

# **OFGEM Smart Metering Prospectus – Questions requiring a response by 28 September 2010**

## **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)?**

I believe the biggest issue is that customers believe having a smart meter will automatically save energy. Customers will need educating as to how to use the data from a smart meter to and actions they must take.

**Question 16\*: Do you have any comments on the proposals for requiring suppliers to deliver the rollout of smart meters (including the use of targets and potential future obligations on local coordination)?**

No

**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?**

The approach is likely to lead to significant redesign

**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?**

No

**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?**

The approach will need significant co-ordination

## **Statement of Design Requirements**

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

Yes

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

Yes

**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?**

Look at alternative technologies that do not use SIMs

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

No- there is significant technical discussion required.

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

No

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

Like all cost benefits it depends on the assumptions made.

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

Yes

**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?**

Performance and meeting customer's expectations

**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?**

More field testing

### **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?**

No

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

More actual proving and pilots

**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?**

No

**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?**

Technical risk the HAN will not work and costs will be higher.

**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?**

More in field testing to prove the system works. I believe there a conflict to get it out quickly against prove it will work.

**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?**

Yes

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

Stated above

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

No

### **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?**

Yes

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

No there is already working solutions in this area. Very little thought has been given to non-domestic gas.

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

**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?**

I believe the public thinks having a smart meter will automatically reduce their bills. A lot of effort is needed to show how savings can be made.

**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?**

Open discussion with interested parties, industry stakeholders and consumer groups.

**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?**

Full working HAN and meters

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

Yes – every month

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

No

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

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

Depends what the objective is – saving carbon or helping fuel poor?

**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?**

Yes

**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?**

Yes

**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?**

Yes

## **Annex 1 – Energy Suppliers**

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 sites<sup>3</sup> for the following years:

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.

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.

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

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

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

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.

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

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.

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.

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).

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.

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.

## **ANNEX 2: Question for Meter Manufacturers**

**Not applicable.**

Question 1\*: What is your planned maximum production capacity during rollout?

Question 2\*: In terms of the unit costs of metering and communications assets (including the IHD where relevant), 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.

Question 3\*: Our current planning assumption is that GB smart meter technical specifications will be confirmed by winter 2011. Please outline the processes and timescales required to go from confirmation of the technical specification to delivery of the smart metering components. Please specify whether these timescales differ for the following components:

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

Question 4\*: How do you plan to organise your production capacity in order to minimise supply chain constraints?

## **ANNEX 3: Questions for Meter Operators**

**Not applicable**

Question 1\*: In terms of installation costs (including any logistical aspects), 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.

Question 2\*: Please outline the processes and projected timescales required to recruit, develop and train installers so that they have the appropriate certifications to install gas and electricity smart meters and associated WAN and IHD equipment. Please include 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

Question 3\*: Please explain how you believe that smart meter installers will be deployed 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.

Question 4\*: 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).

Question 5\*: 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.

# **OFGEM Smart Metering Prospectus – Technical/Manufacturer Questions requiring a response by 28 September 2010**

## **OFGEM document - Prospectus**

### **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?**

We are broadly in agreement with the requirements set out in Functional Requirements Catalogue.

We believe that the communication aspect of the meter should be replaceable as this is the area where there is most likely to be technical innovation.

It is important to keep the option of a simple pulse-out to ensure compatibility with building management systems used on non-domestic sites.

It needs to be made clear that smart meters on larger sites can be fulfilled with a pulse meter and logger.

With respect to these sites it must be made clear that the retrofitted device does not need to include support for the HAN.

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

Issue is to ensure that the physical and electrical characteristics are sufficiently defined to enable a manufacturer to produce the meter. There is little time for prototyping and field testing of any derivative specification.

### **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?**

No- the plan does not follow a recommended product life cycle process and is likely to result in significant problems. As stated above there is no time to produce Alpha and Beta models and for problem shake-out. Only by significantly reducing functionality can time be reduced.

## **OFGEM document - Statement of Design Requirements**

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

Yes - -this is an absolute.

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

In asking the question there is a need to define what suitable means and to fully define the requirements. At the moment there appears to be a headlong push to Zigbee without a full review and practical test of alternatives.



**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?**

Don't use SIMs - technology should be based on Internet technologies not mobile.

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

No- it is a wish list with a number of assumptions and little tangible analysis.

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

Broadly we agree that the additional functionalities are justified.

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

Local pulse output or simple data connection

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

No

**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 on both questions

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

Proving the HAN is fit for purpose.

**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?**

More upfront testing of basic assumptions and technologies.

### **Questions specifically for Meter Manufacturers**

Question 1\*: What is your planned maximum production capacity during rollout?

Question 2\*: In terms of the unit costs of metering and communications assets (including the IHD where relevant), 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.

Question 3\*: Our current planning assumption is that GB smart meter technical specifications will be confirmed by winter 2011. Please outline the processes and timescales required to go from

confirmation of the technical specification to delivery of the smart metering components. Please specify whether these timescales differ for the following components:

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

Question 4\*: How do you plan to organise your production capacity in order to minimise supply chain constraints?