Our Ref: AA-2/URN:10D/732

28 October 2010

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Dear Margaret

ESTA 2nd stage response to DECC/Ofgem consultation ref: 10D/732 on the Smart Meter Implementation Programme

Please find attached our final responses to the remaining consultation questions.

In order to collate our response to this very important project we have:

- Briefed all members through meetings and our members' website.
- Meeting to discuss implications of the prospectus.
- Draft response circulated to all members with facility to respond.
- ESTA conference including demand side end users and other non-ESTA members to explore the broader views.
- Collation of final response.

We believe the output to be a balanced view of the demand side issues, offered for your consideration. As always, we will be pleased to explain and develop any of these views further and to further help to encourage a demand side response to the whole project.

We would also like to clarify our use of the term 'legacy' in our earlier response to the prospectus. This is needed as feedback from members indicates that some of the parties involved in the working groups and elsewhere may be misinterpreting our use of this term.

We are not using 'legacy' to suggest an older or outdated technology. Nor are we using it as a phrase to describe an advanced metering system that uses a pulsed output from either an electricity or gas meter. Instead our use of the term 'legacy' relates to the need of consumers to have the ability to connect any new smart (or advanced) meter to their existing automated systems.

Yours sincerely

[redacted]

OFGEM Smart Metering Prospectus Questions requiring a response by 28 October 2010

PROSPECTUS

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

ESTA supports the concept of a proposed minimum functional requirement for the IHD however, there are one or two issues which need to be considered.

Gas energy use and billing presents a particular problem due to the fact that gas is delivered through each meter as a volume and not as energy. In order to accurately calculate energy the calorific volume (CV) of the delivered gas needs to be known. Instantaneous CV data is not available and therefore any real-time data displayed on an IHD can only really be considered an estimate.

How the Welsh language is dealt with also needs further consideration. For example, there are at least two possible approaches - a universal IHD with an ability to display data in Welsh or availability of two versions (English or Welsh) available as option as the point of installation.

Members have also expressed concerns about the technology to deliver the data to the IHD via the HAN. We believe it would be detrimental to future development and innovation to dictate a single, proprietary communication technology such as Zigbee or any other. The HAN should be specified in a way that ensures data compatibility and functional requirements but does not specify a single ‘forever’ technology or protocol.

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

ESTA fully supports the principle stated that:

> *"The customer shall choose in which way consumption data shall be used and by whom, with the exception of data required to fulfil regulatory duties"*

This must apply equally to both the domestic and non-domestic sectors. It also important that any regulation properly supports a competitive market for services aimed at aiding consumers to understand and reduce their energy consumption.

Consideration also needs to be given to the security of consumer data provided to third parties by the customer or their agent. Will current data protection rules sufficiently protect the consumers' data in the long term?

Additionally, data will need to be protected at both the data collector (DCC or third party) and at the meter. This is particularly the case is the proposed 12 months data retention specification for the meter is adopted. Processes for managing meter stored data on change of owner or change of tenant will be required.

It will also be particularly important to have robust procedures for ensuring data security. Given that national system have a tendency to be 'leaky' and often the subject of front-page revelations; we believe security to be vitally important as it could readily degrade the acceptance of the smart metering technology.

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

NO.

We do not accept that remote disconnection is acceptable under any circumstance. This is supported by consumer feedback , for example from ESTA's own Smart Metering event held September 2010. Consumers often distrust their energy suppliers and have all experience customer service and accounts problems that result from supplier mistakes or those of a related party e.g. meter asset details etc. Such mistakes can lead to dire consequences for certain occupants and businesses. If a business is mistakenly disconnected who pays compensation and by when?

We understand that the ERA has taken on board a code of practice involving visits before disconnection but the instances of mistakes in the recording of meter location and serial numbers is high. In fact, many of our members make a business out of finding these errors and obtaining reimbursement for their clients.

We believe the underlying requirement driving this issue is one of credit control and that this should be handled differently.

ESTA propose that no remote disconnection should be allowed but that a change from credit to prepayment should be possible at the premises – requires a visit to ensure that the location and circumstance of the occupants and businesses is validated.

The meter should be designed to allow ready switching between credit and prepayment tariffs but not remotely.

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

OFGEM's acknowledgment that smaller non-domestic sites should be treated differently to domestic premises is welcomed by ESTA. Our members operate in this sector and maintaining a competitive market that supports innovation is critical both to our members' interests but also to those of non-domestic consumers. That said, members believe OFGEM can and should go further.

Firstly, there is the need to recognise that a percentage of smaller sites coming within this category are part of large organisations – telecoms, retail, local authority, etc. Such sites will be operated alongside larger consuming non-domestic sites already covered by the supplier license conditions for profile classes 05 to 08 and gas above 732MWh. In fact, we estimate that between 15-20% of properties in the small non-domestic sector are operated by larger companies. In addition, larger campus style sites operated by many organisations include a range of both larger and smaller supplies. As a consequence any regulation needs to adequately accommodate this scenario.

We propose that larger companies operating smaller non-domestic sites be allowed to opt for advanced metering after 2014. This would allow portfolio wide solutions to be maintained by such consumers while still meeting OFGEM's longer term objectives.

Other smaller non-domestic consumers should also have the option to adopt smart or advanced metering post 2014.

That said, ESTA would also like to remind OFGEM of our proposal set out in our earlier response. Namely, that the current license condition covering larger non-domestic supplies is extended to cover all non-domestic meters. This will provide clarity to the sector and allow the opportunity to accelerate the roll out of advanced metering across the sector but independently of the smart metering programme.

We believe such an approach will allow the non-domestic sector to lead the way. In turn this will support the roll out of domestic smart metering as the lessons learnt and the positive consumer experience of informed decision making and lower energy bills can be shared.

Irrespective of the approach adopted we suggest that the requirement for the consumer to have access to their data and to direct its use should be the same as for the domestic sector. However, the provision of the data in a suitable form and mechanism requires expertise and facilities [IT, Comms, software] and therefore is a commercial offering.

Finally, in our view the vast majority of SMEs are web enabled and reasonably IT literate [the Government dictates that VAT, PAYE, accounts are all now handled on line for most businesses]. We therefore, believe that whilst each individual business should have the opportunity to select to receive data on an IHD, a much better solution is the delivery of the data via the internet. This also allows utility suppliers and third parties to develop and offer competitive energy services.

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?

YES, we believe there should be an opportunity for non-domestic customers to decide what is appropriate to their estate and to select third party providers if necessary. Suppliers should be obliged to accept appropriate metering systems and data and to deduct and costs normally charged to a non-domestic consumer where they have contracted with a third party for the provision of the these services.

The extent of the 'all customer premises equipment' also needs to be clearer. We do not believe this should extend into the HAN connected devices for example.

Consideration also needs to be given to the extent of any warranty required on the equipment provided and the liabilities associated with failure. Also, responsibility for unfixed items such as portable IHDs etc need to be considered so that suppliers do not remain liable for replacement of such items under all circumstances e.g. loss, damage etc.

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?

In principal ESTA would prefer to see the 'thin' model for the DCC as we believe this is the best way to protect and enhance a competitive model for energy services.

We are however, aware that others are suggesting a 'thicker' model for the DCC that includes meter registration data as part of the DCC from an early stage. Although we agree with the need for an industry wide database available to a wider number of parties than at present we do not agree that extending the scope of the DCC is the right route to take.

We would suggest that the existing sources of data are able to handle meter registrations but that more should be done to improve the data integrity and accessibility. Access to meter data held by Xoserve and Elexon is currently too restrictive and although we have seen moves to extend access, for example the recent modification to the UNC to allow MAMs to access Xoserve data, these do not go far enough. We believe that any company or agent appointed by a customer should be able to gain data from either Xoserve of Elexon about the meters and ancillary equipment installed on a customers' site.

Overall, ESTA's view is that the role of the DCC should be minimal to achieve the core role of managing the data collection and accessibility but limited in order that further development of innovative services is not inhibited.

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?

ESTA agrees with this approach providing this does not result in a single large contract with a one supplier carrying the entire commercial, technical and resource risks. In particular we would welcome a sub-contract structure that identifies a number of regions and allows different suppliers to win regional contracts.

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)?

The timescales associated with establishing the DCC are challenging however, OFGEM's approach of issuing an early RFI will go some way to identifying the key issues for resolution and ESTA will continue to support this work.

ESTA members are also keen to ensure that the fact energy suppliers will be expected to fund the development of the DCC will not provide them with undue influence over the shape and scope of, or the contracts procured by the DCC.

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

ESTA believes this is not just desirable but essential to encourage and allow the non-domestic sector to achieve both energy and carbon reductions. This is because, in the short and medium term, the ability to convert potential savings into actual savings is far higher in the non-domestic sector than in domestic.

We therefore, fully support the approach that the DCC is not mandated in the non-domestic sector. We further suggest that this sector is aligned with the larger non-domestic in being allowed to use 'advanced meters' post 2014. This alignment would remove many operational barriers to larger companies with small sites who are currently uncertain about their investment and approach for their smaller buildings. A clear statement about this would unlock much energy and carbon saving over a short timescale – i.e. well before the advanced meter deadline in 2014. It is unlikely that similar savings could be achieved in the domestic sector.

In terms of possible problems the only possible issue may be if the larger domestic suppliers try to use the Smart Code, SPA and master registration processes to constrain the ability of providers using a non-DCC route to compete. OFGEM should ensure that consumer choice and the existing competitive markets are protected.

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

Yes. ESTA would also encourage using existing codes of practice as the basis of any new code developed. In particular the AMR Service Providers Code of Practice (ASPCoP) developed by ESTA to support the application of AMR to gas meters should be carefully considered as any new Smart Meter Code needs to properly safeguard the installation of smart (or advanced) metering solutions to existing pulse enabled gas metering in the non-domestic sector.

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

In ESTAs earlier response to OFGEM we highlighted some issues or interdependencies which we felt needed to be considered as part of this process.

- 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
- Disposal of removed metering assets and the potential for recycling

On broader sense members have also expressed concern that the traditional definition of 'the energy sector' is too narrow and principally describes the energy supply industry. However, we would argue that, as the national priority at the core of the smart metering debate is the reduction of core energy demand, the definition needs to be extended to encompass the broader energy services sector.

For this reason, although we support the majority of the prospectus' proposals, we are not yet convinced that demand reduction through energy and carbon management has yet reached sufficient prominence either within the prospectus or within the regulatory regime. OFGEM should therefore, ensure that the broader energy services sector and the ability for the UK to manage its energy use is best served by any smart metering proposal when assessing their impacts.

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

ESTA understands the needs for data security and security of the smart metering infrastructure in general however, members have expressed some concerns that security could easily be used as an excuse to prevent access to data by third parties authorised by the consumer. Members would encourage OFGEM to remain robust in its conviction that consumers must be able to choose to whom their data is provided.

At a practical level the current proposed specifications require meters to hold up to 12 months worth of consumption data. Consideration therefore, needs to be given to how such data is secured on the change of ownership or tenancy associated with a particular supply point.

Finally, members have also expressed some concern that the proposed staged roll out may weaken overall security for the project.

STATEMENT OF DESIGN REQUIREMENTS

No outstanding questions.

IMPLEMENTATION STRATEGY

No outstanding questions.

NON-DOMESTIC SECTOR Ref: 94i/10

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?

In order to properly answer this question ESTA believes it is critical to first define the terms 'smart' and 'advanced'. This is because we feel that the current use of these terms is unhelpful, implying that the current solutions, commonly referred to as 'advanced' are in some way older technology and, as a consequence inferior. This is most definitely not the case. Although 'smart' and 'advanced' technologies offer different feature set the outputs in terms of information and their ability to effect change, reduce consumption and lower emissions is the same. In our view, the differences between the two technologies are much more to do with the way in which the data is accessed and used than in the metering itself.

This is important as we believe a number of key conclusions have been drawn from the assumption that today's 'advanced' meters are not 'smart' meters. For example, it is often said that advanced meters are unable to support the development of a smart grid. We firmly believe this to be a false conclusion.

Other differences often relate to specific features of each technology. For example, a key difference between 'advanced' and 'smart' meters often centres on communication, with smart meters offering two way communications. In reality we believe meter manufacturers take a platform approach where some functions can be disabled or enabled. In effect, the cost of two way communications is already built into many meters or loggers classed as 'advanced' and it is a marketing and/or market pricing decision as to how these are sold today. In a wider context, large meter manufacturers need to cope efficiently with meters across Europe and indeed across the world. They do not design a new meter for every market.

Finally, 'smart' meters are often seen as a single box solution with metrology, data logging and communications in a single package. Although we accept this is a reasonable assumption to reach we do not believe this is a fundamental requirement of a smart metering solution, particularly in the non-domestic sector. A component based solution that links existing or replacement metering to data logging and/or communications modules can work just as well and many offer some distinct advantages in the non-domestic sector and, in particular for gas. Therefore, assuming a component based solution is acceptable in some circumstances we see no technical reasons as to why only advanced metering may be applicable to gas meters of U16 or above and on CT electricity meters.

There are however, some other technical issues to consider.

For gas meters above U6 the physical size and design dictate that the meter and the logger providing the smart functionality will not be physically integrated. Manufacturers also indicate that manufacturing volumes limit the viability of fully integrated smart gas meters above U6. It is also worth noting that as most large gas meters are often remote from other buildings and services, the loggers are predominantly powered by battery.

For electricity meters using CTs the smart functionality can be built into the unit and need not be a restriction on its functionality.

Overall it is important to note that we believe that not all non-domestic sites will need a HAN and that some will actively want a pulsed output, for example to link to an existing system. Customer choice and flexibility is therefore, key to allowing the sector to work most efficiently.

ESTA would suggest that OFGEM work with ESTA and others to properly define the terms ‘smart’ and ‘advanced’. Doing so will ensure the long term objectives of the SMIP are achieved alongside an economic and timely implementation.

Question 2: Do you agree with our proposed approach to exceptions in the smaller non-domestic sector?

ESTA is pleased that the comments we made earlier about the smaller non-domestic market has been taken into consideration and we support the proposed exceptions However, for larger users ESTA believe it is unreasonable to limit the use of 'advanced' meters to pre-existing contracts or current installations. We feel the consumer should be able to choose whether a smart or advanced approach better meets their needs. Moving to such an approach provides clarity for customers. As such it will support existing markets in advanced metering and help customers making investment decisions at this time. It also provides surety about the future. This is important as it is impractical for companies with an estate of small and large sites to manage on any other basis e.g. what happens when a business with advanced meters takes over another business without an existing contract?

To be clear - we recommend that a uniform approach is taken across the entire non-domestic sector where advanced metering is available to all users and that the time restriction of 2014 is removed.

ESTA also agrees with the proposal not to mandate the IHD for non-domestic however, we would like to see the need to provide HAN enabled meters being left to customer choice also. After all many non-domestic consumer may already have opted for internet reporting that requires no HAN interface and therefore, the cost of the HAN provision can be saved if it is not mandated. We also agree that no shut-off valve is required for gas however, we would encourage OFGEM to remove this requirement from all non-domestic supplies including those fitted with U6 meters.

We also recommend that the electricity supply should not have a remote disconnect facility but require a site visit to effect either disconnection or transfer to prepay.

Finally, a number of members have raised concerns that the current proposal to mandate 'smart' U6 gas metering is causing problems today. Many gas Meter Asset Managers are refusing to exchange or fit non-pulse enabled U6 meters for use with advanced metering systems. This is because they fear stranded assets post 2014. We would recommend that all non-domestic metering is treated differently to the domestic sector and therefore the use of non-smart U6 meter fitted with an appropriate logger should always be acceptable as an alternate to a fully integrated smart meter.

Question 3: Are there technical circumstances that we have not considered that would justify further flexibility around installation of either smart or advanced meters?

Yes. Many existing advanced metering solutions use pulse outputs from gas or electricity meters to allow users to access data directly on-site. This is particularly relevant for gas meters and the feeds into data loggers.

We accept that 'in the fullness of time' the dominant method of data collection will be by some form of serial protocol, probably via the HAN. However, it is vital that over a transition period, probably at least 4-5 years, pulse outputs are made available so that customers currently using this facility do not loose the ability to manage energy and carbon on-site as a meter is replaced under this programme.

A good example of such a use is in the real time energy data now being provided on many governmental department websites e.g. DECC. This data is being provided via pulse outputs form the existing meters. If the meters were replaced, they would loose that facility and need to invest in further equipment.

Non-domestic consumers should therefore have the right to choose advanced metering solutions over smart meters where their needs dictate an alternate approach.

We would also like to see the development of a transition plan to cover the period from now until the start of the smart meter roll out. This will help to avoid consumer confusion while supporting the competitive market in the non-domestic sector.

Question 4: Do you agree with the proposed approach that use of DCC should be optional for non-domestic participants in the sector?

ESTA agrees with the proposal not to mandate DCC in the entire non-domestic sector providing that the ability of service providers to bid to provide domestic services under the DCC is allowed.

The design of the commercial arrangements needs to ensure that DCC does not have an unfair advantage vs. other commercial services providers e.g. having access to data not available to other bidders. Ref: paragraph 4.35.

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?

Yes as long as all services remain on a fair competitive basis.

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?

ESTA's view is that smart grids (whatever their final definition and design) can be facilitated via both advanced and smart meters and via DCC or third party service providers. We do not see the likely commercial or technical structures inhibiting the development of smart grids.

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?

ESTA members have expressed concern that a possible impact of this question could be that their activities become subject to licensing however, members fully understand the need for networks to have access to non-domestic metering data. ESTA would therefore support any proposals to ensure that such data is made available to either a network operator or the DCC but we would prefer this was not achieved by imposing undue regulation on our members. Incorporating a right to this information into the licenses of network operators or the DCC would be a better solution than improving licensing on third party data collectors. That said, making data available in an appropriate timescale and format has a cost and members believe that this cost needs to be passed onto network operators. However, in common with all metering activities the costs should be transparent whether the supplier is a utility or third party supplier.

Question 8: How can interoperability best be secured in the smaller non-domestic sector?

Whilst interoperability is very important to protect meter assets at change of energy supplier, we have to be careful not to restrict innovation and the ability to drive costs down.

We are supportive of the European Commission view that the metrology part of the meter should be very stable and long term whereas the network interfaces (WAN, HAN) and any communication system (Zigbee and others) needs to be allowed to develop.

We therefore feel that it would be reasonable to have a number of available protocols and transmission techniques, which must be open and available to all data collection service providers. The numbers and types to be regulated but allowing the introduction of advancing cost effective technology.

We have to be careful not to be locked into a single design that becomes a dinosaur.

ESTA believe this approach is consistent with the notion of developing meters platform that can be configured to suit current and future system e.g. by changing out the WAN communication card.

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?

The proposal contained elsewhere in the prospectus about a consumer's right to access their data should apply equally to non-domestic consumers. They should be able to access the data or nominate a third party to which they want to issue this data. We would also suggest that a minimum timescale for delivery of data is also applied. It is worth pointing out however, that a consumer's right to date does not necessarily mean the provision of data needs to be free of charge however, if OFGEM choose to leave the door open to charging for such data we would suggest either a regulated tariff or clearly transparent charges on entering into a contract.

Our view is that most small and larger business are internet enabled and that delivery via the internet gives easy access and the ability for utilities and service providers to provide value added services.

Requirements above the minimum should be subject to commercial negotiation.

Question 10: Do you agree with our approach to data privacy and security for non-domestic customers?

Yes

Question 11: Is the proposed approach to rollout (for example in terms of targets and a requirement for an installation code of practice) appropriate for the non-domestic sector?

ESTA has previously stated that we would prefer to see the smaller non-domestic sector aligned with the larger non-domestic sector. As such we would like to see the current license conditions applying to larger supplies extended to all non-domestic supplies.

We believe that taking such an approach will speed up the adoption of this technology and therefore accelerate the achievement of energy and carbon savings.

ESTA would also suggest that including smaller non-domestic meters as part of a national roll-out plan or within supplier targets is not essential. We support the view that smaller suppliers should not be included in any national targets. We would encourage a consumer lead take up of smart and advanced metering for this sector as we believe this will serve both the consumer and our members best.

REGULATORY AND COMMERCIAL FRAMEWORK Ref 94h/10

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.

It would also be beneficial to recognise some of the additional codes of practice utilised throughout the industry. For example, ASPCoP for gas AMR (AMR Service Providers Code of Practice) is an accreditation for the gas data collection market in the non-domestic sector. This gives an equivalent to the approved data collectors for electricity by Elexon.

Question 2: Do you agree with the proposal to establish a Smart Energy Code?

YES

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

The table looks comprehensive. However, we note in several places that it refers to the DCC providing data or the DCC activities. We believe it should be made clear that this is the DCC in its management and procurement role and that the actual data or information would come from successful third party bidders who actually carry out the operations and will also need to be tied into the smart energy code.

An appeals procedure also needs to be included and we also suggest that a list of codes of practice and/or legislation that this document replaces is complied and included.

Members have however, commented that any code of practice needs to support competition and innovation. It should not restrict market participation to established companies or organisations of a certain size. In addition, the code should be fair and reasonable to all participants.

Question 4: Do you have any comments on the most appropriate governance arrangements for the Smart Energy Code?

ESTA believes that such codes are best governed by the industry, perhaps overseen by a regulator. This will allow industry expertise to be brought to bear while providing consumer protection.

Question 5: Do you agree with the proposals concerning the roles and obligations of suppliers in relation to the WAN communications module?

ESTA's view is that the WAN module should be procured, installed and commissioned as part of the meter, although we would advocate the use of a physically separate WAN module. This should apply to whoever is supplying the meter - utility or third party supplier.

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.

The HAN data set should include some alarm or event functions that are transmitted via the WAN to the DCC but not displayed on the IHD.

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?

The ability for smart metering to deliver a good customer experience and add value for consumers must lay at the heart of any decision made about responsibility for the smart metering installation.

Others have raised the concept of a 'lead supplier' and ESTA supports the need to clearly identify a lead supplier in all circumstances. We do not however, agree that responsibility should automatically transfer to the electricity supplier as this may not offer the best consumer protection. In addition, it is important to remember that meter installers are currently only qualified for particular meters e.g. gas or electricity. For example, gas engineers are not qualified to work on assets upstream of the meter or part on the electricity meter.

For our members the biggest risk is with the HAN and its relationship with the occupants. Potential additional equipment might be added to use the HAN, which could make the point of interface and responsibility even harder to define.

The WAN involves commercial suppliers and can be resolved in commercial arrangements. For the HAN this is going to be much more difficult e.g. an occupant connects a computer to retrieve metered data and it doesn't work - who sorts it out? This is a difficult issue and it seems unreasonable to add this dimension into the utility supplier's responsibility.

Our view is that the responsibility for the HAN should be restricted to the HAN port itself and with a well-defined test regime to prove that it is or is not working within specification.

Question 8: Are there additional measures that should be put in place to reduce the risks to the programme generated by early movers?

Yes. Early movers should not be discouraged however, we firmly believe that consumers must be protected where they agree to opt for a smart metering solution today. For example, any consumer entering into a contract for a smart metering solution with a utility supplier should be made aware of the implications involved. For example, if the use of a smart meter affects their ability to switch suppliers they must be informed. Transparency is therefore, a must. No supplier should be able to use an early roll out of smart metering to protect its market position without consumers being aware of any restrictions applying to the choices presented.

We therefore suggest that where suppliers install smart meters in advance of the roll-out that the supplier must explain the consequences and the consumer must provide written consent.

We would also reiterate our desire to see the current license conditions applying to larger non-domestic supplies extended to encompass all non-domestic supplies. Doing so will reduce the risks associated with early adopters in this sector while allowing a controlled acceleration of the roll out. It also provides exemplar projects and, in particular consumer experience testimony to support the domestic roll out.

Question 9: What is needed to help ensure commercial interoperability?

No comments.

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 comment.

Question 11: Are there any other regulatory and commercial issues that the programme should be addressing?

YES. We feel that within the design of the meter and rules about its use that the consumer should be able to gain access to metered data without recourse to requests on the utility supplier i.e. access should not be controlled 'under the cover' as at present (for example, with pulse outputs on electricity meters being under the meter's seal). Doing so will provide true freedom of use and access to data.

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?

It is not unreasonable to conclude the time-of-use tariffs are possible outcome from the roll out of smart metering however, their take up and effectiveness will be subject to one of two key tests – the supply industry's ability to facilitate the change and the customer's ability to understand the opportunity and effect change.

Although ESTA is by no means an expert in terms of the supply industry and the market mechanisms under which it operates, we feel there will need to be changes made to the way gas and electricity are balanced in order to allow tariff innovation. It is also possible that other market mechanism will also need to be addressed.

From the customer perspective we know that many customers, including those in the non-domestic sector will make change to their energy usage if the reasons for the change are both easy to understand and simple to adopt. Automation can play a part but any tariffs designed to deliver a better balance of supply to demand, the use of green generation technologies or simply to lower costs must be easy to understand and implement.

Question 13: Are there changes to settlement arrangements in the electricity or gas sectors that are needed to realise the benefits of smart metering?

Although not within the scope of our members activities we instinctively believe that settlement arrangement must at least be reviewed in light of smart metering innovation. The ability for the supply industry to innovate tariff structures and balance supply to demand is an intrinsic element of the proposed programme and it is hard to see how innovation can be achieved without the need to amend some or all of the market mechanisms.

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 comment.

Question 15: Are there any other industry processes that will be affected by smart metering and which the programme needs to take into account?

The provision of accurate point of use consumption data available to producers, networks, shippers and suppliers will undoubtedly affect the processes currently in use. For example, the review of AQ and End User Categories for gas supplies may no longer be required. To our knowledge most industry calculations are based on averages; industry processes could refine these averages to the benefit of customers.

As previously mentioned the ESTA ASPCoP for gas is an accreditation now used extensively in the non-domestic gas data collection market, which offers support for smart and advanced meters. The role of ASPCoP will need to be reviewed as a consequence of the smart metering programme.

DATA PRIVACY AND SECURITY

Question 1: Do you have any comments on our overall approach to data privacy?

No. We fully support the proposed approach.

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.

No comment.

Question 3: Do you support the proposal to develop a privacy charter?

Yes. In principal we agree that acceptance of smart metering by the public will be dependent on rigorous application of data protection and privacy however, we would also point out that data of a far more sensitive nature than energy use is shared between agencies and companies on a daily basis. It is therefore important that a balanced and pragmatic approach is taken throughout.

Question 4: What issues should be covered in a privacy charter?

In our belief consumers both in the domestic and non-domestic sector dislike their data being used for commercial advantage or gain. The charter should therefore, ban the sale of metered data for marketing purposes.

The charter should also set out any limitations or rules that apply on change of ownership or tenancy.

It would also be helpful if the customer right to metered data and their right to nominate a third party to receive that data was included in the privacy charter.

Question 5: Do you agree with our approach for ensuring the end-to-end smart metering system is appropriately secure?

Whilst we do not disagree with this section, it is a very brief overview and the risk will be in detail design and implementation. Lessons can be learnt from other smart metering roll outs worldwide and we would encourage OFGEM to learn from shared experiences where possible.

While the need for security should not be under estimated in any way we feel that much of debate ought to initially centre on the prevention of fraud however, as smart metering moves to enabling the smart gird the need for protecting critical national infrastructure also requires consideration. In either case we would not want to see security creating barriers either for innovation or for a competitive energy services market.

There is also a risk that energy suppliers are seen as ‘safe’ organisations and all other parties are ‘unsafe’ until proven otherwise. We feel this is inappropriate as many suppliers have repeatedly been investigated by OFGEM for poor behaviour and therefore, we would suggest that OFGEM should be equally concerned that suppliers could abuse or misuse smart metering data too.

In the US it is our understanding that there is a body that deals with electronic security, NERC/CIP and we believe that there should be a similar body in the UK.

COMMUNICATIONS BUSINESS MODEL Ref 94d/10

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?

Whilst we agree that these functions are essential, we are concerned that the scope of the DCC does not gradually extend to doing 'everything'. The DCC should provide the structure and glue for the operation but independent providers are needed to implement the various parts. For example, we do not believe that the DCC itself should be holding the metered data or developing value added services.

We have concerns about phrases like "If DCC retained data to enable it to provide these [data aggregation] services it could also provide services to other entities". This implies a creeping expansion of the DCC undertaking locking out other competitive services.

We are concerned that such moves would simply put a government-backed monopoly in place and be detrimental to the UK developing its processes by competition.

Given a successful project, the scope for exporting sector expertise is worldwide and attractive for the UK.

Question 2: Do you agree that meter registration should be included within DCCs scope and, if so, when?

No.

ESTA believes that the DCC must follow a 'thin' model in order to ensure a competitive market for energy services. We would therefore not like to see meter registration included within the scope of DCC.

We are however, aware that others are suggesting a 'thicker' model for the DCC that includes meter registration data as part of the DCC from an early stage. Although we agree with the need for an industry wide database available to a wider number of parties than at present we do not agree that extending the scope of the DCC is the right route to take.

We would suggest that the existing sources of data are able to handle meter registrations but that more should be done to improve the data integrity and accessibility. Access to meter data held by Xoserve and Elexon is currently too restrictive and although we have seen moves to extend access, for example the recent modification to the UNC to allow MAMs to access Xoserve data, these do not go far enough. We believe that any company or agent appointed by a customer should be able to gain data from either Xoserve of Elexon about the meters and ancillary equipment installed on a customers' site.

Question 3: Should data processing, aggregation and storage be included in DCCs scope and, if so, when?

ESTA agrees that raw data collection, processing, aggregation and storage should be included in the scope of the DCC however, it is important that each term is fully defined at early a possible. This is imperative to protect the competitive market for data management and analysis.

As an intrinsic part of the DCC function we see these function being a requirement of the DCC form day one.

Question 4: Do any measures need to be put in place to facilitate rollout in the period before DCC service availability and the transition to provision of services by DCC, for example requiring DCC to take on communications contracts meeting certain pre-defined criteria?

ESTA members are very concerned that the period between now and the start of the roll out of smart metering does not create a barrier to the continued roll out of the advanced metering systems provided by our members. Uncertainty created doubt and we are already seeing signs that businesses and other organisations are putting off investment decisions due to the smart metering programme. Furthermore, uncertainty surrounding the specification of metering systems is adding to confusion.

ESTA would like to see a transition plan adopted that allows consumers to benefit from advanced metering solutions today and in confidence. Some of the statements around the use of advanced metering pre and post 2014 have helped but much more needs to be done. ESTA and our members are willing to work with OFGEM and others to create a suitable transition plan.

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

Yes, but with the same concerns raised on page 48 of our response.

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?

Bidders for the DCC should be independent of any existing major suppliers in this market - energy or third party suppliers - unless they agree to extract themselves as operators in this market. This will ensure the freedom to innovate and to reinvest in itself and the industry. It should also be self-funding.

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?

No comment.

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

ESTA is uncomfortable with the suggestion that the initial funding to develop the DCC should come from the energy suppliers. We believe this sends the wrong signals to the market and we would prefer to see a fully self-funded model.

IN-HOME DISPLAY Ref: 94c/10

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.

The risk on the IHD is that it will either be too complex to understand or unhelpful and therefore will not be used.

At a simple single rate or two rate the display should indicate £p rate at which you are currently using energy [£p per hour] plus a limited number of cost comparisons over the last rolling 24 hours, daily, weekly. Monthly comparisons are subject to changes through the seasons and we do not believe these would give a meaningful comparison. This would have to be compared to last year, which again we believe is too complex.

At computers users may also have access to the HAN and any more detailed analysis can be run by the PC. We would expect an accuracy to within a few pence per hour. At a low consumption rate this would be a matter of a few pence per hour. Therefore, the absolute accuracy needs to be in the order of 1p or 2p per hour.

For gas metering there is also the added complexity of calorific value and therefore the ability to display and accurate data will always be limited. As a result ESTA believes that the IHD should not attempt to replicate the bill. We therefore do not support the notion of an account balance except for prepayment where the value left would be very relevant to occupants.

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.

In the domestic sector we believe that adding CO2 onto an IHD will create complexity, which will not be used. If individuals need a CO2 footprint, use your personal PC or collect the data via the internet.

Evidence in the non-domestic sector indicates that the principal drivers for improving energy efficiency relates to the cost of energy and the ease of spotting wastage. To date carbon emissions have not driven significant change in consumer behaviour however, this might alter as carbon regulations bite. For example, recent announcements about the CRC Energy Efficiency Scheme now mean that each tonne of emissions will have a direct cost. However, only time will tell if consumer demand to see emission data on a regular basis.

Question 3: We welcome views on the issues with establishing the settings for ambient feedback.

We support the view that ambient feedback is preferable to detailed numeric information but have no developed views on establishing the settings.

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?

We believe it is reasonable to provide appropriately designed IHDs for certain categories of customers. However, we also believe this range should be limited and defined so that the suppliers are not left with an open-ended commitment to the type of display.

Question 5: We welcome evidence on whether portability of IHDs has a significant impact on consumer behavioural change.

We have anecdotal evidence that placing 'energy dashboards' in relevant places does engage a workforce in energy saving initiatives. However, we have no evidence in the domestic sector.

Some members have however, expressed concerns that portable displays are easily lost or damaged.

Question 6: Do you agree with the proposed minimum functional requirements for the IHD?

YES except for the longer-term comparisons [1 month+] and the bill balance.

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?

The provision of two displays, one for gas, one for electricity, is unnecessary given some simple design/specification principles. It is our suggestion that the display should be specified as electricity with the capability to add gas, responsibility for the display to be with the electricity supplier. Responsibility for ensuring the gas information is available in a compatible format is with the gas supplier.

We understand the issues of separate suppliers but believe this should be tackled (a) to eliminate the abortive second display cost and (b) to provide only one display to occupants.

It is also worth noting that some members have suggested that water consumption should also be considered in the design of the IHD. Although water is not covered by the current proposals it is not unreasonable to suggest that any infrastructure designed for metering utilities is later extended to cover water.

Question 8: Do you agree with the proposals covering the roles of and obligations on suppliers in relation to the IHD?

General principles yes, subject to our view in question 7, page 62.
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CONSUMER PROTECTION 94a/10

Question 1: Do you have any views on our proposed approach for addressing potential tariff confusion? What specific steps can be taken to safeguard the consumer from tariff confusion while maintaining the benefit of tariff choices?

Largely YES. Our view is that offers do not need to be exclusively through the IHD - they can be by email, letter or online. We suggest that the display on the IHD is limited to say 3 or 4 options and that anything further should be by other methods.

In time, the consumer may become better able to deal with more complex and dynamic options but by making it too complex initially risks consumers being negative and not utilising the capability.

Question 2: Do you agree with our proposed approach for addressing unwelcome sales activities during visits for meter installation?

Yes. The proposed code of practice needs to be very clear on this issue as experience has shown that suppliers can still take advantage of such circumstances.

Question 3: What do you consider as acceptable and unacceptable uses of the installation visit and why?

The installation visit should be used to raise awareness about energy efficiency and the impact for example of the meter/IHD being installed. The customer should be left with generic industry wide advice, from Energy Saving Trust?

The consumer can be left with contact details but the installer should NOT be able to make an appointment directly.

Question 4: Do you agree with our proposed approach to ensuring that the IHD is not used to transmit unwelcome marketing messages?

YES

Question 5: Do you agree that consumers should be able to obtain consumption information free of charge at a useful level of detail and format? How could this be achieved in practice?

YES. By not promising to replicate the bill, the accuracy of calculation can be lower. For example gas volume can be converted into approximate kWh and £p without using varying CV values and correction factors.

Sing the HAN to download data to PC would allow a greater level of data to be available.

Question 6: Do you consider that existing protections in the licence are sufficient to ensure that consumers are not remotely switched to prepayment mode inappropriately?

No. ESTA's view is that physical switching to prepayment [facilitated by smart meters] should become the major credit control mechanism rather than by remote switching. This needs to be implemented on a site visit. Remote actions as drastic as switching a supply off will lead to disastrous mistakes and a loss of credibility for smart meters and the utility suppliers.

Also, to be clear – the non-domestic sector is set against any ability to remotely disconnect a supply. Consumers are united in their objection to this feature and this was borne out at the recent Smart Metering event run by ESTA late in September.

Question 7: Could provision of an appropriate IHD help overcome meter accessibility issues to facilitate prepayment usage?

Yes

Question 8: What notification should suppliers be required to provide before switching a customer to prepayment mode?

At least one week notice of a site visit with the intention of switching to prepayment. Only switch at a site visit.

Question 9: Do you believe that suppliers should be required to provide emergency credit and „friendly credit periods to prepayment customers or whether, as now, this can be left to suppliers?

There needs to be some consistent guidelines particularly as consumers are likely to switch more often. At some point, the energy supplier cannot shoulder further non-payment and has the power to switch to prepayment or switch off altogether.

Question 10: Do you consider that an obligation similar to Prepayment Meter Infrastructure Provision (PPMIP) may be required?

No comment.

Question 11: Is the obligation which Ofgem is proposing to introduce on suppliers to take all reasonable steps to check whether the customer is vulnerable ahead of disconnection sufficient? If not, what else is needed?

No. Disconnection must only be with a site visit where the existing checks can be made.

Question 12: What notification should suppliers be required to provide before disconnecting a customer?

At least one week notice of a visit to switch to prepayment or to disconnect.

As smart meters provide an easier route to switching to prepayment, this would surely limit the number of occasions when disconnection is required. If consumers don't pay prepayment then they are cut off at their own instigation.

Question 13: Do you have any views on the acceptability of new approaches to partial disconnection and how they might be used as an incentive to pay bills?

OK as long as total remote disconnection is NOT an option.

Question 14: Do you agree with our approach for addressing issues related to remote disconnection and switching to prepayment?

No. Engaging the occupant in a process which they most likely will not understand i.e. buttons on the IHD, instructions, etc. is a major risk. For safety, the utility company has to be present.

Question 15: Have we identified the full range of consumer protection issues associated with the capability to conduct remote disconnection or switching from credit to prepayment terms? If not, please identify any additional such issues.

No additional views.

Question 16: What information, advice and support might be provided for vulnerable consumers (e.g. a dedicated help scheme)? Who should it be provided to?

No comment.

Question 17: Do you have any comments on our proposals to prevent upfront charging for the basic model of smart meters and IHDs?

We agree with the proposal that no upfront charges for the core smart meter/IHD are allowed with cost recovery over the lifetime of the asset.

It is vital that the regime for this cost recovery is transparent particularly to the non-domestic market. This is important and this sector fears they will be paying for the meters whilst utility companies get the benefit. ESTA does not subscribe to this opinion but can understand how it could be arrived at.

We therefore propose much greater transparency of the metering and data collection costs so that consumers can clearly see how these costs are constructed, their level and assess alternative routes of supply.

Consumers also need the added protection that if they choose to source metering services and data collection independently of their energy supplier that these costs are deducted from their energy bills in full.