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## **Smart Metering Implementation Programme - Responses requested by September 28, 2010**

### **Smart Metering Prospectus**

#### **Chapter 2**

*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)?*

First Utility agrees that smart meter installation visits should be for that purpose. Therefore, we agree that the prevention of sales activity during the installation process is desirable.

#### **Chapter 3**

*Question 6: Do you have any comments on the functional requirements for the smart metering system we have set out in the Functional Requirements Catalogue?*

Whilst we agree that functionally rich metering equipment produces benefits to the consumer and industry at large, we believe that a phased implementation would produce better benefit in terms of smart metering introduction and reduced stranded asset risk. Any meter points (smart or other) where equipment is installed before the agreement of a specification and the availability of compliant products and where this installation was requested by the customer should be exempt from these requirements for a period of ten years from the installation date to ensure early adoption, subject to a minimum agreed standard. We would like to make the point that section D in the High level functionality table may be over prescriptive and could constrain innovation by restricting meters to fixed register patterns. Unlike dumb meters, where fixed register configuration is static, smart meters offer an ability to collect detailed, settlement level data which can then be manipulated in back office systems to match new tariff patterns. In relation to section H, we would also request that a cost / benefit analysis be conducted in relation to requiring generation metering being built in rather than meeting this requirement through a standalone generation meter before any decision is made.

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

We agree that it would be appropriate to develop the technical specifications in tandem with industry and that the creation of expert groups to progress this work would be useful. However, we would ask that equal consideration is given to the views of smaller players within the domestic market rather than simply large incumbent players. As a smaller supplier in the domestic market we see restriction of technical functionality to the lowest 'common denominator' as a key risk to innovation in this area. We believe that there should be no maximum meter specification.

*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)?*

The use of targets for the deployment of smart meters by energy suppliers should provide a strong incentive for the rollout to be completed within a suitable timeframe. The most obvious way for these targets to be set would be to link them to market share. We also agree that there is scope for cooperation between suppliers in certain situations, perhaps by larger suppliers being required by licence to offer MAP services on a mutually agreed contractual basis to smaller suppliers where this service is requested.

## **Chapter 4**

*Question 17: Do you have any comments on our implementation strategy? In particular, do you have any comments on the staged approach, with rollout starting before DCC services are available?*

First Utility obviously supports the rollout of smart meters before DCC services are available as we are already doing this. Our view is that it is essential that as many UK domestic customers as possible are able to benefit from smart metering technology and the rollout should not be delayed by waiting for a regulatory regime and the DCC to be set up. We would again suggest that meter points where meters are installed prior to the agreement of a technical specification and the availability of compliant products and where this installation was requested by the customer be exempt from these requirements for a ten year period in order to reduce the risk of asset stranding, subject to a minimum agreed standard.

*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?*

Removing the necessity of metering equipment to be forward compatible with an undefined DCC platform and compliant with an as yet to be completed list of functional requirements and technical product specifications. The key benefit would be that early adopters like First Utility would be able to continue to roll out smart metering with a reduced commercial risk. The key risk would be potential interoperability conflicts with an unknown specification. We believe that any meter points where equipment is installed before the agreement of a specification and the availability of compliant products and where this installation was requested by the customer should be exempt from these requirements for a period of ten years from the installation date in order to encourage early adoption, subject to a minimum agreed standard.

*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?*

We believe that the current timelines are adequately ambitious.

*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?*

It would seem appropriate that DCC be a separately licenced entity given its unique role within the market. We also agree that DCC should be bound by the Smart Energy Code and its compliance with its obligations relating to both that Code and its licence be overseen by Ofgem. However, as implementation gathers pace, the management of this multi billion pound project may require Ofgem E Serve to seek outside assistance.

## **Statement of Design Requirements**

### **Chapter 3**

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

Yes, in principle. However, there is a risk that this will delay the rollout of smart meters as most meters currently available do not incorporate this feature. We believe that any meter points where equipment is installed before the agreement of a specification and the availability of compliant products should be exempt from these requirements for a period of ten years from the installation date in order to encourage early adoption.

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

Some development may be required in order to assure all electricity meters will be able to connect to a HAN or extended WAN in the case where Power Line Carrier technology is employed.

More work needs to be done for gas meters that are installed in semi-concealed boxes and communal meter cupboards.

*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 to change out SIMs?*

By implementing the use of roaming SIMs and encouraging Mobile Network Operators to offer competitive roaming tariffs in M2M (Machine to Machine) applications. These are now emerging in the M2M mobile market.

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

All currently known aspects of meter operations are covered in the Catalogue. However, we would prefer a phased introduction of meter functionality with remote firmware upgrade in the initial rollout to speed implementation and reduce commercial risk for early movers.

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

The addition of Maximum Demand and power quality monitoring, recording and data transmission is likely to introduce costs in excess of benefit in the early phases of implementation. We support a framework which allows additional functionality to be added during the course of the rollout supported by appropriate commercial arrangements. To support innovation there should be no maximum meter specification.

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

No.

## **Chapter 5**

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

The proposed approach should deliver technical certainty, but interoperability may remain an issue as meter manufacturers will continue to drive for competitive differentiation of their own products. In order to achieve complete interoperability, the technical specification would likely need to be prescriptive to the point where commercial competition would be impeded.

*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.

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

The primary issue will be the agreement/specification for a HAN standard and communications protocols to ensure interoperability of HAN components sourced from different manufacturers.

Additionally, there are clear technical challenges surrounding the smart gas meter. Chief among these are:

1. Regular updating of the IHD with consumption data whilst operating on battery power and maintain a 15-year service life.
2. Connection to the HAN where the gas meter is installed in a semi-concealed box, and also where a smart gas meter is operating in prepayment mode, may require the use of signal repeaters and a redesign of meters to tolerate the unfavourable environmental conditions.

*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?*

A phased introduction of meter functionality with remote firmware upgrade in the initial rollout would speed implementation and reduce commercial risk for early movers.

## **Implementation Strategy**

### **Chapter 2**

*Question 1: Do you have any comments on our proposed governance and management principles or on how they can best be delivered in the context of this programme?*

These principles seem appropriate. It is crucial that stakeholders are given the chance to input views at all stages of the process.

### **Chapter 3**

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

First Utility feels that it would be appropriate to also assess the impact that smart meter rollout and the MAP issues associated with this might have on metering competition. It would also be appropriate to consider the concept of a Smart Meter Provider of Last Resort and which party would be best suited to fulfil this role.

### **Chapter 5**

*Question 3: Do you agree with our proposal for a staged approach to implementation, with the mandated rollout of smart meters starting before the mandated use of DCC for the domestic sector?*

First Utility obviously supports the rollout of smart meters before DCC services are available as we are already engaged in smart meter rollout. Our view is that it is essential that as many UK domestic customers as possible are able to benefit from smart metering technology and the rollout should not be delayed by waiting for a regulatory regime and the DCC to be set up. We would again suggest that meter points where meters are installed prior to the agreement of a technical specification and the availability of compliant products and where this installation was requested by the consumer be exempt from these requirements for a ten year period in order to reduce the risk of asset stranding.

*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?*

We agree that the interoperability and communications issues flagged up require consideration. The interoperability issue could best be dealt with by means of open protocols and wider criteria as to what types of meter would be considered compliant. Whilst base metering technology for smart is well understood there are at present no defined open protocols associated with meter communication for data exchange or configuration. We believe that these will emerge by default during rollout. It is therefore imperative that interoperability for existing domestic smart meters is enshrined within the DCC remit to ensure that early adoption is not punished by default as part of the design of the rollout.

*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?*

We are uncertain as to whether it would be appropriate to speed up rollout significantly as the final criteria as to which meters will and will not be interoperable have not yet been agreed. Any acceleration of rollout prior to this information being issued could potentially lead to an increased risk of asset stranding, although we have made suggestions as to how these concerns could be lessened elsewhere in our response.

*Question 6: Do you agree with our planning assumption that a period of six months will be needed between the date when supply licence obligations mandating rollout are implemented and the date when they take effect?*

Six months would seem an appropriate length of time for industry parties to make the necessary changes.

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

We agree that both a ramp up period and in depth testing and piloting will be required before DCC go live. A separate DCC licence will also need to be created.

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

These outputs seem appropriate and achievable.

## **Rollout Strategy**

### **Chapter 2**

*Question 1: Do you believe that the proposed approach provides the right balance between supplier certainty and flexibility to ensure the successful rollout of smart meters? If not, how should this balance be addressed?*

First Utility believes that targets set at regular intervals (i.e. annually) for suppliers to roll out smart meters based on their market share would be a suitable incentive. However, we feel that suppliers should be given the flexibility to plan this rollout in a manner of their choosing as long as they achieve the smart meter installation numbers set by Ofgem and as long as stranding issues for already existing metering assets are given due consideration.

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

The installation of AMR technology is already becoming more commonplace in the non domestic sector, largely driven by the different contractual arrangements in that market. First Utility does not

feel that there is any requirement for the non domestic sector to be subject to the same approach in terms of rollout incentivisation as the domestic sector, particularly as there are already requirements for meter points above a certain threshold to have AMR technology installed.

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

Ironically, it is smaller suppliers who have been at the forefront of championing smart metering technology, largely as this is one of the few ways that they can compete with the Big Six. However, as long as the targets set for smart meter installation are based on market share, we do not feel that there should be any significant difference between large and small suppliers in terms of ability to achieve those targets, despite smaller suppliers not having the advantages of geographic density of customer numbers in certain areas as well as the lack of a Smart Meter Provider of Last Resort.

## **Chapter 3**

*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?*

Perhaps a campaign run through multiple media channels informing consumers of the benefits of smart metering and funded by the Government would raise awareness and promote engagement. This should be carried out as early as possible.

*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?*

It would seem appropriate for this to be developed between the relevant industry bodies representing both domestic and non domestic suppliers, e.g. ERA and ICOSS. A separate subgroup of the Smart Energy Code could be set up to meet on a regular basis and monitor and update this over time. Separate consideration will also need to be given to the participation of those small suppliers who are not members of any industry body.

## **Chapter 4**

*Question 6: Do you agree with the proposed obligation on all suppliers to take all reasonable steps to install smart meters for their customers? How should a completed installation be defined?*

This obligation would seem appropriate to achieve the desired aim. We would define a completed installation as a fully functional installed smart meter system capable of providing remote reads to the supplier and enabling the supplier to bill the customer against those reads. This would include connecting metering equipment to any existing HAN or commissioning of the HAN and WAN during the initial smart installation.

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

We would suggest that targets be set annually.

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

Targets should apply to all domestic suppliers and be based on those suppliers' market share.

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

First Utility believes that with an obligation created by licence condition accompanied by a public awareness campaign, we could achieve a five times uplift on our current meter installation figure although this would be dependent on the ability of third parties to provide us with sufficient quantities of the appropriate technology. We accept, however, that it will be a big challenge for the industry to achieve a significant uplift on the current installation figure of several million meter exchanges annually. We see major constraints in relation to achieving this uplift as being availability of Ofgem approved meters and properly accredited meter installers, particularly in relation to gas smart meters. Our experience also shows us that there is often additional work required by the associated gas or electricity distributor and there are currently extended lead times for these services to be carried out which are beyond the control of the supplier.

## **Chapter 5**

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

We have no specific evidence relating to this.

## **Chapter 6**

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

This seems reasonable and would potentially assist Ofgem in monitoring the progress of the smart meter rollout. We would suggest that suppliers be obliged simply to report the number of completed installations on an annual basis.

## **Chapter 7**

*Question 12: Do you agree that there is already adequate protection in place dealing with onsite security or are there specific aspects that are not adequately addressed?*

The concerns over bogus meter installers, as Ofgem has pointed out, already exist in the context of current metering activities and First Utility does not believe that the smart metering rollout will do anything to increase this risk. We would agree with Ofgem that the differences in visit requirements for smart meters do not require any further protection in supply licences.





*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?*

Although First Utility feels that sales and marketing activities should be precluded during meter installation visits, we do not feel that there is a necessary requirement for a code of practice at this stage. However, the situation could be reviewed later on in light of consumer feedback.