customers not just over outages and the provision of alternative accommodation, but also over the cost of what may effectively be a service alteration.

These practical delivery issues could well delay rollout, if it was necessary to deal with the service alterations as part of the accelerated delivery. However, we are confident that at least 60% of installations should be sufficiently straightforward to allow accelerated roll-out, although some hard-to-treat installations initiated during that period will not be resolved until later. Therefore, we suggest that a target of 60% in four years is achievable.

If it is accepted that some meter exchanges may have to be deferred until network issues are resolved, we expect an accelerated rollout of up to 80% of installations within four years to be deliverable. This would necessitate a higher proportion than 80% being targeted to take account of those properties where installation is subsequently postponed until service alterations could be made.

Appendix 2

Smart Meter Implementing Programme:

Prospectus

Responses requested by 28 October except for asterisked questions, where responses are requested by 28 September

Ofgem Ref: Smart Meter Prospectus

CHAPTER 2	
Question 1: Do you have any comments on the proposed minimum functional requirements and arrangements for provision of the in-home display device?	<p>In addition to the minimum requirements as presented, we believe that there would be consumer benefits associated with the ability to send short messages to customers. From a DNO perspective, such messages could be used to provide formal notification of planned outages or updates on progress of restoring supplies. This would be a more efficient means of providing the required notification than the present hand-delivery process.</p>
Question 2: Do you have any comments on our overall approach to data privacy?	<p>Addressing issues of data privacy and security to the satisfaction of both customer and industry is key to the successful implementation of a smart meter programme. We agree with the principle that consumers should be able to choose how their consumption data is used and by whom, except where the data is required to fulfil regulated duties.</p> <p>It is important that the wider societal benefits associated with smart metering and smart grids can be delivered. Section 9 of the Electricity Act 1989 places an obligation on DNOs to "...develop...an efficient, co-ordinated and economical system...." We therefore consider that data needed to deliver smart grids is required to fulfil regulated duties. It is clear however that the greater the extent to which access to data may be considered to encroach on individuals' privacy (for example real time information on electricity usage), the greater the level of security that will need to be accorded to that data.</p> <p>In order to establish which parties should have legitimate access to an individual data stream, it will be necessary to systematically consider each data element available from the smart meter, the latency associated with its availability and its intended use by the stakeholder concerned. This would establish a definitive requirement which would then need to be justified by that party. Even then access would only be permitted if that stakeholder could demonstrate (to the regulator) that it had systems in place to preserve the confidential nature of the data i.e. comply with a privacy code.</p>
Question 3*: Do you have any comments on the proposed approach to ensuring customers	<p>CE Electric UK agrees that if the anticipated smart meter benefits are to be delivered it is essential for the customer experience to be positive. We would</p>

have a positive experience of the smart meter rollout (including the required code of practice on installation and preventing unwelcome sales activity and upfront charging)?	<p>support the development an installation Code of Practice.</p> <p>Given that there may be a need for the DNO to visit a customer's premises as part of the overall smart meter installation process, it would seem reasonable for the Code to include potential DNO activities (e.g. hygiene factors) and the co-ordination of DNO activities (e.g. arranging visits by DNO staff) and hence for the DNOs to be involved (in a limited way) in the development of such a Code.</p>
Question 4: Have we identified the full range of consumer protection issues related to remote disconnection and switching to prepayment?	No CE Electric UK response.
Question 5: Do you have any comments on the proposed approach to smaller non-domestic consumers (in particular on exceptions and access to data)?	<p>CE Electric UK agrees with the aim that all non-domestic customers should ultimately have either smart or advanced meters. Care must be taken with the timetable for rollout, however, as many of the difficult cases may require service alterations to be taken by the DNO. As for domestic customers, this may have resource implications.</p> <p>We agree that it is sensible for the same principles of data privacy to apply to both domestic and non-domestic consumers. However if there is to be flexibility for suppliers not to use the DCC facilities for data transmission for non-domestic customers, there will be a need for the principles / privacy charter to be applicable to multiple data collection processes. Existing obligations e.g. for suppliers to provide DNOs with consumption data for tariff setting purposes, need to be maintained.</p>
CHAPTER 3	
Question 6*: Do you have any comments on the functional requirements for the smart metering system we have set out in the Functional Requirements Catalogue?	<p>The ENA via Engage has carried out a robust gap analysis to identify any key differences between the ENA functional requirements and those contained in the Smart Meter Prospectus. CE Electric UK has played a key role in the development and delivery of this document, which we hope the SMIP team will find helpful.</p> <p>The report includes a summary of the findings and these are developed further in the ENA response to the Ofgem consultation document. CE Electric UK fully supports the issues / comments raised in the ENA response.</p>
Question 7*: Do you see any issues with the proposed approach to developing technical specifications for the	<p>We agree with the proposed approach process for developing the technical specification. The main issues associated with this process are:</p> <ul style="list-style-type: none"> • The timescale available to refine and finalise

smart metering system?	<p>the functional requirements</p> <ul style="list-style-type: none"> Establishing the level of detail in the technical specification required so that it is sufficiently prescriptive to ensure technical interoperability. The challenging timescale available to develop the detailed technical specification from the functional specification – particularly given the wide scope of the issues that need to be considered and the number of stakeholders who have a legitimate interest
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?	No CE Electric UK response.
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?	<p>We agree. We have some reservations about the inclusion of supplier meter registration services within the initial scope of the DCC. Meter registration is an essential foundation of the settlements process and underpins the accuracy of settlements data. Any change in this process should be carefully considered. There may be simpler ways to improve the customer's experience of the change of supply process than centralising the supplier meter registration.</p> <p>There would however be value in including a central meter asset register in the initial scope of DCC to ensure it is clear across the industry who owns a meter and whether or not it is smart, recorded by MPAN.</p>
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?	No CE Electric UK response.
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)?	No CE Electric UK response.
Question 12: Does the proposal that suppliers of smaller non-domestic customers should not	Some smaller non-domestic customers may have a significant role to play in implementing smart grids, because of the higher capacity of their supplies, the

<p>be obliged to use DCC services but may elect to use them cause any substantive problems?</p>	<p>variety of their electricity profiles and a commercial interest in managing their energy requirements. DNOs will therefore wish to have access in due course to the same data sets (e.g. half hourly consumption) as for domestic customers. There is a danger that, if use of the DCC is optional, this information may not be made available or in a format that is consistent and customers themselves could lose the opportunity to benefit. Smaller meter operators may be able to handle data flows required initially but have difficulty in managing the step change needed for smart grid requirements. It needs to be made clear to meter operators what the initial data requirements are and how they might increase in due course as smart grids functionality is required. It will then be for the meter operator to decide whether to develop their own data communications apparatus or to use the services of the DCC.</p>
<p>Question 13: Do you agree with the proposal for a Smart Energy Code to govern the operation of smart metering?</p>	<p>We support the creation of the Smart Energy Code. It should however be extended to include a standard multilateral default Meter Asset Provision (MAP) agreement, signed up to by all suppliers and Meter Asset Providers (covering both gas and electricity meters). We would also propose a central Meter Asset Register under the code and the DCC to enable the tracking of smart meters to the appropriate MPAN.</p> <p>Arrangements in the electricity sector work well in general. However, some suppliers seem to be reluctant to sign new MAP contracts that reflect the current market structure. This risks discouraging market entrants, reducing competition and increasing prices for end users. It may be beneficial to create an overarching contract structure for smart meter asset provision. This could include central governance of a multi-party agreement to ensure that meters stay on the wall as long as possible and the meter owner receives the meter income it is entitled to on change of supplier.</p> <p>Current arrangements require multiple suppliers to sign multiple bilateral agreements with multiple MAPs. This can lead to unnecessary stranding where an agreement with MAP A has not been signed by a supplier B and a customer churns to that supplier.</p> <p>A contrast may be drawn here with the multi-party Distribution Connection (DCUSA) and Use of System Agreement, which was established as an efficient means of replacing multiple bilateral distribution use of system agreements (DUoSAs) between distributors and suppliers.</p> <p>A similar multi-party agreement could be established under the proposed Smart Energy Code with</p>

	<p>suppliers and MAP/MAMs required to sign up to a common form of agreement. This agreement would oblige suppliers to pay charges to the relevant MAP/MAM where a customer moved to that supplier. The agreement could be multi-party and binding on all parties who provide or take a MAP service or take the form of default terms that would come into play in the absence of a bilateral agreement between a MAP service provider and a supplier. These arrangements should assist national operation of the arrangements and smaller suppliers.</p> <p>From our limited understanding of the gas industry, it would seem that there is a significant incidence of newer gas meter owners not knowing where their meters are, which means that the meters may become stranded upon change of supplier. This potential risk to metering income could be a barrier to market entry. Our suggested central meter asset register would address this.</p>
Question 14: Have we identified all the wider impacts of smart metering on the energy sector?	No CE Electric UK response.
Question 15: Is there anything further we need to be doing in terms of our ensuring the security of the smart metering system?	No CE Electric UK response.
Question 16*: Do you have any comments on the proposals for requiring suppliers to deliver the rollout of smart meters (including the use of targets and potential future obligations on local coordination)?	No CE Electric UK response.
CHAPTER 4	
Question 17*: Do you have any comments on our implementation strategy? In particular, do you have any comments on the staged approach, with rollout starting before DCC services are available?	Whilst we recognise the wish to accelerate the smart meter implementation, there are clearly risks and costs associated with requiring smart meters to be installed in advance of the DCC becoming operational. There is a need to ensure that these additional costs do not outweigh the benefits. From a DNO perspective, to the extent that smart meter data is required in this interim period, it will need to be obtained directly from the range of suppliers. This will particularly be the case where there is a known specific requirement e.g. as part of a smart grid / LCNF project or where there is a known network problem.
Question 18*: Do you have any other suggestions on how the	We believe that accelerated rollout of up to 60-80% of meters in four years can be delivered, so long as it

rollout could be brought forward? If so, do you have any evidence on how such measures would impact on the time, cost and risk associated with the programme?	is accepted that premises where service alterations are needed may take longer than that to resolve. For further details see Appendix 1.
Question 19*: The proposed timeline set out for agreement of the technical specifications is very dependent on industry expertise. Do you think that the technical specifications can be agreed more quickly than the plan currently assumes and, if so, how?	Given the timescales there is a clear need to draw on all the relevant knowledge that has already been developed in other smart meter programmes, such as those in Europe and the US.
Question 20*: Do you have any comments on our proposed governance and management	No CE Electric UK response.

Appendix 3
Smart Meter Implementing Programme
Statement of Design Requirements
Response required by 28 September
Ofgem Ref: 94b/10

CHAPTER 3	
Question 1: Should the HAN hardware be exchangeable without the need to exchange the meter?	<p>The HAN technology needs to be sufficiently future-proofed to last for the lifetime of the meter, otherwise the ability of consumers to continue to use the HAN to manage consumption may be limited. Unless there is confidence about the ability of the HAN to provide enduring functionality it would be reasonable to explore the costs of providing the HAN in a modular form so that it could be exchangeable without the need to change the meter. Paragraph 4.12 identifies the possibility of needing to replace some HAN modules within the lifespan of the meter.</p>
Question 2: Are suitable HAN technologies available that meet the functional requirements?	<p>CE Electric UK is not in a position to comment on the suitability of HAN technology. However it would be worth reviewing the Illustrative HAN data volumes (Table 4) once the detailed functionality of the smart meter has been confirmed. Some data items e.g. microgeneration reads may need to be collected more frequently than indicated if microgeneration is to be used in actively managing networks.</p> <p>There is also a need to review the proposals for recording the electricity generated by microgeneration in order to enable the DNO to assess the latent demand on the network. At the moment it appears that the generation feed in tariff meter is not included within the scope of the smart meter system and so the detailed (half hourly) data on electricity generated will not be available.</p>
Question 3: How can the costs of switching between different mobile networks be minimised particularly in relation to the use of SIM cards and avoiding the need change out SIMs?	No CE Electric UK response.
Question 4: Do you believe that the Catalogue is complete and at the required level of detail to develop the technical specification?	<p>ENA commissioned Engage Consulting to document the comparison of ENA's requirements as detailed in the five previously issued ENA reports against those documented in the Prospectus. This comparison document is entitled: DECC / Ofgem Prospectus and ENA Requirements Comparison. Document Ref: ENA-ENACR012-001-1.0 and is attached to the ENA's consultation response, which is supported by CE Electric UK.</p> <p>A summary of the findings of the report is developed further in the ENA response to this consultation. CE</p>

	Electric UK fully endorses the issues / comments raised in the ENA response.
Question 5: Do you agree that the additional functionalities beyond the high-level list of functional requirements are justified on a cost benefit basis?	<p>CE Electric UK strongly supports the view that the availability of data for network planning purposes an essential part of the minimum functional requirement. This paves the way for the delivery of the smart grid benefits identified in the report carried out for the ENA by Imperial College on the benefits of smart grids.</p> <p>Regarding the inclusion of the 'Last Gasp' network outage functionality, we can appreciate the merits of the functionality from a customer perspective, but we do have concerns as to how this might work in practice. There are issues associated with ensuring that the system is reliable (immune to network outages) and of swamping communication and DCC/DNO systems for widespread outage. It would be worth reviewing the justification for this functionality.</p>
Question 6: Is there additional or new evidence that should cause those functional requirements that have been included or omitted to be further considered?	No CE Electric UK response.
CHAPTER 5	
Question 7: Do you agree that the proposed approach to developing technical specifications will deliver the necessary technical certainty and interoperability?	CE Electric UK agrees that technical interoperability is important if the full benefits from smart meters are to be delivered. Creating a cross industry forum for all relevant stakeholders to collectively develop the functional requirements does seem to be the most appropriate way of achieving this. Manufacturers and standards bodies would generally be best placed to be involved in the development of the detailed technical standards / protocols etc required.
Question 8: Do you agree it is necessary for the programme to facilitate and provide leadership through the specification development process? Is there a need for an obligation on suppliers to co-operate with this process?	<p>Given the tight timescale it does seem appropriate for the development of the technical specification to be included as part of the smart meter programme – the development of standards are a time-consuming process and there will be a need to strike a balance between the degree of detail required and the time available.</p> <p>It would be essential for suppliers to be involved in the development of the Functional Specification into a Technical Specification, if only to ensure that their requirements (i.e. those supplier-driven functional requirements that it is agreed should form part of the Smart Meter Functional Requirements) had been correctly interpreted by those developing the</p>

	Technical Specification. DNOs would also need a similar degree of participation in the process.
Question 9: Are there any particular technical issues (e.g. associated with the HAN) that could add delay to the timescales?	No CE Electric UK response.
Question 10: Are there steps that could be taken which would enable the functional requirements and technical specifications to be agreed more quickly than the plan currently assumes?	Given the timescales there is a clear need to draw on all the relevant collateral that has already been developed in other smart meter programmes in Europe and the US.
Other comments / observations	In section 3.39, the technical specification developed by the ENA contains details that are perhaps too detailed to be included as part of the functional requirements specification, yet would provide good collateral for inclusion in the Technical Specification as it is developed in the next stage of the project.
	In section 4.5, in addition to displaying consumption / demand metrics there is the opportunity for the IHD to be capable of displaying text messages from the supplier or the DNO (e.g. providing information on power outages). Consideration should be given to the ability to display such messages.
	In section 4.21, reference is made to the possibility of a 'trickle disconnection' facility in relation to pre-payment customers. Such a facility could also be useful for DNOs as a possible alternative to rota disconnection under emergency conditions, in order to share the available network capacity more fairly between consumers.
	4.27 -4.40 Facilitating Smart Grids CE Electric UK welcomes the recognition that the smart grid is likely to have in the development of electricity network and the role that the smart meter programme has in facilitating smart grids. We support the view that it is essential for information from the smart meter system to be available to DNOs so that they can plan and develop their LV and HV networks more effectively than at present.

Appendix 4
Smart Meter Implementing Programme
In home display

Response required by 28 October

Ofgem Ref: 94c/10

CHAPTER 2	
Question 1: We welcome views on the level of accuracy which can be achieved and which customers would expect, in particular in relation to consumption in pounds and pence.	No CE Electric UK comment.
Question 2: We welcome evidence on whether information on carbon dioxide emissions is a useful indicator in encouraging behaviour change, and if so, how it might be best represented to consumers.	No CE Electric UK comment.
Question 3: We welcome views on the issues with establishing the settings for ambient feedback.	No CE Electric UK comment.
Question 4: 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 CE Electric UK comment.
Question 5: We welcome evidence on whether portability of IHDs has a significant impact on consumer behavioural change.	No CE Electric UK comment.
Question 6: Do you agree with the proposed minimum functional requirements for the IHD?	In addition to the minimum requirements as presented we believe that there would be consumer benefits associated with the ability to send short messages to customers. From a DNO perspective, such messages could be used to provide formal notification of planned outages or updates on progress of restoring supplies. Further details are included in the ENA Smart Meter functional requirements document.

CHAPTER 3	
Question 7: Do you have any views or evidence relating to whether innovation could be hampered by requiring all displays to be capable of displaying the minimum information set for both fuels?	No CE Electric UK comment.
Question 8: Do you agree with the proposals covering the roles of and obligations on suppliers in relation to the IHD?	No CE Electric UK comment.

Appendix 5
Smart Meter Implementing Programme
Communications Business Model
 Response required by 28 October
 Ofgem Ref: 94d/10

CHAPTER 2	
<p>Question 1: Do you agree that access control to secure centrally-coordinated communications, translation services and scheduled data retrieval are essential as part of the initial scope of DCC?</p>	<p>CE Electric UK considers that these features should be provided in the initial scope of the DCC.</p> <p>Sections 2.26 and 2.44 indicate that the DCC would be required to manage scheduled data reads from suppliers. The ENA Smart Meter Functional Requirements and Use Case document sets out the scheduled and ad-hoc information that DNOs will require from smart meters via the DCC.</p> <p>The DCC must be required to provide data as requested / required by the DNO for regulated duties in addition to that required / requested by the supplier. Whilst there will be overlap between the data required by the supplier and the DNOs, their requirements will be different and DNOs' access must not be restricted to a subset of the information that suppliers use.</p> <p>For example, distributors will generally need access to half-hourly data, while we expect many smaller customers to be settled and billed on non-half-hourly data. Therefore, distributors may need more data (for fewer customers) than suppliers require (for all customers).</p>
<p>Question 2: Do you agree that meter registration should be included within DCCs scope and, if so, when?</p>	<p>CE Electric UK believes that it is essential for the good health of the entire settlements system that a robust meter registration process is in place. Great care must therefore be taken to fully understand the implications of changing the responsibilities of the registration process to ensure that data robustness is maintained. So whilst we are not necessarily opposed to the movement of the registration process to the DCC we are yet to be convinced that the benefits outweigh the costs and risks. A more thorough assessment would need to be prepared so that industry stakeholder can see the merits of this proposal.</p> <p>Supplier Meter Registration Service The SMRS and system are currently owned and maintained by the licensed DNO or IDNO accordingly. Currently all DNOs and three IDNOs use the Metering Point Registration System (MPRS) to fulfil the licence requirement of the provision of the SMRS. One of the arguments for centralising the registration process seems to be the "lengthy" change of supplier process. The registration of a supplier via the MPRS</p>

	<p>process is completed daily upon receipt of the required dataflow. There is then a subsequent 10 day lockout period where the current supplier can either agree or object to the change. If, as an industry, we are not happy with the length of time for negotiations to take place in the change supplier process then a simple change to the obligations is needed. The system can be implemented to do this, which would require approval via the MRASco board.</p> <p>The scale of implementing a change to all industry parties' registration services would need to be quantified and considered carefully. The registration service involves 30 external data flows. However, the system also needs to be populated with MPAN numbers (which a DNO is responsible for creating) and disconnection notifications (which a DNO is responsible for performing). The registration system covers much more than simply the change of supplier process and therefore it is difficult to see how centralisation of this service would provide the benefits to outweigh the industry costs.</p> <p>The registration service system is a key input to the non half hourly settlements process. The data is fed to the data aggregator who in turn provides this to the supplier volume allocation agent (SVAA) for settlements purposes. A further concern is the initial scope of this agent to include the domestic market only: we see no benefits in a partial central registration service.</p> <p>Central meter asset register Whilst currently we would not support transferring the registration service, there would be value in including a central meter asset register in the initial scope of DCC to ensure it is clear across the industry who owns a meter and whether or not it is smart, recorded by MPAN.</p>
Question 3: Should data processing, aggregation and storage be included in DCCs scope and, if so, when?	<p>Other than to ensure that data is in an agreed format, the DCC should not process or aggregate consumers' data. Agreed individual consumer data should be made available to the DNO, subject to appropriate safeguards being in place, for network planning purposes.</p> <p>If, contrary to our advice, meter registration is transferred to the DCC, DNOs would need further discussion about the degree of disaggregation required for network planning, tariff setting, and DUoS billing purposes.</p>
Question 4: Do any measures need to be put in place to facilitate rollout in the period before DCC service availability	<p>There needs to be a balance established between the benefits of advancing the smart meter roll out and the risks and costs of establishing interim processes.</p>

and the transition to provision of services by DCC, for example requiring DCC to take on communications contracts meeting certain pre-defined criteria?	DNOs will need to weigh the benefits of securing smart meter data in this interim period from a range of suppliers through an interim system compared with focusing efforts on developing systems associated with the enduring solution – i.e. a single point of access via the DCC. It may be more appropriate in the interim period for DNOs to seek to obtain data from individual suppliers where there is a known specific requirement e.g. as part of a smart grid / Low Carbon Network Fund project or where there is a known network problem.
CHAPTER 3	
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?	This seems a reasonable approach.
Question 6: Do you consider that DCC should be an independent company from energy suppliers and/or other users of its services and, if so, how should this be defined?	Provided that appropriate controls and governance arrangements are put in place to ensure that the DCC complies with its licence obligations, there does not need to be an explicit requirement for the DCC to be independent of existing industry stakeholders.
Question 7: Do you have any comments on the steps DCC would need to take to be in a position to provide its services and the likely timescales involved?	There needs to be a common interface to access responsive demand. One option for such an interface is for the DCC to provide demand response management services.
Question 8: Do you have any comments on the proposed approach to cost recovery and incentivisation for DCC?	<p>The cost recovery arrangements need to be developed so that all the industry stakeholders make an appropriate contribution towards the operation of the DCC. Given that ultimately the end consumer will fund these costs it is essential to make sure that the processes for establishing charges / allocating costs to the stakeholders is minimised as far as possible, whilst maintaining incentives for those parties who trigger costs to minimise them.</p> <p>If the charging methodology results in DNOs being charged for consumer-related data, there will need to be a mechanism in the DPCR for recovering these costs. We accept that the use of such data should enable DNOs to operate more efficiently, for example, to deliver network reinforcement projects more efficiently, but there are many uncertainties in this area. It is envisaged that some of these issues will be addressed through LCNF projects, but these are unlikely to deliver meaningful outputs before the</p>

	<p>DCC charging methodology is established. Areas of current uncertainty for the DNOs include:</p> <ul style="list-style-type: none"> • Establishing how to reduce to a realistic minimum the amount of consumers' data whilst still developing a reasonable view of the performance of a network e.g. by the use of up to date generic profiles, collecting data relating only to previously identified critical periods etc. • The new network issues that might be identified once more detailed network data becomes available. • Data flows are likely to change as the uses of smart meter and smart grid information develops with experience. <p>As the scope of the DCC is refined there will be a need to review the overall cost of operating the DCC and estimate the costs that are likely to be carried by each of the stakeholders – this will enable a view of the materiality for each stakeholder to be assessed, which may result in a review of the charging arrangements.</p> <p>Given the uncertainties associated with establishing a new regulatory entity, there needs to be governance arrangements in place to enable the charging arrangements to be reviewed as required.</p>
<p>Other comments / observations</p>	<p>In section 4.5, whilst it may be necessary to give suppliers flexibility not to use the DCC in the short term, we are of the view that it would make sense in the longer term for all metering data (both domestic and non-domestic) to be routed via the DCC. From a DNO network planning perspective, this would result in common data flows for all smart meter data and simplify data collection and in smart grid scenarios the issuing of control signals to consumers (i.e. via one route).</p>

Appendix 6
Smart Meter Implementing Programme
Data Privacy and Security
 Response required by 28 October
 Ofgem Ref: 94e/10

CHAPTER 3	
<p>Question 1: Do you have any comments on our overall approach to data privacy?</p>	<p>Addressing issues of data privacy and security to the satisfaction of both customer and industry is key to the successful implementation of a smart meter programme. We agree with the principle that consumers should be able to choose how their consumption data is used and by whom, except where the data is required to fulfil regulated duties.</p> <p>It is important that the wider societal benefits associated with smart metering and smart grids can be delivered. Section 9 of the Electricity Act 1989 places an obligation on DNOs to "...develop...an efficient, co-ordinated and economical system...." We therefore consider that data needed to deliver smart grids is required to fulfil regulated duties. It is clear however that the greater the extent to which access to data may be considered to encroach on individuals' privacy (for example real time information on electricity usage), the greater the level of security that will need to be accorded to that data.</p> <p>In order to establish which parties should have legitimate access to an individual data stream, it will be necessary to systematically consider each data element available from the smart meter, the latency associated with its availability and its intended use by the stakeholder concerned. This would establish a definitive requirement which would then need to be justified by that party. Even then access would only be permitted if that stakeholder could demonstrate (to the regulator) that it had systems in place to preserve the confidential nature of the data i.e. comply with a privacy code.</p>
<p>Question 2: We seek views from stakeholders on what level of data aggregation and frequency of access to smart metering data is necessary in order for industry to fulfil regulated duties.</p>	<p>We believe that free access to smart meter data by the DNO is a key deliverable from the smart meter programme. As mentioned above, Section 9 of the Electricity Act 1989 places an obligation on us to "...develop...an efficient, co-ordinated and economical system..." Using the best data available to inform the network planning process through which we discharge that obligation is part of our regulated duty.</p> <p>Aggregated data for all customers supplied from an LV feeder would provide information about the demand on the HV/LV transformer (and allow it to be actively managed) and the initial sections of the LV</p>

	<p>feeder, but little information on the loading further along the LV feeder, on teed sections or on individual service cables. The true smart grid requires interaction with the individual customer (e.g. for smart electric vehicle charging), and therefore consumer data that is not aggregated. Therefore, we are strongly of the view that DNOs should have free access to all half-hourly consumption / demand / voltage data for all customers without the need for customers to provide consent individually.</p> <p>DNOs need this information to be identified by individual exit point (address) and therefore this data could be considered to be personal. DNOs already have access to customer consumption data by premises. As and when more data becomes available from smart meters, we will also need access to half-hourly data by premises better to meet our obligations. Existing network planning tools use specific point loads at each exit point to calculate voltage profiles - the more advanced versions we propose to develop as part of our LCNF project (Customer-led Network Revolution) may need even more data. Delivering voltages within ESQCR limits is a legal obligation on us and therefore, a regulated duty.</p> <p>The documents on smart metering (e.g. Functional Requirements, Use Cases and Data Transfer analysis) prepared by the ENA provide considerable detail on the data that the DNOs consider to be required to meet their regulatory requirements. We would be happy, via the ENA, to work with the SMIP team to provide further clarification of the requirements set out in these ENA documents to address any specific data issues.</p>
Question 3: Do you support the proposal to develop a privacy charter?	CE Electric UK recognises that consumers have genuine concerns about the privacy of smart meter data and that a privacy charter would help to address those issues. We would be happy to assist the SMIP team develop the DNO-related issues addressed in such a charter.
Question 4: What issues should be covered in a privacy charter?	The charter needs to cover the issues that are summarised in section 2.17.
CHAPTER 4	
Question 5: Do you agree with our approach for ensuring the end-to-end smart metering system is appropriately secure?	We agree that the overall approach described in Chapter 4 is appropriate. In addition to the privacy and security of data relating to a customer, it is essential that the entire smart meter communication system is secure and not open to illegal access. This will become increasingly important as networks become more interactive. For instance, when the smart meter system is used to implement consumer

	demand response, the system will need to be secure against bogus command / control signals in addition to illegitimate data access.
Other comments / observations	<p>Contrary to what is asserted in section 2.1, DNOs do currently have access to consumption data for all customers on an individual basis. Actual readings for half-hourly customers, and estimated annual consumption for non-half-hourly customers, are provided as a copy of the flow between data collector and data aggregator.</p> <p>Distributors receive: half-hourly meter reads from data collection agents on behalf of suppliers; site-specific non-half-hourly data direct from suppliers; and non half-hourly aggregated data from the Supplier Volume Allocation Agent (SVAA). The first and last data sets are essential to allow DUoS billing. The half hourly data is also used to validate the accuracy of registration data which feeds into settlements via the SVAA. Smart metering would see half-hourly data created for all customers. However we understand it is not proposed to change the way the settlement process currently works, i.e. that smart metered customers may still be settled on a non-half-hourly basis. So, if we are to obtain the necessary information to enable smart grids, we cannot rely on the settlement system to provide this information.</p>
	In section 2.8, development of the SDR will no doubt clarify what information of benefit to the customer needs to be stored locally for 12 months. There is likely to be some data e.g. voltage, that need not be retained locally for such a period.
	In section 2.10, once the parties that are permitted to have access to particular data items have been established, it is important that the DCC has an obligation to make such data available.
	In section 3.3, CE Electric UK agrees that it is sensible for the same principles of data privacy to apply to both domestic and non domestic consumers. However if there is to be flexibility for suppliers not to use the DCC facilities for data transmission for non-domestic customers, there will be a need for the principles / privacy charter to be applicable to multiple data collection processes. Existing obligations e.g. for suppliers to provide DNOs with consumption data for network planning, tariff setting and billing purposes, need to be maintained.
	In section 3.19, the ENA Smart Meter Use Case documentation explains how the data would be used by the DNO and the information this would assist in the development of the DNO aspects of a privacy

	code.
	<p>In section 3.20, detailed half hourly data from the EHV network is currently made accessible for network planning purposes for a period of three years, after which it is archived, but remains available for detailed network studies requiring the assessment of trends. We would propose similar timescales for retaining smart meter data, unless the volumes of data meant that this was unrealistic.</p>

Appendix 7
Smart Meter Implementing Programme
Implementation Strategy

Response required by 28 September

Ofgem Ref: 94f/10

CHAPTER 2	
Question 1: Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?	<p>CE Electric UK agrees that in order to deliver the smart meter programme in the challenging timescale there needs to be a well defined and governed programme to ensure that all stakeholders are sufficiently engaged in the overall process. The terms of reference for all the groups (i.e. Consumer Advisory Group, Privacy and Security Advisory Group, Implementation Co-ordinating Group, Smart Meter Design Expert Group and Data & Communications Group) should be published. Their meeting notes should be made publicly available and a periodic 'newsletter' should be published providing information on the key decisions taken, documents published etc by these groups. This would enable stakeholders both directly and indirectly involved in the ongoing process to be kept up to date with current and emerging thinking.</p> <p>CE Electric UK is involved in some of these groups, via the ENA, and will contribute to provide support to the SMIP team.</p>
CHAPTER 3	
Question 2: Are there other cross-cutting activities that the programme should undertake and, if so, why?	The activities listed are important, but we have no further suggestions to add.
CHAPTER 5	
Question 3: Do you agree with our proposal for a staged approach to implementation, with the mandated rollout of smart meters starting before the mandated use of DCC for the domestic sector?	Whilst we recognise the wish to accelerate the smart meter implementation, there are clearly risks and costs associated with requiring smart meters to be installed in advance of the DCC becoming operational. There is a need to ensure that these additional costs do not outweigh the benefits. From a DNO perspective, to the extent that smart meter data is required in this interim period, it will need to be obtained directly from the range of suppliers. This will particularly be the case where there is a known specific requirement e.g. as part of a smart grid / LCNF project or where there is a known network problem.
Question 4: Do you have any comments on the risks we have identified for staged implementation and our	The smart meter manufacturers have a key role to play in making sure that the programme can be implemented. Section 5.38 indicates that the programme is for the smart meter technical

proposals on how these could best be managed?	<p>specification to be finalised by summer 2011 and the EU review to be completed by winter 2011 for implementation by the Secretary of State in 2012. Unless there is a high degree of confidence that the technical specification will be substantially unchanged between summer 2011 and early 2012, there are possibly fewer than 6 months for the manufacturers to make meters available for the commencement of roll out in summer 2012. This would appear to be a material risk to the delivery of the implementation plan.</p> <p>Also see response to Question 3.</p>
Question 5: Do you have any other suggestions as to how the rollout could be brought forward, including the work to define technical specifications, which relies on industry input?	No CE Electric UK response.
Question 6: Do you agree with our planning assumption that a period of six months will be needed between the date when supply licence obligations mandating rollout are implemented and the date when they take effect?	No CE Electric UK response.
Question 7: Do you have any comments on the activities, assumptions, timings and dependencies presented in the high-level implementation plan?	No CE Electric UK response.
Question 8: Do you have any comments on the outputs identified for each of the phases of the programme?	No CE Electric UK response.
Other comments / observations	<p>3.17-3.20</p> <p>Addressing issue of data privacy and security is key to the successful implementation of a Smart Meter programme. See our detailed response to the "Data Privacy and Security" document (Appendix 6).</p>

Appendix 8
Smart Meter Implementing Programme
Rollout Strategy

Response required by 28 September
Ofgem Ref: 94g/10

CHAPTER 2	
Question 1: Do you believe that the proposed approach provides the right balance between supplier certainty and flexibility to ensure the successful rollout of smart meters? If not, how should this balance be addressed?	<p>From a network perspective a geographical or area-based rollout program has distinct advantages in that it would enable the network benefits to be delivered in a more efficient and co-ordinated way, for example:</p> <ul style="list-style-type: none"> • Smart meter data could be used to help address local network problems • Outage management benefits would be more focussed • Educational initiatives associated with securing customer engagement would facilitate local development of network-driven demand response solutions • Co-ordination with smart grid projects would be facilitated • Planned service alteration work associated with DNO assets could be carried out more efficiently, although there is the risk for unplanned issues to arrive in unmanageable peaks. <p>However, given the supplier responsibilities for delivering the smart meter rollout, we agree that suppliers should have considerable latitude to establish their own rollout programme. As defined Approach 1 does not require the supplier to liaise with the DNO (although there is additional flexibility proposed in the later stages of the rollout to require further co-ordination). CE Electric UK is of the view that there should be an explicit obligation for the supplier to co-ordinate with DNO smart grid initiatives under the LCNF framework and in respect of any DNO service alteration works.</p>
Question 2: Would the same approach be appropriate for the non-domestic sector as for the domestic sector?	CE Electric UK is of the view that it would be reasonable for the same rollout approach to be applied to the non-domestic sector i.e. supplier-led with an explicit obligation for the supplier to co-ordinate with DNO smart grid initiatives under the LCNF framework and in respect of any DNO service alteration works.
Question 3: Is there a case for special arrangements for smaller suppliers?	No CE Electric UK response.
CHAPTER 3	
Question 4: What is the best way to promote consumer	No CE Electric UK response.

engagement in smart metering?	
As part of broader efforts, do you believe that a national awareness campaign should be established for smart metering? If so, what do you believe should be its scope and what would be the best way to deliver it?	No CE Electric UK response.
Question 5: How should a code of practice on providing customer information and support be developed and what mechanisms should be in place for updating it over time?	No CE Electric UK response.
CHAPTER 4	
Question 6: Do you agree with the proposed obligation on suppliers to take all reasonable steps to install smart meters for their customers? How should a completed installation be defined?	No CE Electric UK response.
Question 7: Do you think that there is a need for interim targets and, if so, at what frequency should they be set?	No CE Electric UK response.
Question 8: Do you have any views on the form these targets should take and whether they should apply to all suppliers?	No CE Electric UK response.
Question 9: What rate of installation of smart meters is achievable and what implications would this have?	No CE Electric UK response.
CHAPTER 5	
Question 10: Do you have any evidence to show that there are benefits or challenges in prioritising particular consumer groups or meter types?	No CE Electric UK response.
CHAPTER 6	
Question 11: Do you agree with our proposed approach to requiring suppliers to report on progress with the smart meter rollout? What information	No CE Electric UK response.

should suppliers be obliged to report and how frequently?	
CHAPTER 7	
Question 12: Do you agree that there is already adequate protection in place dealing with onsite security or are there specific aspects that are not adequately addressed?	CE Electric UK is of the view that existing measures to ensure consumers' physical security should be adequate for the smart meter programme. Where there is a requirement for CE Electric UK staff to visit a consumer's premises, the normal requirements as identified in paragraph 7.7 would be followed.
Question 13: Do you agree with our proposal to require suppliers to develop a code of practice around the installation process? Are there any other aspects that should be included in this code of practice?	Given the key role of the supplier in the rollout programme and the need to secure customer engagement, it is essential that the customer experience associated with the smart meter installation is positive. A code of practice would be a reasonable way of achieving this. Given that there may be a need for the DNO to visit a customer's premises as part of the overall smart meter installation process, it would seem reasonable for the code to include potential DNO activities (e.g. hygiene factors) and the co-ordination of DNO activities (e.g. arranging visits by DNO staff) and hence for the DNOs to be involved (in a limited way) in the development of such a code.
Other comments / observations	In section 1.3, a supplier-led rollout is likely to encourage a supplier to deliver the rollout in a way that is efficient for itself. Suppliers should be required to aim, as far as reasonably possible, to maximise the overall rollout efficiency and minimise the cost across all the industry parties.
	<p>In section 1.19, in addition to the demand for a smart grid being driven by the take-up of electric vehicles, it will also be driven by the installation of technologies such as heat pumps and microgeneration. The rollout of heat pumps and microgeneration can be triggered as part of housing refurbishment schemes and hence have an impact on a particular part of the LV network. Smart meters installed in these geographic locations would help to better understand the impact on the local LV network.</p> <p>CE Electric UK agrees that some outage management benefits will be delivered by a non-geographical role. However the full benefits of having complete information of customers experiencing a supply outage will only be realised when all customers in a geographical area have smart meters. Other outage benefits e.g. notification of planned outages are also linked to the completion of the roll out programme.</p>
	In sections 7.8 - 7.13, CE Electric UK agrees that there may be a need for DNO staff to visit customers'

	<p>premises as part of the smart meter installation process for the reasons as indicated in paragraph 7.8, but also if there are any other issues associated with the service cable or cut-out that it is unreasonable for the meter installer to deal with. The proportion of installations requiring such visits is as yet uncertain.</p> <p>CE Electric UK recognises the view of stakeholders expressed in paragraph 7.9 that DNOs could have "rapid response" teams working locally for installers to contact if they come across problems. We have, and will continue to maintain, rapid response staff to address immediate safety issues wherever found. However, we doubt that it will be efficient to keep other staff on stand-by awaiting reports of non-urgent issues identified by meter installers.</p> <p>We support the view proposed by ENA representatives in discussions under MOCOPA that we should respond to non-urgent network issues that delay meter exchanges, within a reasonable timescale.</p> <p>Suppliers and meter operators should be capable of addressing many issues associated with meter installation themselves. For example, some meters have been boxed in by customers making access to the meter difficult. However, not all of these will require a service alteration, i.e. relocation of service cable, cut-out and meter, in order to permit the smart meter to be installed. Instead, it may be more effective and less disruptive to the customer for the kitchen cupboard (or whatever has created the access restriction) to be temporarily partially dismantled to permit access.</p> <p>If it is agreed that relocating the service cut-out and meter to a new position in the customer's premises is the best solution, there will be a need to agree the details with the customer and the customer's electrician, etc. In this scenario the work needs to be carried out in a planned timely manner and rather than by a 'rapid response team' as an immediate response.</p> <p>CE Electric UK anticipates that the supplier or meter operator would take the lead role in co-ordinating the onsite activities with the consumer.</p> <p>The prospectus notes the lack of information on services, which makes it difficult reliably to project likely workload and hence efficiently set resources aside. We agree with paragraph 7.9 that the "...industry needs to find ways to anticipate problems and respond quickly when they occur...", but response needs to be <i>in an appropriate timescale</i> to any issues raised. DNOs need to anticipate the broad level of resource that will be required as part of the installation process, but it is impossible to anticipate</p>
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	<p>precisely what issues will arise where and when, due to the lack of information on services to which the prospectus refers. Requiring meter readers to carry out a 'survey' of service termination positions would be one way of gathering early information to help manage the risk and assist with the smooth running and planning of the rollout programme. This option should be investigated further.</p> <p>We welcome Ofgem's commitment in paragraph 7.13 "...to work closely with suppliers, metering agents, network operators and others to facilitate work on these issues...[including] changes to the Meter Operator Code Of Practice Agreement (MOCOPA), Ofgem-Approved Meter Installer (OAMI) Codes of Practice and the Meter Asset Managers' Code of Practice (MAMCoP)". As previously stated, we believe that continued engagement, with Ofgem's presence, under MOCOPA is the best way to resolve the issues.</p> <p>CE Electric UK agrees with the thrust of Ofgem's statement in paragraph 7.13 that there could also be an option to include obligations within the Smart Energy Code to define working arrangements between DNOs and suppliers. If the collaborative work under MOCOPA continues to be as constructive as it has been to date, we do not believe that any additional obligations will be necessary.</p>
	<p>In sections 7.17 – 7.19, CE Electric UK agrees with the concern expressed in the Prospectus that there may be generic situations where the installation of smart meters creates difficulties for suppliers and DNOs e.g. multi-occupancy buildings. We agree that there is a need to identify such situations and develop standard or generic co-ordinated solutions accepted by all suppliers which can be applied. When installing smart meters in such situations, there will be a need for increased co-ordination with the DNOs and suppliers. CE Electric UK is happy to work, via the ENA, with suppliers to identify and resolve such issues.</p>

Appendix 9
Smart Meter Implementing Programme:
Regulatory and Commercial framework
 Response required by 28 October
 Ofgem Ref: 94h/10

CHAPTER 2	
Question 1: Have we identified all of the key elements that you would expect to see as part of the Smart Metering Regulatory Regime?	Yes.
CHAPTER 3	
Question 2: Do you agree with the proposal to establish a Smart Energy Code?	<p>We support the creation of the Smart Energy Code. It should however be extended to include a standard multilateral default Meter Asset Provision agreement, signed up to by all suppliers and Meter Asset Providers (covering both gas and electricity meters). We would also propose a central Meter Asset Register under the code and the DCC to enable the tracking of smart meters to the appropriate MPAN. We believe that these arrangements would greatly assist national roll out arrangements and smaller suppliers.</p> <p>Arrangements in the electricity sector work well in general. However, some suppliers seem to be reluctant to sign new MAP contracts that reflect the current market structure. This risks discouraging market entrants, reducing competition and increasing prices for end-users. It may be beneficial to create an overarching contract structure for smart meter asset provision. This could include central governance of a multi-party agreement to ensure that meters stay on the wall as long as possible and the meter owner receives the meter income it is entitled to on change of supplier.</p> <p>Current arrangements require multiple suppliers to sign multiple bilateral agreements with multiple MAPs. This can lead to unnecessary stranding where an agreement with MAP A has not been signed by a supplier B and a customer churns to that supplier.</p> <p>A contrast may be drawn here with the multi-party Distribution Connection and Use of System Agreement (DCUSA), which was established as an efficient means of replacing multiple bilateral distribution use of system agreements (DUoSAs) between distributors and suppliers.</p> <p>A similar multi-party agreement could be established under the proposed Smart Energy Code with suppliers and MAP/MAMs required to sign up to a common form of agreement. This agreement would oblige suppliers to pay charges to the relevant</p>

	<p>MAP/MAM where a customer moved to that supplier. The agreement could be multi-party and binding on all parties who provide or take a MAP service or take the form of default terms that would come into play in the absence of a bilateral agreement between a MAP service provider and a supplier.</p> <p>From our limited understanding of the gas industry, it would seem that there is a significant incidence of newer gas meter owners not knowing where their meters are, which means that the meters may become stranded upon change of supplier. This potential risk to metering income could be a barrier to market entry. Our suggested central meter asset register would address this.</p>
<p>Question 3: Do you have any comments on the indicative table of contents for the Smart Energy Code as set out in Appendix 3?</p>	<p>We have proposed in answer to question 2 that the Smart Energy Code should also be extended to include a standard multilateral MAP agreement, signed up to by all suppliers and Meter Asset Providers (covering both gas and electricity meters). We would also propose a Meter Asset Register under the code and the DCC to enable the tracking of smart meters to the appropriate MPAN.</p> <p>The following comments relate to the scope of the Smart Energy Code as set out in Appendix 3:</p> <p>Appendix 3 section 1.1 Item 6 There is a need for the technical interoperability to include WAN functionality as changing a WAN module would require a site visit.</p> <p>Appendix 3 section 1.1 Item 15 CE Electric UK agrees that the DNO should have rights to receive consumption and other consumer-related data, subject to appropriate safeguards being in place. In addition to consumption data, and in order to pave the way for a smart grid and to provide outage management benefits, there is a need for DNOs to have a right to pass command / control signals to the smart meter and receive responses back from it.</p>
<p>Question 4: Do you have any comments on the most appropriate governance arrangements for the Smart Energy Code?</p>	<p>We have proposed in answer to question 2 that the code should be extended to include a standard multilateral MAP agreement, signed up to by all suppliers and MAPs (covering both gas and electricity meters) and the creation and maintenance of a Meter Asset Register under the smart meter code controlled and operated by the DCC to enable the tracking of smart meters to the appropriate MPAN. Meter asset providers should therefore be parties to the code, and the governance framework should include a sub-committee/panel to address MAP/supplier relationships on behalf of the main code panel.</p>

CHAPTER 4	
Question 5: Do you agree with the proposals concerning the roles and obligations of suppliers in relation to the WAN communications module?	No CE Electric UK response.
Question 6: We welcome views as to which other additional data items should be included in the mandated HAN data set beyond the list for the IHD.	In theory, all the consumer-related information available in the smart gas and electricity meter should be available to the customer via the HAN. Some of this information (e.g. export kW) may, however, not necessarily be available via the HAN, if for example the WAN module is located in the electricity meter whilst other data (e.g. gas consumption and electricity generated from microgeneration) will be transmitted via the HAN. We suggest that it would be reasonable to review the data sets available in the Statement of Design Requirements to establish which data sets the consumer could reasonably require to manage his energy consumption effectively. This would then identify the information that should be available via the HAN as it is the customer interface gateway.
Question 7: Do you agree with the proposal that the WAN and the HAN in customer premises should be shared infrastructure, with the installing supplier retaining responsibility for ongoing maintenance? If not, would you prefer to have an arrangement by which if the gas supplier is the first to install, responsibilities for the common equipment is transferred to the electricity supplier when the electricity smart meter is installed?	<p>The responsibility for provision and maintenance of the WAN and HAN modules is not an issue for a DNO. However, DNOs have an interest to ensure that the system is reliable as this will increase the availability of data and the ability to rely on smart grid functionality facilitated by the WAN / HAN. Whilst Option 2 (sharing of WAN and HAN assets) clearly has a number of advantages over other options, we believe that the consumer would prefer it if the ongoing responsibility for the WAN / HAN is simple and clear following installation. This would be the case if the electricity meter was the first meter to be installed in a customer's premises. While this could reduce the flexibility of suppliers to set their rollout programme (which could, in theory, delay implementation), this effect is unlikely to be material especially considering the enduring clarity benefits of option 3 (the electricity supplier has initial and enduring responsibilities).</p> <p>4.23 identifies that if a gas smart meter is installed first there would be a need for a power supply to be provided and that this would require the installer to have electrical skills. The provision of such a power supply may require internal modification to a consumer's electrical installation, which he would need to agree to. For some gas meter locations the provision of a mains power supply could be impractical.</p>

CHAPTER 5	
<p>Question 8: Are there additional measures that should be put in place to reduce the risks to the programme generated by early movers?</p>	<p>In our response to Ofgem's review of current metering arrangements (ROMA) we highlighted concerns and opportunities in the area of commercial interoperability. Commercial interoperability should be finalised early, for example concerning whether the costs of installation should be recovered within or outside meter rentals, in order to improve commercial certainty and reduce stranding risks for early movers.</p> <p>Similarly, an early lock-down of technical interoperability would also reduce stranding risks due to technical advances making early movers' meters obsolete.</p>
<p>Question 9: What is needed to help ensure commercial interoperability?</p>	<p>We agree with Ofgem on the importance of clarifying the arrangements for commercial and technical interoperability. We believe that obligations in key aspects of interoperability should be included in supply licence changes to ensure efficient arrangements for customers switching supplier and to avoid unnecessary meter changes. This will be good for customers changing supplier, help deliver a positive experience for customers in terms of smart meters in general and minimise early meter stranding risks leading to lower costs overall.</p> <p>We agree that the best way to ensure technical interoperability is to establish the meter technical specification as early as possible.</p> <p>A key aspect for smart grids will be that demand control functionality is compatible between suppliers. Both DNOs and other suppliers need the ability to access responsive demand, so interfaces should be common across the industry.</p> <p>The principles of commercial interoperability should be standardised with either installation costs being outside or inside meter rentals and not a mix of the two models.</p> <p>So far as our metering interests are concerned, CE Electric UK is purely a meter asset provider. Our current meter rental prices to suppliers only cover the capital cost of the meter asset and do not include any element of the cost of meter installation since we do not carry out this work. The main benefit of a charging model that excludes installation visits is that meter rentals are kept low. A further benefit of funding installation visits separate to meter rentals is that the separate transaction charges funded by suppliers for installing meters discourage early changes or unnecessary meter changes that can result in increased meter stranding. Reduced</p>

	<p>stranding leads to longer and more predictable asset lives and lower costs overall for the benefit of customers.</p> <p>There are also some benefits of a charging model which recovers the cost of the installation visit within the meter rental charge. In particular, the installation cost will be recovered from all users of the meter over the lifetime of the meter rather than funded by the one supplier who is responsible for the meter on the day of the meter change.</p> <p>Overall, however, we believe that the benefits of full commercial interoperability far outweigh the benefits of either charging model and would be happy for either model to be adopted as the standard throughout the industry. This would be preferential to the mixed approaches currently in use in today's market which leads to confusion and meter rental prices which vary widely from provider to provider.</p>
Question 10: 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 CE Electric UK response.
Question 11: Are there any other regulatory and commercial issues that the programme should be addressing?	We believe that standardised arrangements for commercial interoperability would benefit smaller suppliers and new entrant MAP businesses. In our experience access to meters for use by a wide range of suppliers, including smaller suppliers might best be achieved by ensuring effective commercial interoperability and an efficient trading arrangement for MAPs, thereby encouraging market participation by stand-alone MAP businesses.
CHAPTER 6	
Question 12: What evolution do you expect in the development of innovative time-of-use tariffs? Are there any barriers to their introduction that need to be addressed?	<p>Experience in the industrial and commercial markets shows that any half-hourly meter is capable of programming to any reasonable tariff structure. If efficient use of the distribution system is to be encouraged, meters will need to be able to aggregate consumption according to at least two tariff structures, for example a three-rate DUoS/TNUoS structure and a one- or two-rate supply structure.</p> <p>More radically, the efficient use of the distribution system could be better facilitated if distributors had the right to impose tariff structures upon suppliers, for example by obliging all capable meters to support a three-rate tariff.</p> <p>The extent to which customers' behaviour can be</p>

	influenced by innovative tariff structures is one of the areas to be investigated in CE Electric UK's Low Carbon Networks Fund bid.
Question 13: Are there changes to settlement arrangements in the electricity or gas sectors that are needed to realise the benefits of smart metering?	The introduction of smart metering will see more accurate and up to date meter readings available for settlement processes and calculations. Therefore, to realise the benefits we need to ensure this data is incorporated effectively into existing settlement processes and calculations where possible.
Question 14: What arrangements would need to be put in place to ensure that customers located on independent networks have access to the same benefits of smart metering as all other customers?	No CE Electric UK response.
Question 15: Are there any other industry processes that will be affected by smart metering and which the programme needs to take into account?	No CE Electric UK response.
Other comments / observations	
	In section 4.13, in addition to displaying consumption / demand metrics, the IHD should be capable of displaying text messages from the Supplier or the DNO (e.g. providing information on power outages).
	<p>In sections 5.17-22, there are currently obligations on suppliers under standard licence condition 12 to inspect not just meters but the associated installation, including service cable and cut-out. CE Electric UK takes the obligations under ESQC regulations 3 and 5 very seriously; in addition to relying on suppliers discharging their obligations, we also commission focused sets of inspection visits ourselves.</p> <p>The smart metering system does not have any functionality proposed to address the inspection of service cables and cut-outs, with the exception of the hot contact detection that has been considered by the ENA as a potential optional requirement. Any such functionality would probably need to be provided external to the meter and the indications of the cost were prohibitive. Such a detector would only identify one type of failure mode and would not, for example, identify damage to insulation, which creates a risk of electric shock.</p> <p>Therefore, we remain convinced that a robust inspection regime for services, cut-outs and meters is still required. We accept that a flat two-year interval</p>

	is likely to be wrong: in some circumstances, it may need to be much shorter. This is an issue where we are actively working with our colleagues across the industry under MOCOPA, and we look forward to continued fruitful discussions with suppliers and HSE.
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Appendix 10
Smart Meter Implementing Programme
Non-Domestic Sector
 Response required by 28 October
 Ofgem Ref: 94i/10

CHAPTER 3	
Question 1: Are there any technical circumstances where only advanced rather than smart metering would be technically feasible? How many smaller non-domestic customers have U16 or CT meters and what scope is there for full smart meter functionality to be added in these cases?	No CE Electric UK response.
Question 2: Do you agree with our proposed approach to exceptions in the smaller non-domestic sector?	We agree with the aim that all non-domestic customers should ultimately have either smart or advanced meters. Care must be taken with the timetable for rollout, however, as many of the difficult cases may require service alterations to be taken by the DNO. As for domestic customers, this may have resource implications.
Question 3: Are there technical circumstances that we have not considered that would justify further flexibility around installation of either smart or advanced meters?	See answer to question 2.
CHAPTER 4	
Question 4: Do you agree with the proposed approach that use of DCC should be optional for non-domestic participants in the sector?	Some smaller non-domestic customers may have a significant role to play in implementing a smart grid, because of the higher capacity of their supplies, the variety of their electricity profiles and a commercial interest in managing their energy requirements. DNOs will therefore need to have access in due course to the same data sets (e.g. half hourly consumption) as for domestic customers. There is a danger that, if use of the DCC is optional, this information may not be made available or in a format that is consistent, and customers themselves could lose the opportunity to benefit. Smaller meter operators may be able to handle data flows required initially but have difficulty in managing the step change needed for smart grid requirements. It needs to be made clear to meter operators what the initial data requirements are and how they might increase in due course as smart grid functionality is required. It will then be for the meter operator to decide whether to develop their own data communications apparatus or to use the services of DCC.

Question 5: If use of DCC is not mandated for non-domestic customers, do you agree with the proposed approach as to how it offers its services and the controls around such offers?	The arguments supporting the use of the DCC, in terms of interoperability, simplifying industry processes and facilitating a smart grid are strong. These requirements and the date for their implementation need specifying in detail at the outset. Meter operators currently offering services will need to keep these requirements in mind if they are to continue to offer competitive services.
Question 6 To what extent does our proposed approach to the use of DCC for non-domestic customers present any significant potential limitations for smart grids?	For the reasons set out above, this approach is not as straightforward as if the DCC was to be used. Care is needed to ensure DNOs and suppliers can easily access the necessary data.
Question 7: 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?	If suppliers already access the data set as defined in the minimum functional requirements for a smart meter in the Prospectus with the required degree of latency, then the provisions of DCUSA should be adequate. However, there may be information that is being recorded, or is capable of being recorded, in the meter, but not necessarily being accessed by the supplier, that is reasonably needed to meet DNOs' obligations to manage network investment efficiently and / or develop a smart grid. If so, there needs to be a requirement for this information to be made available to the DNO and customer. The best way to ensure this is a matter for lawyers.
Question 8: How can interoperability best be secured in the smaller non-domestic sector?	No CE Electric UK response.
CHAPTER 5	
Question 9: What steps are needed to ensure that customers can access their data, and should the level of data provision and the means through which it is provided to individual customers or premises be a matter for contract between the customer and the supplier or should minimum requirements be put in place?	Although advanced and smart meters that are installed may have the necessary functionality, it may be that the energy supplier may not actively collect all this information. Customers need to be able to access the totality of the data that is recorded by the meter.
Question 10: Do you agree with our approach to data privacy and security for non-domestic customers?	We agree that the same approach should be adopted for non-domestic customers as for domestic customers.
Question 11: Is the proposed approach to rollout (for example	We support the proposed approach to rollout. As for the domestic sector, there may be substantial

in terms of targets and a requirement for an installation code of practice) appropriate for the non-domestic sector?	number of properties where additional action by the DNO is needed. A flexible approach is needed to accommodate resource constraints.
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