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Consultation on Proposals regarding Smart Appliances – ELEXON Response

We welcome the opportunity to comment on the questions posed in the above consultation document relating to the Government's proposals to mandate standards for smart appliances.

As you are aware, ELEXON (as 'BSCCo') is the Code Administrator for the Balancing and Settlement Code (BSC). We are responsible for managing and delivering the end-to-end services set out in the BSC, for which we provide Code Manager, Delivery Body and Policy Delivery support. In addition, through our subsidiary, EMR Settlements Ltd, we are the EMR Settlement Services Provider, acting as Settlement Agent for the Contract for Difference and Capacity Market.

Our 2016 and 2017 independent customer surveys achieved our highest ever scores in customer satisfaction and customer advocacy. We were the leading Code Manager across Ofgem's cross-Code survey in 2017. We continue to direct our efforts into customer engagement with all customers. Within the Code Manager role, we provide an efficient and effective end-to-end service (concept, design, implementation and operation).

We believe that a central data collection and settlement function, with a single standard on data communications, offers significant efficiencies, and would ensure interoperability of appliances. ELEXON believes that our experience with fulfilling a similar role in electricity imbalance settlement, and as a top Code Administrator, would make us a suitable candidate to fulfil these functions.

Given that so many potential functions on Smart Appliances will be dependent on Smart Meters and market wide Half Hourly Settlement (HSS), it is vital that the standards align with the Target Operating Model for HHS once this is approved by the Regulator.

The views expressed in this response are those of ELEXON Ltd alone, and do not seek to represent those of the BSC Panel or Parties to the BSC.

If you would like to discuss any aspects of our response, please don't hesitate to contact me at Jeremy.Caplin@elxon.co.uk.

Yours sincerely,



Jeremy Caplin
Market Architect

CONSULTATION ON PROPOSALS REGARDING SMART APPLIANCES – ELEXON RESPONSE

Below are the ELEXON responses to your specific questions, omitting those questions on which we have not expressed a view.

Q1. Do you agree that the Government should take powers to allow for regulation on standards for smart appliances?

ELEXON agrees that there is a need for regulation on standards for smart appliances.

It is clearly not desirable for a smart appliance to be tied to a particular service provider. In the same way that the new generation of Smart Meters will be independent of Supplier, allowing consumers to freely move between Suppliers, smart meters must also allow consumers free movement between companies seeking to make use of the Smart features of the consumer's appliance.

Q3. The consultation stage Impact Assessment published alongside this consultation document explores the costs and benefits of the options considered for this policy. It indicates that mandating standards for smart appliances provides the greatest net benefits, compared to voluntary standards. Do you agree with our analysis? In particular, please consider the following, and provide analysis to back up your views:

a) Likely consumer uptake of smart appliances, including which type of consumers and anticipated time frame;

Consumer uptake of smart appliances will be constrained by the roll out of Smart Meters, and the implementation of the option of Half Hourly Settlement at domestic level. ELEXON is leading on the development of the Target Operating Model (TOM) for market wide Half Hourly Settlement (HHS) on behalf of Ofgem. Currently five skeletons of possible models have been developed and approved by the Regulator to be further worked up and consulted on.

b) Consumer use of the smart function provided by smart appliances in relation to different types of tariffs, including fixed and variable;

It is unlikely that many consumers will wish to engage with any smart appliance that requires active management on their part. Functionality will have to be remotely configurable by the Supplier or other service provider as the consumer changes tariff, while at the same time providing security to the consumer.

Given the interaction between market wide Half Hourly Settlement and the ability to maximise the benefits of Smart Appliances, it is vital that the HHS TOMs take account of Smart Appliances and that both standards and timescales approved for the roll out of Smart Appliances align with the HHS model that is adopted.

d) Monetised and non-monetised costs for industry to comply with standards, including consumer businesses, smart appliance manufacturing businesses, smart appliance service providers, supply chains and the electricity industry (such as Distribution Network Operators);

The costs to the electricity industry are likely to be mostly in the areas of data collection and validation, and settlement. Any service other than just turning an appliance off for an expensive settlement period is likely to have availability and utilisation components in the tariff. In order to ensure accurate payments, there will need to be standardised systems to record and transmit information such as the times an appliance operated in a frequency responsive mode, or if an appliance switched off in response to a signal from a DSO to manage a local system constraint.

While it would be possible for each company procuring a service from an individual consumer's appliance to collect data from each appliance, and process it, there are clear efficiencies of scale to be gained from centralised data collection and settlement, as is the case for Settlement of electricity imbalance, or the collection of data from Smart Meters. In addition to the basic cost saving, there would also be the advantages arising from increased competition for access to an individual's appliance, as switching would be easy for a consumer.

Q4. In this document, we have proposed minimum functionalities for each principle. Do you agree with these functionalities? What functionalities should be considered in addition to those listed above? Please divide your responses according to:

i) Interoperability;

Given that so many potential functions on Smart Appliances will be dependent on Smart Meters and market wide Half Hourly Settlement, it is vital that the standards align with the Target Operating Model for HHS once this is approved by the Regulator.

As discussed above, a central data collection and settlement function, with a single standard on data communications, would ensure interoperability of appliances. ELEXON believes that our experience with fulfilling a similar role in electricity imbalance settlement, and as a top Code Administrator, would make us a suitable candidate to fulfil this function.

ii) Grid-stability and cyber-security;

The availability of live operational data to both the national and distribution system operators is a key requirement for grid stability.

iii) Data Privacy;

Standards in this area should align with the work currently being done under Ofgem's market wide Half Hourly Settlement Significant Code Review work.