Smart meters for SMEs: a short policy paper

October 2014

Introduction

Citizens Advice supports the rollout of smart meters to small and medium enterprises (SMEs) and micro-businesses. Our priorities are to ensure that there are adequate procedures in place and an understanding of businesses' needs to ensure the rollout achieves its aim of a sustained demand reduction.

We want **a unified approach to be taken with the rollout in both domestic and non-domestic sectors**. Research conducted on our behalf in 2013 suggests there are many issues that need to be worked through to ensure the rollout works optimally, for both consumers and the industry.[1] This has been backed up by recent qualitative research from DECC.[2] Recent questioning of suppliers and other interested parties has assuaged few of our overall concerns.

Our key recommendations are to ensure that:

- All consumers are able to access basic data[3] free at the point of entry, and that more advanced data solutions are cost-reflective.
- After an initial billing cycle, back-bills are permitted only if the supplier has gone through an agreed process to mitigate the error and because the customer is at "fault".[4]
- Demand-side response tariffs are available for the appropriate businesses.
- The issue with one central communications body does not affect interoperability and thus switching between suppliers.
- Suppliers are only able to remotely disconnect properties when all other avenues to deal with debt have been exhausted, and with appropriate notice.

[1] http://bit.ly/1w8DR1O – hereafter 'the research'
[2] http://bit.ly/ZG4qQy – hereafter 'the DECC research'
[3] That pertaining to the current consumption of the consumer and so relevant to reducing day-to-day consumption
[4] The new Standards of Conduct may apply here regardless of the basic argument that smart should eliminate the vast majority of back-billing permanently (after an initial spike due to installation itself uncovering 'issues')

1. The existing non-domestic smart rollout

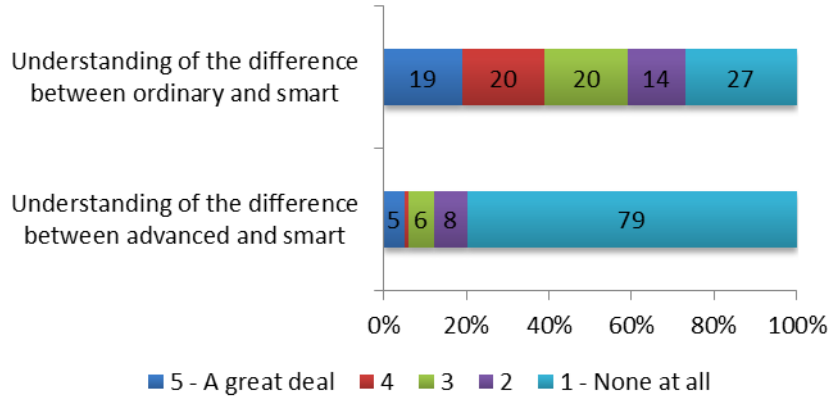
The Government and industry have prioritised the rollout of smart meters in the domestic sector. Research from the Federation of Small Businesses (FSB) from 2011 shows that 55 per cent of businesses had not even heard of the non-domestic rollout.[5] This may be because according to the latest figures released by DECC, although there were 529,000 smart or smart type meters operating in smaller non-domestic sites by the end of 2013, this only accounts for about 15 per cent of all SME meters.[6] The Government's focus on the domestic sector is rational given that in the SME market (**2.14 million electricity accounts and 1.5 million gas**):

- engagement levels are linked to the date when contracts expire
- average spend is relatively low[7] so the opportunities for saving money are commensurately low given the complex contracting process.

Many suppliers are offering smart – or more accurately, 'advanced' (AMR) – meters as a benefit to entice businesses. The decision by a minority of suppliers to charge for basic data access is an unfortunate precedent as delivering behaviour change and, ultimately carbon reduction, among the SME sector, is a key success criteria for the rollout and critical for meeting the business case. If a key rationale for rolling out smart meters is to encourage demand reduction, then there must be a certain level of data available for free to encourage that behaviour change. We are pleased to see that the vast majority of suppliers have not, and will not be charging for basic data access.

The business market already suffers from low engagement and trust issues – as witnessed in low switching rates and an increasing number of contacts to the Citizens Advice consumer service respectively – and general awareness of smart meters and their use among small businesses without one is fairly low.

Figure 1. Understanding of smart meters among SMEs without one



[5] http://bit.ly/1sLwOMs
[6] http://bit.ly/1w8DZi3
[7] Consumer Focus research in 2012 suggested that half of SMEs spend less than £1,500 a year on electricity – with a quarter spending £500 or less – http://bit.ly/1u8kpir

Citizens Advice recommends that business representatives should be directly consulted on appropriate engagement strategies for different sectors (or business segments).

We are not convinced that businesses currently understand the difference between smart and AMR meters (see Figure 1 above). Our research on those SMEs with smart meters demonstrates how supplier-led the process has been thus far; only 5 per cent of consumers with smart meters had proactively requested one. Many SMEs seemed to think they had to have one now (or eventually) or break the law; indeed we have cases from our Extra Help Unit where suppliers have said just that.

Of the small minority who had requested a meter, they had generally done so with the expectation of receiving accurate billing – this was also a majority position in the DECC research, with very few mentioning anything else. Most respondents stated that this had been achieved but many saw very little variation (that is their bills were not unduly inaccurate in the first place). Of these early smart SME users, around 40 per cent think they are getting the most from their meter. It is important to note that this level of satisfaction is based on their low expectations of what a smart meter will deliver. The results below are replicated by FSB research of their membership's expectations, in terms of ranking and the relative weight attached.

Figure 2. SME expectations of smart meters (requested one)

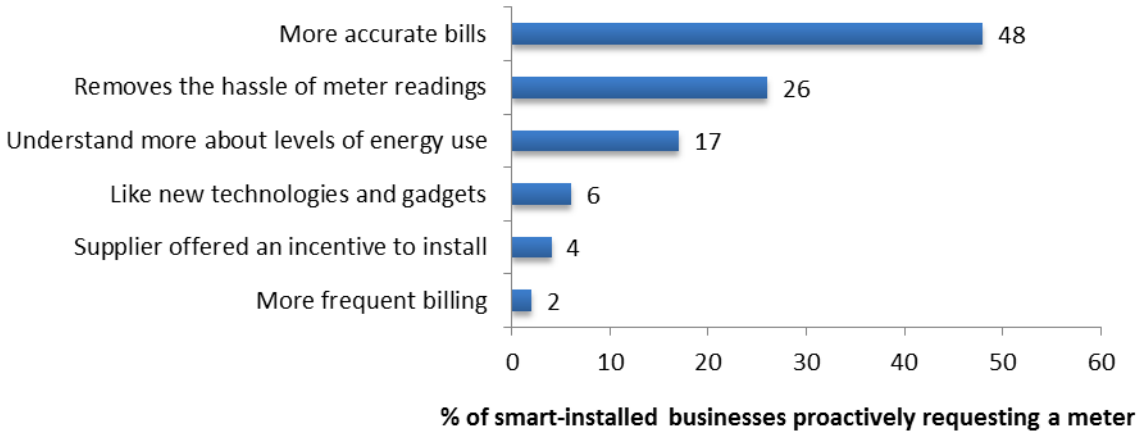
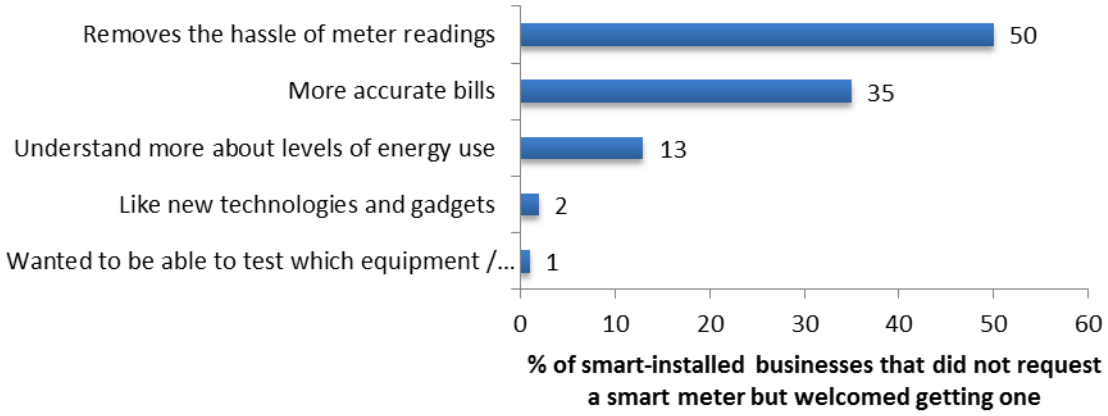


Figure 3. SME expectations of smart meters (not requested)



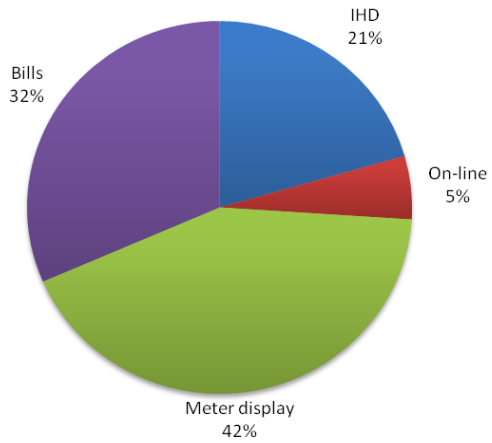
2. Ensuring demand reduction and energy efficiency

The business case for non-domestic smart metering is predicated on SMEs seeing energy savings – £1.71 billion in the form of reduced consumption.[8] But **Citizens Advice does not have a comprehensive understanding of SME and micro-businesses' attitudes to energy efficiency advice, displays or what they do and don't want by way of support during an installation visit**.

We do not think that the Central Delivery Body – now rebranded as 'Smart Energy GB' (SEGB) – is developing a comprehensive engagement strategy for micro-businesses.[9] If smart meters are rolled out without a significant engagement push at the same time, rollout could see businesses paying for the cost of the meters (and thus 'spending' £649 million) without accessing any of the benefits.

Consumers with smart meters in our research did not appear to change their demand levels because they were not using smart functionality. When asked how they monitored usage the totals were as follows.

Figure 4. How SMEs monitor usage



Only around 1 in 4 of our survey respondents stated that they were using the enhanced functionality smart offered – the vast majority were using channels already available to them whether on 'dumb' or smart meters. One third found their meter display easy to read and understand so there is the possibility of future behaviour change. Of those consumers without smart meters, over half would want an In-home display (IHD), only a minority would like to see their usage online. 11 per cent of those with smart meters in our research reported taking subsequent action to reduce energy bills; two thirds reported receiving lower bills, though the causal link is not clear.

[8] DECC IA

[9] In response to an earlier draft of this paper SEGB came up with 'focus groups and stakeholder events' as examples of their current engagement, with no clear indication of how this would change in the near future. There appears to be an emphasis on 'cost effectiveness' which may be counter-productive. In addition they referred other questions we asked them to DECC, including the crucial one of interoperability.

The DECC research is even more stark, with only a small minority of smart businesses being ‘aware of the full functionality of their smart meter and none were using the energy usage data it could produce.’

Citizens Advice recommends that more research is carried out looking explicitly at what would induce SMEs to reduce consumption and how suppliers and other bodies can play a positive role to encourage greater consumer engagement. It is imperative that DECC and SEGB begin this research forthwith.

3. Switching and the DCC

Ensuring meter interoperability when a change of supplier takes place is of critical importance for SMEs, micro-businesses and the smart meter project overall. Suppliers serving non-domestic customers are not required to use the Data Communications Company (DCC), so there will be no explicit guarantees of interoperability. Ofgem is not minded to introduce protections in this area as it feels the AMR market is maturing and does not feel there are specific issues that need addressing. However, our research threw up a minority of cases where having smart meters caused some (often temporary) issues for consumers when trying to switch supplier.

In our research around 10 per cent of consumers had switched supplier since having their smart meter installed; there seemed neither a push nor a drag on switching due to smart. In some cases the need to switch had been identified because of smart (because it was more clear that savings were possible as there was an enhanced awareness of energy spend/cost).

DECC expects that larger suppliers will choose to use the DCC regardless of mandating. We also expect that in practice these suppliers will be able to help shape the DCC to their own needs and those of their consumers, either internally or through later engagement. The question is whether those companies who are rolling out smart meters early have an incentive not to participate if barriers to interoperability limit their customers' ability to switch and therefore helps to tie the customer to them. We particularly do not want to see some kind of Chinese wall thrown up between big 6 and other suppliers.

Citizens Advice recommends that this issue is monitored throughout the rollout process to **ensure it is not having any unintentional impacts on competition. We would not want to see consumers required to pay at the point of entry (or through a higher unit rate) if they need new technology when switching supplier.**

4. Data access

As discussed above, exactly how non-domestic customers will access (their) usage data, in what format and at what cost, will be critically important to ensure they access the benefits of smart meters and to achieve the overall business case objectives that DECC has laid out. It is extremely unlikely that the consumption reductions of 3 to 5 per cent, predicted in the Impact Assessment (IA), will occur if consumers cannot easily see how much energy they are using.

Citizens Advice believes that suppliers should only charge customers for data access if they are providing more elaborate energy services. We are pleased to say that the majority of suppliers agree with us; some have pointed out to us that they interpret the new Energy Efficiency Directive as making this mandatory. Indeed some who used to charge at the point of access a few years ago no longer do so.

If consumers have to go through their supplier to access their own data (because there is no separate hub or the DCC) this could have a negative impact on access to third party services (because it is not as easy as possible to access), and on competition. Strong evidence in the domestic sector shows that where displays are provided with smart meters that the energy savings delivered increase.[10]

Therefore we are still worried that a failure to mandate a free of charge tool to allow small businesses to access their consumption information, whether it is an IHD or online portal, will act as a barrier to small businesses being able to reduce their energy consumption and therefore access the benefits of smart metering. It is hard to imagine businesses making any use of data (and thus use less energy) if it is not made easy for them. Although suppliers agree with this in principle there could still be issues in practice.

Citizens Advice's **key aim is for all small businesses to be able to access full data from a smart meter free of charge.**

Customers will need to have free access to their **historic data (13 months as a minimum)** which shows them not only how much energy they use but when they use it, at a level that is proportionate to that taken from the business. For example, if the company records half hourly data use, the supplier should provide data that show their half hourly use of energy. This needs to be in a standardised format that allows consumers to make like for like comparisons with other deals available on the market. In order to establish if they will benefit from a time of use tariff, for example, they will need to fully understand when during the day they actually use their energy.

In our research 98 per cent of consumers didn't think they were paying for their display (where one was present), suggesting that smearing costs works for suppliers. This is even higher than the percentage (96 per cent) who thought that the installation of a smart meter was free.

[10] ACEEE Advanced Metering Initiatives and Residential Feedback Programmes (2010). http://bit.ly/1w8E5G9

5. Remote functionality

Smart provides the ability to remotely disconnect customers and switch them to prepay – both of which are potentially money saving to consumers overall if the appropriate protections are put in place. However, there is a gap in understanding about how smart prepay could develop for the small businesses sector – we know that some suppliers (especially smaller ones) are already implementing it. We look forward to learning from these innovations.

The remote switch and disconnection function means that suppliers could simply disconnect or switch a business to prepay without ever carrying out a visit or gaining a court order to the affected site. This is already a reality for some SMEs and micro-businesses with certain suppliers. Citizens Advice regards disconnection as a sanction that should only be used when all other avenues to recover the debt have been exhausted. All suppliers that we have discussed this with agree that this is a reasonable approach; this is very encouraging, although it does not mean that there is no issue beyond the policy level.

We are keen on the cost savings that can be made and then passed on to businesses through the use of remote disconnection/reconnection and it may be the preferred option of some consumers to reduce costs and staff time – for example, if a premises will be unoccupied for a significant period of time.

Citizens Advice agrees that **remote disconnection of SMEs or micro-businesses for debt should be allowed, but only if significant improvements in businesses debt and disconnection processes are made and that there is supplier agreement on what constitutes a vulnerable business.**

We consider it would only be appropriate to allow remote disconnection in the following circumstances:

- where the consumer has explicitly requested it
- where the supplier has carried out full correspondence with the consumer including letters, phone calls and emails/text and the supplier can prove a conversation has been had with the consumer about the implications of remote disconnection
- where the supplier has contacted the consumer and can prove that there are no domestic consumers resident on the premises or environmental health implications associated with the disconnection.

In all circumstances before proceeding to remote disconnection the supplier must ensure that the consumer is informed in writing of exactly when the disconnection will take place (that is, the exact time and date), what the implications are of this and what they can do to halt this process. Sufficient warning must also be given – we would suggest at least five working days.

6. Demand-side response

Demand-side response should be considered as an opportunity for those appropriate businesses that will benefit from dynamic pricing; they are likely to be a minority and across many different sectors. Time-of-use (ToU) tariffs might be especially useful to those larger small businesses who cannot get half-hourly (or interruptible) contracts, but who can vary their energy patterns. Given this will be a minority of customers they should be self-selecting. Suppliers seem to support the DECC approach here but were wary of over-selling their own ability to select and help the relevant SMEs.

Citizens Advice wants to ensure that the approach is an opt-in with no pressure selling (see Section 7) as guaranteed by industry codes.

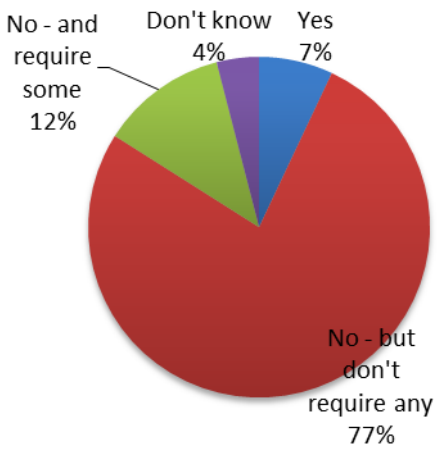
7. Installation

We support a broadly similar installation code of practice to that for domestic customers. It should ensure that SME customers can access the benefits of smart metering and are guaranteed a certain level of service. The Smart Metering Installation Code of Practice (SMICOP) achieves this, in the round. The behaviours prescribed there must be accompanied by a general period of engagement via business groups. We note that selling is permitted during the installation process, and while this is not ideal we recognise that some businesses may benefit from this engagement. This will avoid the danger of businesses merely viewing a smart meter as a sunk cost and giving it no further thought.

Citizens Advice believes that **DECC needs to consider what mechanisms should be in place to ensure fair and transparent prices and that consumers are getting value for money.**

Research suggests that the majority of SME consumers were, perhaps surprisingly, happy with their installation process – though very little follow-up occurred (see chart). 80 per cent were satisfied with the installation process and 77 per cent in its arranging.

Figure 5. Were you satisfied with the smart meter installation process



Appendix

The DECC Impact Assessment (IA) case for non-domestic smart metering

- Present value base year is 2013. 'Period' is 18 years. 3.6 million meters. Focus is on 3/4 meters and gas of less than 732MWh/year that is SMEs. 2.14 million electricity and 1.5 million gas.
- Net benefit in 2013: £1.448 billion to £3.070 billion, best is **£2.262 billion**. Comes from **costs £649 million and benefits of £2.911 billion over the 18 years**. Benefits range is £2.097 billion to £3.719 billion.
- **Total consumer benefit is £1.72 billion**, of which reduced consumption is £1.71 billion (rest is micro-gen). Total supplier benefits just £466 million.
- Dual fuel bill reduction on average of £140 by 2030. All the DCC and consumer engagement costs are in the domestic IA, as are theft saving and network benefits.
  - By 2020 estimate split between advanced and smart is 40/60 (gas) and 23/77 (electricity). DCC use estimate is 75 per cent and 45 per cent for electricity and gas meters respectively (these reflect big 6 shares of the non-domestic market).
  - **Big consumption reduction (per meter) is for gas – 4.5 per cent, just 2.8 per cent for electricity**.
  - **Just £84 million from "switching benefits"** – mostly with DCC meters.
  - **ToU stats is based on previous work,** with discretionary load of 21 per cent now and international evidence. **24 per cent ToU of some type by 2030**.

Aims and principles

The Citizens Advice service provides free, independent, confidential and impartial advice to everyone on their rights and responsibilities. It values diversity, promotes equality and challenges discrimination.

The service aims:

- to provide the advice people need for the problems they face
- to improve the policies and practices that affect people's lives.

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