ofgem E-Serve

Promoting choice and value for all gas and electricity customers

Energy suppliers, meter manufacturers, meter operators and other interested parties

Direct Dial: 020 7901 7260
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Date: 7 September 2010

Dear Sir/Madam,

Smart Metering Implementation Programme - Rollout information request

On 27 July 2010, the Department of Energy and Climate Change (DECC) and Ofgem published jointly a Prospectus containing proposals for the delivery of electricity and gas smart metering in Great Britain.[1] This covers both domestic households and small and medium non-domestic sites.

The purpose of this information request is to examine the opportunities for accelerating the rollout of smart meters compared to previously published targets, by realising more ambitious but achievable targets for the rate at which suppliers must install them. As recognised in the Impact Assessment[2] published alongside the Prospectus, accelerating rollout will affect not only the delivery of benefits associated with smart metering, but may also have an impact on costs. For example, a more compressed rollout would result in earlier delivery of benefits, but could also increase the risk of supply chain constraints.

For modelling purposes, the Impact Assessment for the domestic sector assumes that about 60% of smart meters are installed within four years of the start of mandated rollout. We welcome your views on the advantages and disadvantages of accelerating the rollout such that the following proportions of smart meters are installed within those four years, with specific consideration given to any changes in associated costs, benefits, risks and feasibility:

a) 70%
b) 80%
c) 90%

Alongside these scenarios, we would welcome any other views you may have on an accelerated rollout based on specific plans you may have already developed.

In addition, attached to this information request are three annexes which include further questions directed at specific market participants: Annex 1 for suppliers; Annex 2 for meter manufacturers; and Annex 3 for meter operators. To inform responses, we have included a

[1] The Prospectus can be found on the Ofgem website: http://www.ofgem.gov.uk/e-serve/sm/Documentation/Documents1/Smart%20metering%20-%20Prospectus.pdf
[2] The Impact Assessments for the domestic and SME sectors can be found on the Ofgem website: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=40&refer=e-serve/sm/Documentation

summary of asset and installation cost assumptions contained in the Impact Assessment in Annex 4.

We are committed to working with all stakeholders to establish a suitably ambitious yet achievable target and therefore encourage feedback from all interested parties. **Responses are requested by 28 September.**

If you have any questions, please feel free to contact Adhir Ramdarshan (0207 901 7340; Adhir.Ramdarshan@ofgem.gov.uk) or Tim Bailey (0207 901 7132; Tim.Bailey@ofgem.gov.uk).

Yours sincerely,

Neil Barnes
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ANNEX 1: QUESTIONS FOR 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[3] for the following years:

	Smart metered supply points[4]				Non-smart metered supply points			
	Domestic		Smaller non-domestic		Domestic		Smaller non-domestic	
	Electricity	Gas	Electricity	Gas	Electricity	Gas	Electricity	Gas
2009 (A[5])								
2010 (P)								
2011 (P)								

Impact of accelerated rollout

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)
- 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.

Pre-rollout preparation

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

[3] The Prospectus defines smaller non-domestic electricity and gas sites as those sites in electricity profile classes 3 and 4 and those non-domestic gas sites with consumption of less than 732 MWh per annum.
[4] For the purposes of this request a smart meter is defined as one which meets the functional requirements proposed in the Prospectus.
[5] A = Actual; P = Projected

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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.

Rollout strategy

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.

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ANNEX 2: QUESTIONS FOR METER MANUFACTURERS

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

Impact of accelerated 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.

Pre-rollout preparation

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

Rollout strategy

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

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ANNEX 3: QUESTIONS FOR METER OPERATORS

Impact of accelerated rollout

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.

Pre-rollout preparation

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

Rollout strategy

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.

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ANNEX 4: COST ASSUMPTIONS

Listed below are the cost assumptions used in the Impact Assessment for the domestic sector:

Capital Costs of Assets (£ per device)[6]

	Electricity	Gas
IHD	£15	£15
Meter	£43	£56

Communications infrastructure (£ per device)

WAN communications module	£15
HAN	£1 electricity/ £3 gas

Installation costs[7]

Electricity only	Gas only	Dual fuel
£29	£49	£68

Other supplier costs:

Supplier IT one-off costs	£45mn

[6] Within the modelling the programme has undertaken, it is assumed that due to technological advancement the costs of the meters, displays and communications devices will fall over time. This has been the experience with current meters and has also been seen in the international deployments of smart meters. We assume that costs fall by 1% per annum, reaching 10% by the end of 2020.

[7] The costs of assets and installation are assumed to be subject to a private cost of capital, i.e. resources committed to assets and installation have an opportunity cost. That cost is fixed at 10% p.a. in the impact assessment.

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