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8 October 2010

Dear Stuart,

RE: Corona Energy Response to the DECC/Ofgem Smart Metering Prospectus

Corona Energy (CE) welcomes the publication of the joint DECC/Ofgem Smart Meter Prospectus detailing the government's plans for rolling out smart meters to every home and business in Great Britain.

CE has been working with Industrial and Commercial customers to deliver substantial energy efficiency savings using Business Smart technology (including SMS and Internet AMR solutions) for over five years. As well as being the market leader, CE was the first supplier to announce a full rollout of Business Smart technology across its entire customer portfolio.

CE believes the benefits Business Smart Metering solutions can bring are significant, with 40% of the expected carbon savings that can be realised by Smart Metering coming from this non-domestic sector.

As a member of ICoSS, CE has been working with other non-domestic suppliers to develop a vision for a fully competitive energy efficiency and smart metering market. In March 2010 ICoSS published a position paper that noted, to capture the benefits of today's Business Smart market, DECC & Ofgem needed to confirm four high level principles. These were that:

1. a CCP (DCC) regime will not be obligated on the I&C Sector;
2. the current market regime for the I&C gas market is not altered significantly;
3. the current Business Smart solution meets their objectives; and
4. the upgrade to the current settlement systems operated by the transporters provide the capacity needed by the Business Smart sector to ensure maximum rollout of the next generation of metering.



CE believes that the Smart Metering Prospectus has delivered a degree of certainty on the first two items which provides significant benefits to consumers and encourages the competitive Business Smart market.

CE recognises that a significant amount of work now needs to be completed to further define the requirements of a smart metering business model. Much of this work appears necessary to allow the domestic market to develop without impacting on supply competition or the consumer experience.

Despite significant questions remaining on the nature and scope of the DCC and specification of the Business Smart product, CE believes that the DECC/Ofgem Smart Metering Prospectus has moved the Smart metering debate forward significantly.

CE therefore welcomes the DECC/Ofgem Smart Metering Prospectus and looks forward to further productive dialogue with DECC/Ofgem in the future.

Annex I OFGEM Smart Metering Prospectus – Questions requiring a response by 28 September 2010 – Corona Energy Response Prospectus

Question 3*: Do you have any comments on the proposed approach to ensuring customers have a positive experience of the smart meter rollout (including the required code of practice on installation and preventing unwelcome sales activity and upfront charging)?

The experience that CE has of installation of Business Smart technology suggests that a significant part of gaining energy savings is for consumers to be able to a) Consider and understand the data and b) Understand what actions (this may be behaviour or investment) need to be taken to improve their energy efficiency. This would suggest that in the domestic market it could be unwise to provide tailored advice to the consumer at the time the meter is fitted (as the smart data would be unavailable). Rather advice should be provided to help the consumer understand the smart data (this could be supplier specific) and what energy efficiency options are available to domestic consumers (this could be generic).

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?

Generally CE agrees with the requirements set out with two exceptions:

Time based tariffs (gas only) – While CE understands and agrees with the logic around time based tariffs for electricity it is unsure of the logical rationale for gas. Given that time based tariffs are not economic in gas for the very largest of consumers it is unclear how/why they would be economic for small consumers. Additionally the gas market does not and does not intend to trade in a frequency greater than a day and therefore there is no logical basis for suppliers to price.

HAN – CE would question the relevance and benefit of the HAN to the Business Smart market. While the HAN would be beneficial to some smaller businesses, for many it would be irrelevant. Many small businesses already operate in premises with BMS and energy efficiency systems. These usually operate in the gas market by the utilisation of the gas meters pulse output. As the domestic sized smart meter will not have a pulse output these consumers are likely to prefer an 'advance' (pulsed meter and AMR) solution. Additionally the HAN solution assumes a domestic sized premise in its coverage.

CE would suggest that rather than mandate the HAN for the Business Smart market that consumers be allowed a choice. This would avoid the situation where to comply with this requirement a supplier removes existing Business Smart technology and replaces it with a smart meter and as a consequence reduces the energy efficiency of the customer by cutting off the customers' existing energy management technology.

Control Valves - Concerns still exist around the provision, maintenance and use of a control valve in gas meters. It is still of concern to CE that this technology may prove to be problematic both technically and operationally and that in the medium to long term the costs will outweigh the benefits.

Data Location - The specification requires a year of half hourly data to reside on the meter and to be accessible via the DCC. It appears to CE that this model creates a number of issues. How does this data get transferred to the new meter during an exchange? What happens if the meter becomes faulty (other similar technology suggests this is a likely occurrence)? Who should have access to the data on change of tenancy and how can this be controlled?

Experience of the AMR market suggests that the provision and protection of this data would be more efficient and manageable if it were held centrally. New meters could have the consumption from previous meters downloaded centrally and it would reduce the chance of lost data and therefore a poor consumer experience.

Question 7*: Do you see any issues with the proposed approach to developing technical specifications for the smart metering system?

CE support the approach outlined. CE would recommend the use of open standards wherever possible (including the meter/WAN interface) as this should lead to the fewest barriers to entry for the meter manufacturers and other interested parties in the HAN/WAN sphere of influence.

CE would like to use this opportunity to express some minor concerns that there appears a focus on domestic and electricity requirements. Requirements for I&C gas technical specifications will need to be different if they are to operate efficiently.

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)?

Given that most suppliers in the gas I&C market have pre-existing rollout strategies the creation of an obligation here would seem undue. In this market the main driver for the rollout of AMR is consumer choice which is often motivated by CRC, EUETS or other existing government energy efficiency schemes.

As consumers in this market are usually geographically spread the argument for a 'local' rollout is reversed. The lowest cost/impact rollout strategy for the consumer in this market is usually for all of their premises to be converted at the same time across the whole country. CE therefore believes that I&C suppliers should be exempt from such a mandate and the competitive Business Smart market should be allowed to continue to deliver benefits based on existing consumer motivation which ensures that the consumers with the greatest energy efficiency gains (such as consumers that are part of the CRC) get Business Smart metering first.

The larger domestic suppliers are better placed than CE to comment on the benefits/costs of a coordinated rollout strategy for their consumers. CE recognises however that smaller domestic suppliers are likely to find the costs of a mandated rollout are likely to significantly outweigh the benefits. Their ability to negotiate reasonable charges for installation in such circumstances would be limited. Such a mandate would therefore place smaller suppliers at a significant commercial disadvantage.

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?

If implemented well such a strategy could have benefits. It would allow the domestic smart meter rollout to begin in advance of the DCC beginning in place.

CE would note however that Ofgem/DECC should be mindful to ensure that such a strategy is not used as an opportunity to affect energy supply competition and tie a customer to a particular supplier. Were this to happen CE believes it could impact on consumer confidence in both the supply market and in smart technology. One means of avoiding this problem may be for suppliers in the domestic market that are fitting 'single box' smart meters to only do so during the interim period where consumers have expressly provided permission and has been made aware of the interoperability issues.

Question 18*: Do you have any other suggestions on how the rollout could be brought forward? If so, do you have any evidence on how such measures would impact on the time, cost and risk associated with the programme?

The provision of an exemption for the non-domestic market from the DCC has already provided a greater degree of confidence in the competitive Business Smart market. This market is already rolling out AMR across its consumers.

It is not clear currently if/how such an exemption could operate practically in the domestic market for the larger suppliers without impacting on supply competition. Given that all of the 'big 6' suppliers will have to support an optional model for the 'opted out' or 'advanced' sites that their non-domestic I&C businesses encounter, it would appear reasonably possible for them to consider such an exemption for the smaller 'sub 50,000' domestic suppliers. If considered appropriate this could allow them to rollout smart meters in advance of the smart meter design being finalised without fear of stranding as meters that subsequently are not compliant with the final smart specification could be replaced at the end of the rollout period.

Where domestic 'one box' smart meters are fitted then it is important to manage the customer experience and expectations. CE note that despite issues existing where consumers move from a niche small domestic supplier (such as First Utility) to another supplier, that these customers understand that not all suppliers can support the new smart technology and that they may not get the cheapest tariff available. CE believes this is because the customers that have a smart meter are generally well informed by the small suppliers and it is their active choice to have a smart meter service. This limits the impact on consumer confidence of issues caused by early adoption.

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?

The existing timeline appears highly challenging. Using the RGMA design process as a benchmark (this took over four years, had less of a commercial impact on the market and involved fewer parties) would suggest that the timescales are unlikely to be achieved.

Despite this CE believes it is the correct strategy to agree the technical specifications as quickly as possible as this will provide the largest amount of time for suppliers to implement the designed solution.

CE has some concerns that a push to establish a highly technical interim interoperability solution could divert resources away from providing the final solution as quickly as possible.

Question 20*: Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?

Given the challenging timescales CE agrees that DECC/Ofgem need to manage the implementation of this policy.

Statement of Design Requirements

Question 1*: Should the HAN hardware be exchangeable without the need to exchange the meter?

In the I&C market gas suppliers have resorted to changing meters due to the lack of a dependable pulse being available. As well as significantly increasing the costs of increasing the functionality to the consumer this is also inconvenient as the gas has to be off during this period.

Some gas meters can have pulse models installed/replaced, avoiding the costs and inconvenience of a meter exchange. Were the HAN hardware exchangeable this could have similar benefits in the future.

Question 2*: Are suitable HAN technologies available that meet the functional requirements?

CE is aware of a number of potential existing standards but has no preference for a particular standard. CE would encourage Ofgem/DECC to listen to the advice of Energy Efficiency service providers and their trade associations such as ESTA.

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?

Making the WAN/mobile module easily exchangeable should provide a commercial incentive for existing communication service providers to offer reasonable terms.

Question 4*: Do you believe that the Catalogue is complete and at the required level of detail to develop the technical specification?

CE believes the approach taken by DECC/Ofgem is correct and is at the right level of detail to develop the specification.

I&C suppliers are highly likely to use 'domestic smart' specification meters where this size of meter is required as economies of scale are likely to make this option the most economic. These meters would have all the functional specifications to be able to operate within the domestic market if the use of the property changes.

*CE believes that the use of the HAN module should be optional for all I&C customers however. In many case consumers will prefer a single Business Smart solution and/or a solution which utilises a pulse output to integrate into existing BMS and energy efficiency technology. **CE strongly advocates that the choice of solution should be within the control of the consumer in this sector.***

Were DECC/Ofgem to mandate the HAN solution then this would lead to sub optimal metering solutions being introduced and would constrain the ability of consumers to introduce appropriate energy efficiency solutions. In certain cases this could actually decrease the energy efficiency of the consumer.

Question 5*: Do you agree that the additional functionalities beyond the high-level list of functional requirements are justified on a cost benefit basis?

CE supports a commercial model that mandates a minimum set of functionality to deliver the mandated requirements of a smart solution. This will allow evolution of innovative solutions to the market. It is not clear that the additional functionalities would impact on this and therefore if the cost benefit suggests they should be included then it would be logical for DECC/Ofgem to do so.

Question 6*: Is there additional or new evidence that should cause those functional requirements that have been included or omitted to be further considered?

The 'Last Gasp' functionality appears largely inefficient and difficult to implement.

CE believes that the design of the WAN may provide an opportunity to provide similar functionality at a lower price via a service availability check and by checking the service management logs at the local nodes.

Additionally supports the ESTA view that a pulse output should be provided on all smart meters to allow an easy interface with existing technologies that use the pulse for energy efficiency purposes (e.g. BMS systems).

Question 7*: Do you agree that the proposed approach to developing technical specifications will deliver the necessary technical certainty and interoperability?

Yes. The timescales may prove challenging however and consideration should be given to timely decision making throughout.

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?

Yes DECC/Ofgem need to provide strong leadership to implement the government's policy objectives. Suppliers are unlikely to require an obligation to cooperate as the ultimate changes to their supply licences should provide sufficient incentive to be engaged in the process.

Question 9*: Are there any particular technical issues (e.g. associated with the HAN) that could add delay to the timescales?

There are a large number of technical issues that could create problems. Given the size of the project, the greater the level of complexity built into the entire solution, the greater the opportunity for delay.

From experience of developing AMR solutions, CE believes that these technical issues should all be resolvable but this is likely to take time. CE therefore advise DECC/Ofgem to ensure they have a well defined strategy and process for decision making around such issues that allows swift resolutions.

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?

The current plan appears to be the shortest route possible to set the requirements and specifications. CE fully supports the approach taken by DECC and Ofgem.

Implementation Strategy

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?

CE agrees with the Governance principles put forward. It believes it would be possible to add an additional principle that ensures the smart metering programme promotes the maintenance of fully competitive energy efficiency and energy supply markets.

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

CE is keen for any regulation resulting from the smart metering roll out to better align and account for other carbon management regulation. We would therefore ask that the following areas are also considered as part of the implementation strategy:

- *CRC Energy Efficiency Scheme*
- *Feed-in Tariffs and the Renewables Obligation*
- *Proposed Renewable Heat Incentive*
- *Electric vehicles*
- *Onsite generation and micro-generation*
- *Distribution network strengthening*

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?

If implemented well such a strategy could have benefits. It would allow the domestic smart meter rollout to begin in advance of the DCC beginning in place.

CE would note however that Ofgem/DECC should be mindful to ensure that such a strategy is not used as an opportunity to affect energy supply competition and tie a customer to a particular supplier. Were this to happen CE believes it could impact on consumer confidence in both the supply market and in smart technology.

One means of avoiding this problem may be for suppliers to only fit smart meters in the interim where consumers have expressly provided permission and where they have been made aware of interoperability issues.

Question 4*: Do you have any comments on the risks we have identified for staged implementation and our proposals on how these could best be managed?

As above

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?

It seems highly unlikely that a domestic smart metering rollout could be advanced any sooner.

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?

If the changes include significant changes to industry processes and systems, six months appears too short a time for suppliers to be able to respond. Many smaller suppliers will be reliant on external service providers to make changes to system to be able to be compliant. Under this timescale CE therefore believe that it is highly likely that a number of smaller suppliers would not be ready.

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

The timescales appear overly ambitious and therefore are at a higher risk of delay.

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

None

Rollout Strategy

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?

CE agree with the approach proposed with an exemption for I&C and small suppliers. The larger domestic suppliers may be better placed than CE to comment on the benefits/costs of a coordinated rollout strategy for their consumers.

CE recognises however that smaller domestic suppliers are likely to find the costs of a mandated rollout are likely to significantly outweigh the benefits. Their ability to negotiate reasonable charges for installation in such circumstances would be limited. Such a mandate would therefore place smaller suppliers at a significant commercial disadvantage.

Question 2*: Would the same approach be appropriate for the non-domestic sector as for the domestic sector?

No this approach would not be appropriate for the non-domestic sector. Given that most suppliers in the gas I&C market have pre-existing rollout strategies the creation of an obligation for this sector would appear undue. In this market the main driver for the rollout of AMR is consumer choice which is often motivated by CRC, EUETS or other existing government energy efficiency schemes.

As consumers in this market are usually geographically spread the argument for a 'local' rollout is reversed. The lowest cost/impact rollout strategy for the consumer in this market is usually for all of their premises to be converted at the same time across the whole country. CE therefore believes that I&C suppliers should be exempt from such a mandate and the competitive Business Smart market should be allowed to continue to deliver benefits based on existing consumer motivation which ensures that the consumers with the greatest energy efficiency gains (such as consumers that are part of the CRC) get Business Smart metering first.

Question 3*: Is there a case for special arrangements for smaller suppliers?

Yes. Smaller domestic suppliers are likely to find the costs of a mandated rollout are likely to significantly outweigh the benefits. Their ability to negotiate reasonable charges for installation in such circumstances would be limited. Such a mandate would therefore place smaller suppliers at a significant commercial disadvantage.

Question 4*: What is the best way to promote consumer engagement in smart metering? As part of broader efforts, do you believe that a national awareness campaign should be established for smart metering? If so, what do you believe should be its scope and what would be the best way to deliver it?

CE believes customer awareness and engagement is key to making real energy savings from smart data. Customers and retailers need to understand how this data can be used to assess energy efficiency products against customer needs.

A separate group should be established with representatives for all key stakeholders to advise on any communication and to ensure communication is evidence based.

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?

CE would propose that a management board is set up to manage the code of practice. Members should be drawn from the supply industry, meter operators and managers, technology providers, energy management professionals and consumer bodies. An organisation such as ESTA would be ideal to take on management of this code of practice, facilitate its creation and change management.

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?

CE agrees that smart meter installation should be the obligation of suppliers. I&C suppliers should not be obligated to use the DCC but should be required to provide a Business Smart meter with a HAN where technically possible if a customer requests one.

The proposal to appoint a 'lead supplier' is understood but may lead to contention in the future where the WAN fails. This will be particularly relevant where suppliers are not providing dual fuel. DECC/Ofgem should be careful to ensure the right commercial incentives operate to keep the WAN functional rather than relying on supplier obligations.

Question 7*: Do you think that there is a need for interim targets and, if so, at what frequency should they be set?

CE assumes that I&C suppliers and small suppliers would be exempt from any targets.

With regards to the domestic market, CE believes interim targets may prove counterproductive. In contrast continual dialogue with industry participants will ensure issues are identified and addressed as early as possible without a blame culture developing.

Question 8*: Do you have any views on the form these targets should take and whether they should apply to all suppliers?

No targets should be set. If targets are introduced they should not fall on I&C or small suppliers.

Question 9*: What rate of installation of smart meters is achievable and what implications would this have?

CE is unable to answer this question but believes there is a significant risk that the rollout of I&C Business Smart technology will be impacted by a resource drain due to the domestic programme.

Question 10*: Do you have any evidence to show that there are benefits or challenges in prioritising particular consumer groups or meter types?

All CE's experience in the last 5 years of implementing AMR solutions suggests that the level of engagement of the customer has a significant impact on the level of energy efficiency savings. It is logical to suggest the same correlation would exist in other groups of consumers.

Question 11*: Do you agree with our proposed approach to requiring suppliers to report on progress with the smart meter rollout? What information should suppliers be obliged to report and how frequently?

Larger suppliers should report progress in a very simple format monthly (for example % of portfolio). All suppliers should report in a more detailed format quarterly and suppliers should also meet quarterly to discuss progress, issues and developments. This should continue until full rollout is achieved.

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?

Violence towards metering staff is not a new issue and should therefore not need to be specifically addressed by this programme

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?

A code of practice that applies to domestic suppliers seems to be a valuable concept. Any standards that are valuable to consumers should be added to the ASPCoP for the I&C Business Smart market.

Annex 1 – Energy Suppliers

PLEASE NOTE THE FOLLOWING RESPONSE IS PRIVATE AND CONFIDENTIAL

Question 1*: For your supply business, please provide the actual and projected number of gas and electricity smart metered and non-smart metered supply points in Great Britain broken down into domestic and smaller non-domestic sites³ for the following years:

Corona Energy's portfolio is approximately 60,000 meters of which around 15,000 are domestic sized meters. We would expect the majority of the domestic sized meters to be replaced with smart meters and a small number to have Business Smart compliant AMR. All of the larger meters would be expected to have Business Smart compliant AMR. We are currently already working on actively rolling out AMR to the majority of these sites.

Question 2*: For the purposes of our analysis, we have identified three broad areas of costs to an energy supply business during rollout: Unit costs of metering and communications assets (including the IHD) and Installation costs including related logistical and marketing costs Other costs (changes to back office/IT systems). For each of these areas, we welcome feedback on the impact of accelerating the rollout on:

- a) the magnitude, timing and probability of any increased costs and risks; and
- b) the likelihood of any supply chain, or other, constraints arising.

CE believes one of the greatest risks that faces energy supply businesses in this area is the ability of its service providers to deliver within the timescales.

If a mandate exists on suppliers to rollout smart meters then the combination of a shortage of trained engineers and/or assets could significantly increase the costs of smart meter installations.

As the gas supplier may be the 'lead supplier' it is also likely that all existing gas engineers will be required to undertake training to be able to install or maintain the WAN module as the existing gas accreditations do not currently cover electrical work of this nature. **This may be a significant issue that appears not to have been adequately addressed.**

Experience of operating in the AMR market for over 5 years has demonstrated that service providers have been constantly challenged to cope with increased volumes. CE believes that unlike other mature markets, the AMR/smart metering market is unable to respond quickly without there being a significant impact on the quality of service offered.

CE does not share the confidence expressed by many service providers in their ability to deliver once a mandated rollout is announced. CE believes that the I&C market is likely to be an afterthought for many meter manufacturers and it may take several years before U16 sized smart meters are available at commercially viable prices.

CE notes that it was due to these concerns with service delivery that it developed its own in-house service for AMR (which was then demerged from the gas supply business).

It was issues with access to I&C metering resources to support the rollout of AMR that caused CE/Macquarie to first partner with and then invest in Energy Assets Limited (EAL).

Please note that during other industry metering projects (such as the Transco black spot meter replacement programme) prices for labour increased significantly. Given the size and nature of this programme it does seem highly likely that costs for labour will increase considerably.

Question 3*: Please give details on whether accelerating the rollout will allow earlier delivery of supplier benefits (e.g. reduced need for multiple back office systems) and at which point during rollout these savings will commence.

Accelerating the rollout may bring benefits to consumers where they are engaged. It seems unlikely however that suppliers will see the benefits that some envisage.

As an early mover, CE has invested significantly in systems and processes to support AMR/smart functionality. The benefit to CE in being an early mover has not been through cost savings but through the use of the early mover advantage as a marketing tool.

For the first 3 - 4 years the cost of supporting AMR/smart customers was greater than supporting non-AMR customers. Due to economies of scale and system changes this situation has now changed and the costs are similar.

Part of the reason for this is due to industry systems and processes not supporting the daily balancing of AMR/smart customers and the costs of implementing new systems to support AMR/smart technology.

Given the above, CE believes it is highly likely that supplier costs increases will be passed through to consumers through differential charging for supply points with smart meters in the domestic sector. This appears less likely in the I&C sector as customers will retain the choice to purchase smart/AMR technology direct from the competitive market.

Question 4*: Please outline the processes and projected timescales required to ensure readiness for the start of the mass deployment of smart meters in the following areas:

a) Procurement of smart metering components (from confirmation of technical specification to delivery of components):

- Smart electricity meter
- Smart gas meter
- In-home display
- WAN communications module
- HAN communications chip
- Any other components

CE would be entirely dependent on its service providers such as EAL and Technog in this area

b) Recruitment, development and training of gas and electricity smart meter installers, including details on the following points:

- Existing and projected installer capacities
- Recruitment strategy (e.g. any plans to recruit qualified installers or train unqualified applicants)
- Sourcing strategy (e.g. direct employees or contracted staff)
- Cost of training each installer
- Length of time to train each installer

CE would be entirely dependent on its service providers such as EAL and Technolog in this area. It notes however that I&C gas meter engineers are usually trained from the existing pool of domestic meter engineers. It may be harder therefore for the I&C market to tempt new engineers to its market during a full aggressive domestic rollout. Even without the effects of an obligation in this particular market, it would seem highly likely therefore that the costs of engineering will increase in the I&C market.

*As the gas supplier may be the 'lead supplier' it is also likely that all existing gas engineers will be required to undertake training to be able to install or maintain the WAN module as the existing gas accreditations do not currently cover electrical work of this nature. **This may be a significant issue that appears not to have been adequately addressed.***

c) Preparation of your business's back-office/ IT systems, including details of any dependencies.

CE will again be highly dependent on its service providers having time to respond. The time required will also largely depend on the size and nature of the changes envisaged.

If the model 1 'Thin' model is advanced then CE believes that a relatively short implementation should be possible. The advice is that this could be six months (three months build time and three months testing and fixing).

If the other models are changed then CE advises that considerably more time would be required. CE believes this would be in excess of a year (six to nine months build time and six to nine months testing and fixing).

Both of these timescales assumes full knowledge of the technical specification during the build phase with minimal changes during testing and fixing.

CE is unable at this time to assess the costs of such changes. It notes however that the cost of developing the changes for the thin model are likely to be significantly less than those for the thicker models.

d) Testing of rollout activities, including details of any trials you are conducting/planning to conduct, and how results from these trials will inform your rollout strategy.

CE does not believe that time is needed to conduct trials for its market sector as much of the AMR technology is already mature.



New technology usually requires at least six to nine months of testing before full active rollout is viable.

e) Any other elements, including logistical and marketing preparation.

Time will be required for technology providers to understand the specifications, design, build, test and certify any new devices

Question 5*: Please explain your rollout strategy for each of the below phases with consideration given to the following: geographical specificities; customer group prioritisation (e.g. PPM customers, high users); planned installation rates for each phase; and any other relevant aspects.

a) 'Pre-rollout' – the period before mandated rollout;

b) 'Ramp-up' – the period commencing with mandated rollout (e.g. summer 2012 according to current planning assumptions) which runs until maximum installation volumes are achieved;

c) 'Maximum volume' – the period over which maximum installation capacity is achieved with a broadly consistent level of resourcing.

I&C suppliers should be exempt from any such phases. CE notes that it was announced that it was rolling out AMR to the majority of its meterpoints back in 2009. It can confirm that it has currently completed the provision of current generation gas AMR to approximately 25 percent of its portfolio. Assuming the current speed of rollout can be maintained and there is no churn in assets, this would mean that the remainder of its portfolio would be completed by 2014.

Question 6*: Please explain how you plan to deploy smart meter installers during rollout. For example, will a single installer fit all smart metering equipment within the premises or will various different skilled installers work together in a team? Please include details of any geographical differences.

An existing installation usually requires one or two metering engineers to fix/repair/replace the meter to ensure pulse provision and one engineer to fix the AMR.

Question 7*: Please provide an estimate of how many smart meters will be installed on a daily basis by an individual installer or an installation team (if as a team, please include number of installers in a team).

In the I&C market the installation time can vary dependent on the size and complexity of installation. The largest installations can take days or weeks and others can take minutes.

Question 8*: Please provide a breakdown of the projected time spent on each task during an installation (e.g. travel time, time spent on unsuccessful visits, smart meter install, IHD install, customer education). Please include details of any geographical differences.

We have no ability to judge this at this time.

Question 9*: What proportion of the customer base is likely to be 'hard to reach' (i.e. pose specific technical or other problems that will increase installation costs and timescales)? Please outline any plans you have developed to deal with 'hard to reach' customers.



Experience of installing AMR would suggest that the proportion of 'hard to reach' customers is around one in six. This includes meterpoints that are located in basements and other radio blackspots.