

## ESTA RESPONSE TO:



### Promoting Smarter Energy Markets Ofgem

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#### **ESTA Energy Services and Technology Association**

ESTA is the UK Industry Body representing suppliers of products, systems and services for Energy Management. The 120 members cover energy consultants, aM&T providers, controls manufacturers through to full Energy Services/Contract Energy Management mainly working in the I&C sector.

ESTA is engaged with UK Government policies on Energy and Climate Change, The Green Deal, Energy Performance of Building Directive, Part L Building Regulations, Display Energy Certificates, Carbon Reduction Commitment, Energy Services Directive and the roll-out of smart and advanced meters. It also provides UK input to developing international energy management standards and Chairs several BSI committees.

ESTA members are key to the UK's realisation of a low carbon, secure and affordable energy future. Our members provide equipment, systems and services for energy management to reduce energy demand at source and including renewables.

Our response is a majority consensus of the members involved. Where ESTA members respond directly, they may offer differing opinions on some issues which we respect as expressing their own definitive view.

## Promoting Smarter Energy Markets

ESTA welcomes the consultation and sees a smarter energy market as the key towards continued improvement in energy best practice by major stakeholders, in particular consumers.

This however requires further thought on the role of the consumer. Currently, Ofgem are called upon to regulate to ensure demand is reduced (i.e. supplier turnover is reduced) and so under the present scenario the supplier, not the consumer is the driver for change. Whilst ESTA believes that the supplier is likely to be the initial party encouraging the consumer to reduce demand, we do not believe that the supplier will generate optimal best practice in order to deliver maximum energy efficiency.

Under the current scenario ESTA doubts whether current regulation is sufficient to drive energy best practice and believes that industry benchmarks that continually change and improve are needed for suppliers to sign up to and to achieve.

Driving competition and innovation within the smarter energy market is needed to allow for industry standards to develop as best practices come forward. 10 years ago, ESTA developed the standard concept of aM&T (Automatic Monitoring and Targeting) and are continually refining and improving this as innovation from individual member companies are taken up by the market. This experience can be called upon to assist in developing the smarter energy market for I&C and domestic consumers alike.

A different model for SMEs and domestic will develop and many ESTA members are already installing equipment and providing services in these markets - some of which will become standard and others refined through innovation to become standard.

ESTA requests that whatever is rolled out through the SMIP remains as accessible to consumers and their 'advisors' as to the supply industry. This will maximise innovation, requiring the supply industry to follow best practice if it wishes to deliver the benefits that need to be implemented by the ESCO (Energy Services Companies) market.

Generally speaking, the supplier controls access to the meter and therefore reserves what ESCO measures can be taken in the wider market. ESTA believes the continued oversight of a level-playing field in this area will be a fundamental regulatory role for Ofgem in the success of promoting smarter energy markets.

Regulation ensuring the system is as accessible to consumers as it is to suppliers and in dealing properly with consumer complaints where possible obstructions to open competition across the supply chain exist, is imperative.

The ability for ESTA members to continue to install meter and data retrieval / communication systems independently and at lower risk serves to drive innovation forward. However, two elements that could hamper this market sector and the innovation it provides are cost benefits from volume and interoperability.

The SMIP can deliver the solution for both of these elements and ESTA asks that it does so without constraining independent metering and data retrieval in any way. Providing

such an infrastructure has already been shown technically possible and it will ensure that the program as a whole achieves full and rapid payback as well as customer satisfaction and trust.

Such a model is applicable to DNOs as well as end consumers. The networks businesses are slowly realising the potential smart meters offer and will want to make full use of the facility. This will not be possible if functionality is decided upon too early in the SMETS process.

There is pressure to finalise the functionality early because of the way IT/IS systems are designed - (i.e. you need to define all the data items before you implement the communications). SMETS should be adaptive and not constricted. IP and the Internet were put in place before applications were built and the same scope and thinking should be inherent with the size of this infrastructure being planned. An Open Pipe infrastructure is therefore needed. There is inappropriate resistance to this from the major stakeholders at present who seek to protect and ring fence potential value.

In addition to these policy objectives, practical difficulties already exist within the marketplace which can and should be addressed through the smarter markets program.

An example of this is ESTA members who have installed AMR equipment via direct contracts with the customer, providing them with energy management information and in some cases fiscal readings. There have been a number of instances where AMR devices have been disconnected without customer consent or notification by the meter operator. Whilst these issues have been reported it appears there is no regulation in place or process to deal with this satisfactorily and we would welcome a view from Ofgem on how this situation can be resolved, especially as it impacts the complete and successful delivery of the smarter energy market.

Also, ESTA through considerable effort produced ASPCoP a Code of Practice for AMR service providers (ASPs) to improve interoperability and imminently to provide a data hub (or gateway) for the supply industry to query what is connected to a particular meter (ASPConnect). Ofgem's continued encouragement regarding this market development which will provide benefits to the industry is required and we ask for Ofgem's endorsement for this and also endorsement from the supply industry.

ESTA endeavours to make available its member experts to assist with the work being undertaken by Ofgem and DECC on this program and are happy to continue to be engaged over consumer and demand side issues. We believe that the consumer and demand side voice is still under represented and stress that the responsibility for maintaining a balanced view lies with those in charge of the program. Complete stakeholder engagement is an important issue and we encourage Ofgem to be proactive in directly engaging with this part of the industry where representation on panels and at workgroups is missing or under represented.

Further direct views relating to the consultation proposals and specific clauses follows and we will do all we can to help make smarter markets work and deliver maximum benefits to UK PLC and best energy practice.

## CHAPTER: Three

Proposition 1: Time-of-use tariffs should help many consumers lower their energy costs, but improved engagement will be needed to help all consumers make informed choices.

Agreed.

Suppliers however will need to be properly incentivised to pass these on. It is difficult to see how this might be achieved until HH settlement is extended to domestic, but it is of course possible.

ESTA sees that if the consumer is able to make HH data available to suppliers a better overall deal on supply may be negotiated because the supplier can profile match against his cost history. ESTA are therefore adamant that suppliers should not be entitled to HH data unless the consumer requests it (i.e. opt-in). The customer needs to be the prime receiver and owner of this data so the best purchasing power and most informed decisions can be made.

Proposition 2: More efficient use of demand-side response can lower overall energy costs, but this will need coordinated changes to regulatory and commercial arrangements.

Agreed.

However no regulatory or commercial arrangement will change the hardware that is bolted to the wall. ESTA believes that signals in and out from the meter should be accessible to the consumer outside the seal of the accredited MOP, or that the consumer has absolute right to nominate an independent MOP and claw back the charges being paid to the supplier.

These signals include pulse output indicating demand and 5A relay switching which the customer may choose to connect to equipment for load shedding. There is also the possibility of every smart meter to include a 5th metered terminal similar to the radio teleswitch. This 5th terminal should be accessible to domestic electricians, and should be mandated in new builds, controlling load that is non-essential and may be switched out either by the supplier or the customer.

Proposition 3: Innovation in energy services would increase the consumer benefits of smart metering and can happen without major change to the regulatory framework.

Agreed.

Provided that the technology installed is appropriately accessible. From experience this will be a continual struggle, and better regulation needed to maintain a fair and open level playing field.

Proposition 4: Consumers will have more payment options, without changes to regulatory arrangements beyond those envisaged as part of the smart metering rollout.

It difficult is to see how flexibility in payment options can be achieved beyond either credit or prepayment mode in the current SMETS proposals. They seem very fixed on existing scenarios and we need to see much more innovative charging mechanisms.

For example of this could be the ability for a consumer to pay £100 for a block of solar energy that he makes use of when it is cheapest (i.e. when the sun is shining) or nuclear for the overnight base load. This will require revision of back office settlement systems, but may not necessarily need a change in meter hardware.

Most current meters include a number of 'empty' registers which can be configured with special labels remotely and updated dynamically to show new tariffs, credits from more than one supplier, etc. This is a potential configurable meter function rather than a future firmware upgrade.

Question 1: Do you agree with the propositions set out in this chapter?

see above replies to each proposition

Question 2: For each proposition, have we identified the elements of current market arrangements that could help or constrain the realisation of benefits for consumers?

see above replies to each proposition

Question 3: For each proposition, have we identified the key issues, such as the timescales for any changes to market arrangements?

see above replies to each proposition

Question 4: Are there additional opportunities for development in retail energy markets that we should include in the scope of our work?

see above replies to each proposition

CHAPTER: Four

Proposition 5: Settlement arrangements should use actual daily (gas) and half hourly (electricity) meter reading data in order to improve their accuracy and efficiency.

Agreed.

However improving accuracy is only a small part of the overall benefits. The main benefits will be in accountability for individual meter points to the network and to form a more 'deliverable' load profile through less carbon intensive generation and storage.

Currently, there is no incentive for an individual or supplier to switch on energy intensive kit overnight when load is lowest. Very accessible HH data will be key to develop this market. Consideration should be made to allowing HH to develop independently from settlements (since the settlements accuracy element is a small one, it does not justify high implementation costs, particularly if in the meantime it stalls consumer access to HH data).

Proposition 6: The change of supplier process should be reliable and fast, so that customers can confidently switch supplier on a next day basis.

Agreed.

It should be as easy for a customer to switch off demand from a supplier as it is for a supplier to switch off supply to a customer (remote disconnect). This however will require technical interoperability to the level we have not yet seen.

If SMETS2 is an interoperable version of SMETS1 we need to get to a position where SMETS1 is stable and we are comfortable with it. This is still a long way off unless more Open Pipe technology is used in the implementation.

Proposition 7: Electricity data processing and aggregation services should be procured centrally in order to reduce costs and support fast customer switching.

Agreed.

Provided that the procurement parameters are properly specified in open tender.

The proposition however will be difficult to control. An independent meter operator for example could install and operate an ADM for 10 years using GPRS for well under £500, serving monthly or quarterly reads to whoever happened to be the supplier.

MOP costs and "actual" reading costs from the supplier should be able to be clawed back. However, if the market arrangements prevent this happening (either because supplier bills are not transparent enough or other barriers) then the cost of centrally procured services will not be driven down.

Proposition 8: The Smart Energy Code should be used as a vehicle to consolidate existing industry codes dealing with retail issues in gas and electricity to facilitate market development and reduce administrative burdens.

Agreed.

However, the SEC panel must properly represent consumers and demand side participants equally to other stakeholders. If there are six supplier representatives on the panel then there must be six consumer representatives and six demand side representatives on the panel too. Level stakeholder engagement and representation is the only way to provide the most successful outcome even if from a regulatory standpoint more diverse views are presented.

Question 5: Do you agree with the propositions set out in this chapter?

see above replies to each proposition

Question 6: For each proposition, have we identified the right sources of costs and benefits associated with achieving them?

see above replies to each proposition

Question 7: For each proposition, have we identified the key issues, such as the timescales for any changes to market arrangements?

see above replies to each proposition

Question 8: Are there additional opportunities to reform market processes that we should include in the scope of our work?

see above replies to each proposition

Further points for consideration based on the consultation clauses.

3.10

It is unlikely that there will ever be a consumer who will not benefit from TOU tariffs

- all users are able to shift load to a certain extent, depending on incentive
- we envisage energy consultants to be engaged similarly to insurance salesman to help the consumer get the best rates

3.12

Clear and accurate information for smart meters is needed for consumers - is the system interoperable

- what does the system cost?
- do I have to have it, and what are the alternatives and costs?

3.32

There is mileage for the consideration of multiple suppliers to a meter point - supply based on solar during sunny periods, wind during windy periods and nuclear for continuous base load. Blocks of energy say £100 chunks can then be purchased either directly by the customer or (as now in industry) by 3rd parties.

### 3.33

ESTA believes it is essential for non-licensed energy service companies to be able to be able to compete

- we believe this is the only way energy best practice can be continually improved

### 3.38

ESTA strongly agrees

### 3.37

The HAN and WAN must be as accessible to independent parties.

### 3.39

Currently, there is no evidence of unbundling supply charges from charges on meter operation and data collection in the bills consumers receive

- this must be more transparent

### 3.57 and 3.59

ESTA understood that attempts to establish commercial interoperability last year were rejected, that said it is technical interoperability that will be required to ensure consumers have equal access and greater options.

### 4.10

Fig 2 is a bit misleading - the solid blue line is not the actual consumption of a premises, but the average of all premises in that profile class.

### 4.21

There is considerable mileage in allowing consumers to receive HH data without mandating it through suppliers.

- as is in the PC5-8 market. This will allow consolidating markets to develop.

### 4.22

this is effectively inserting a further party between the bulk trading and end consumption of electricity – that party must add maximum value, otherwise it should not be mandated - the only way to achieve maximum value is to ensure there is competition.

### 4.25

It is essential that the consumer may change supplier as easily as the supplier may remotely disconnect the consumer - this ensures trust that the smart meter is empowering the consumer as much as the supplier

### 4.44

Centralisation of processing of data is likely to stifle competition. Ways suppliers can be innovative in how they meter and inform the customer are needed - if data is centralised there will be no differentiation between the suppliers provision.



## 4.74

ESTA believes the market is distorted with the supplier remaining the contractual hub for metering and data collection. Agents appointed by the customer are still in contract with the supplier, and have difficulty clawing back monies for the customer for services provided elsewhere. The SEC should include licensing of MOPs and DCs in addition to the monopoly DCC - this will serve to ensure the DCC continues to provide value going forward.

## 5.

ESTA believes the evolution of smart meters and ensuing smarter markets will take considerable time. Whereas supplier representation is well covered there is little representation for the consumer.

ESTA would like to determine whether suppliers can offset the cost of this representation against their smart metering roll-out charges. If this is the case, the consumer will need to have costs allocated for equal representation.