

**Smart metering implementation programme - rollout information request  
document (annex 3: questions for meter operators) response by**



Q1. 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;
- B) The likelihood of any supply chain, or other, constraints arising

Under the current system of smart meter installation, accelerating the roll-out will result in increased costs, as existing energy supplier engineers will struggle to train sufficient installers required to carry out the roll-out within the shorter timescale. A further problem is that once the roll-out is completed there will be an oversupply of semi-skilled engineers in the market causing significant unemployment. It is also highly likely that it will not be possible to train a sufficient number of smart-meter only engineers to ensure that roll-out targets are met.

Enabling independent registered engineers to install smart meters would minimise the impact of accelerating the roll-out. It would dramatically increase the labour pool available for installation, and create numerous additional opportunities for installing smart meters. Electrical installers currently visit an estimated 3.5 million properties a year, and Gas Installers an estimated 2 million. If over the next seven to nine years, engineers install a smart meter as part of their existing visit, the Government will be greatly assisted in reaching any targets it sets in order to accelerate the roll-out completion target. The use of this delivery method would reduce the pressures placed on the systems of existing smart meter installers.

#### Reduced cost of installation

The cost of installation will be reduced if the installation is undertaken by an engineer as part of his client work. With a typical cost of such an installation to an energy supplier being around £80, it will be significantly cheaper to install a meter as part of existing work than it would be to arrange for a specific visit by an energy supplier or their agents (or sub-contractors) with all the necessary administration, management and aborted or changed visits that this entails.

Further factors which reduce installation costs are:

- As they are already highly trained (average of 7 years), independent engineers would require minimal additional training apart from a short, standardised, induction program lasting around two hours. This would familiarise them with the equipment and train them to become proficient in informing consumers of the smart meter's functions and benefits.
- Due to a higher level of training than energy retailer engineers (who are often trained only for a couple of weeks) installation by independent engineers may often be quicker.
- There would be no transport costs or time lost due to failure to install as the independent engineer would already be on site attending to other matters.
- There would be no need for costly re-visits due to customers being out.

### Physical implementation

The necessary logistical chain for supplying electrical/gas Installers with smart meters and registering their installation with energy suppliers is already largely in place: There are already existing procedures by which independent engineers notify Local Authorities of well over 2,000,000 Electrical and Gas Installations currently each year.

A simple extension to this system has been agreed between a competent body (trade association) and a major high-street retailer (further details can be provided in confidence on request) whereby the required information for smart meter installation can be verified and provided to the relevant energy supplier. The stages of the system are listed below:

- 1) Engineer presents his registration certificate to the high street supplier, which is verified against a national database (this already exists). The high street retailer issues the registered engineer with a smart meter and makes a record of the engineer and the meter serial number, and any existing reading on the meter (i.e. from testing and calibration etc).
- 2) Engineer installs the meter and leaves a card with the home owner advising them of the final meter reading of their old meter and the start meter reading of the new meter (if there is one from calibration etc).
- 3) Engineer then informs his trade association (the competent body), using a software system already in use to report work under the Building Regulations (well over 2M per year of notifications) but which will be expanded with the following six (6) fields of:
  - (i) The start reading of the new smart meter (often new meters have small readings on from calibration and quality control checks).
  - (ii) The serial number of the new smart meter which has been fitted.
  - (iii) The consumers current energy supplier
  - (iv) the energy supplier's customer identification number.
  - (v) The old meter final reading.
  - (vi) The serial number of the old meter.
- 4) The Engineer then returns the old meter to the high street supplier. High street supplier then informs the relevant competent body (the same as the engineer), again using a software notification system that is currently being used to notify over 100,000 jobs per year, but amended to include the following of the following four (4) pieces of information for verification purposes:
  - (i) The independent engineers name and registration number
  - (ii) Postal address of the new installation
  - (iii) The old meter final reading.
  - (iv) The serial number of the old meter that has been returned.

- 5) The relevant competent body then confirms or rejects the two sets of information and communicates them to the energy supplier and any relevant central database. This would then allow the energy retailer to update its system and release payment to the independent engineer or to the relevant competent body to pass onto the engineer.

Due to the clear line of communication between the supplier, engineer and competent body and then the competent body and the electrical retailer, the consumer would experience no difference in service than if the installation had been carried out by an energy retailer engineer. Similarly the energy retailer would also receive the information as easily as it would from one of their own engineers.

Q2: 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
- Sourcing strategy
- Cost of training each installer
- Length of time to train each installer

Qualified electrical installers will not require any additional training to install smart meters; (Gas Installers would require a one day training course which would be carried out by an approved body such as a trade association). They could therefore begin installing smart meters almost immediately. Allowing independent engineers to install smart meters will therefore dramatically increase the pool of people available for their roll-out.

Both sets of engineers would need a short (2 hour is proposed) induction program to ensure standardisation and to educate installers on consumer benefits so that they could provide sufficient information to consumers.

The numbers of companies which are registered as being able to carry out smart meter installations has increased rapidly over the last few years, by almost 1,000 with NAPIT alone between 2008 and 2009. This increase is continuing in 2010 at the same rate.

Currently some 36,000 companies are registered under Central Government Approved Part P competency schemes and are able to carry out smart meter installations. Use of these independent engineers would significantly reduce recruitment roll-out problems associated with a faster roll-out.

Q3: 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.

Much of the work carried out by Electrical and Gas engineers is part of a larger property refurbishment and as a result it is highly likely that both trades would be present. Also, there are now some independent, registered engineers who are proficient with both gas and electrical work.

In the event of only one trade being present, they could notify, with the consumers permission, their opposite number in the other trade to come and visit the property to fit the other component of the Smart Meter. To keep costs down and as this is not an emergency, we would not expect any call out charges to apply or be applied.

The individual would also be a professional, independent engineer who is registered with an appropriate body. In the event that the consumer refuses a visit by the opposite Tradesman, half of the smart meter requirement has already been installed as part of existing client work; saving the energy company money.

It should be noted that the majority of energy retailer engineers specialise in either gas or electric so the energy retailer would also need to arrange two specific visits.

**Q4: 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)**

Each year Electrical Installers visited an estimated 3.5 million premises, and Gas Installers visited an estimated 2 million. If smart meters were installed at each of these premises under our scheme then approximately 10,000 smart meters could be installed each day. However, as the roll-out program progresses and wide spread take-up has already taken place, this number will gradually decline as some of the premises engineers visit will already have smart meters installed.

The number of smart meters each individual Electrical/Gas Installer would install each day will be quite low, probably one a day on average. However, there are *tens of thousands* of independent engineers so the total number of smart meters installed will be high.

**Q5: 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 on any geographical differences.**

Independent registered Electrical/Gas Installers could install smart meters when they visit properties for other reasons; this would dramatically minimise the time and monetary costs of installation. Furthermore, time would not be lost if customers did not agree to the installation of smart meters, as the individual would already be at the property for an unrelated purpose.

The installation of electric smart meters can usually be expected to take no more than half an hour; and the installation of gas smart meters no more than one hour.

The amount of time required to educate the customers on the smart meters will vary considerably and this is true regardless of whether the engineer works for an energy retailer or is independent.

However, effective advertising and raising of public awareness surrounding smart meters would minimise the necessary time allocation to this.

A breakdown of the projected times spent on each task can be found below

Activity	Time (Hours)
Travel time	0
Time spent on unsuccessful visits	0
Smart meter install	0.25-0.75*?
In-Home Display (IHD) Install	0.10?
Customer Education	0.5?

\*Depending on meter type