Office for Low Emission Vehicles
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17 July 2020

Dear Sir/Madam,

Ending the sale of new petrol, diesel and hybrid cars and vans – consultation response

We welcome the opportunity to respond to your consultation on ending the sale of new petrol, diesel and hybrid cars and vans.

As you are aware, ELEXON is the Code Manager for the Balancing and Settlement Code (BSC). We are responsible for managing and delivering the end-to-end services set out in the BSC and accompanying systems that support the BSC. This includes responsibility for the operation and delivery of balancing and imbalance settlement and the provision of assurance services to the BSC Panel and BSC Parties.

We manage not just the assessment, but also the identification, specification, development, implementation and operation of changes to central systems and industry processes. This end-to-end model provides expertise in one place for both administration (especially, Change) and systems design and implementation. In addition, such expertise is then available to support industry, government and regulator in considering future changes and innovation against the existing industry rules, for the benefit of the consumer

In addition, through our subsidiary, EMR Settlement Ltd, we are the Electricity Market Reform (EMR) settlement services provider, acting as settlement agent to the Low Carbon Contracts (LCCC), for the Contract for Difference (CfD) and Capacity Market (CM). EMR services are provided to the LCCC through a contract and on a non-for-profit basis.

We are keen to ensure that the Settlement arrangements are appropriate, promote smart charging and enable the uptake of Electric Vehicles (EVs). As you are aware, ELEXON has been testing lamppost charging infrastructure on behalf of the industry since 2018. We have also had numerous discussions with parties looking to provide EV offerings, including Demand Side Response, Vehicle to Grid and other flexibility and balancing services. We also contributed to the EV Energy Taskforce under the Energy Systems Catapult (ESC) and Low Carbon Vehicle Partnership (LowCVP) by providing our technical expertise and construction of the report.

ELEXON are involved in electricity system requirements and therefore, we have not commented on the achievability of the phase-out date, or the definition of what should be phased out and when. We do strongly believe that appropriate smart charging infrastructure, metering and data access arrangements are essential in delivering the OLEV proposals. Hence, we have chosen to respond to questions in your consultation on barriers and government measures, where we feel our comments can add further value. The ELEXON response to consultation on Electric Vehicle Smart Charging in October 2019 contains our current view on future smart charging requirements.

The views expressed in this response are those of ELEXON alone, and do not seek to represent those of the BSC Panel or BSC Parties. If you would like to discuss any aspects of our response, please do not hesitate to contact me at kevin.spencer@elexon.co.uk, or on 0207 380 4115.

Yours sincerely,

Kevin Spencer Design Authority

What are the barriers to achieving the proposals?
We believe that appropriate smart charging infrastructure, metering and data access arrangements are essential in delivering the proposals. ELEXON provided a response to your previous consultation on Electric Vehicle Smart Charging in October 2019 (ELEXON response to consultation on Electric Vehicle Smart Charging). In our response we highlighted that the smart charging market is at a very early stage in terms of technology, business models, deployment and usage and that innovation should not be stifled. We also agree that it will be necessary to set requirements for charge point operators beyond the device itself, to ensure that interoperability and security objectives are delivered. We also believe that interoperability might not be achievable, where bespoke infrastructure is being provided by charge point manufacturers/operators to manage specific circumstances. This appears to be true in examples we have seen for lamp post charging or smart cables. ELEXON has also been developing requirements to allow multiple suppliers for a single premises (BSC Modification P379). Under these arrangements charge point operators may be required to notify EV data to Settlement on behalf of the customer. This interaction will also require careful consideration when setting regulations relating to smart charge points. ELEXON has also been looking at 'behind the meter' metering requirements (BSC Modification P375) that may require new 'measurement and control devices' that are not likely to be smart Meters. The EV users and/or charge point operators may provide flexibility services, e.g. through aggregators, and so secondary metering may be necessary to demonstrate the provision of these services. We also believe that issues around grid protection will need to be addressed. In our response to the smart charging consultation, we highlighted that The Electricity System Operator (ESO) and Distribution System Operators (DSOs) manage frequency, voltage, reactive power. Furthermore, DSO services are not so focused on energy balancing. System Operation is split into energy balancing and constraint management. Where energy balancing is making sure there is enough electricity to meet demand and constraint management accepts that the networks are imperfect and need careful coordination to ensure it doesn't break and to maintain power quality. We also envisage a future where the needs of DSOs, the SO and other market participants (e.g. suppliers) may conflict. Again, consideration should be given to who can access the smart charging functionality and for what purpose. We note that currently only the Supplier can provide load

switching directly via the smart Meter and that EVs are not listed as trusted devices that can be controlled (as governed by the Smart Energy Code (SEC).

What measures are required by government and others to achieve the earlier phase out date?

We believe regulations should set minimum requirements and should be revisited and improved over time as more is known of potential innovation and EV offerings. We believe the need to specify regulations for Smart Charging (which are technology neutral) not for Smart Charge points. Outcome based regulations could allow a variety of combinations of tech and services – e.g. dumb charge point + smart cloud service or 'all-singing-dancing' charge point or smart charge point with communication with SMETS Meters.

We believe regulations should be tailored and appropriate to each 'use case'. For example, charging cable metering still need a bespoke charge point in order to function. Residential charging requirements are likely to be very different to those required 'on the go'. Different Regulations may be required for fast charging as opposed to trickle charging. Some charge points may be able to provide 'export' to the distribution network while others will not (e.g. lamppost charge points because they are unmetered, the electrical wiring may not support export and because it may make management of the distribution network less predictable).

On the issue of data privacy, we believe that there is a balance to be struck between protecting customer's Charge Point data and not constraining the availability of data for either; regulated purposes (such as Settlement); or the ability to use such data for flexibility, DSO or other innovative purposes.

The current data access requirements for smart meter data could constrain the ability to access the data, specified under the regulations, where customers have opted-out of providing the data.

On export data requirements, we note that Ofgem's benefits case in Smart Systems and Flexibility Plan set out the work industry needs support to take advantage of flexibility.

Therefore, the EV regulations need to cater for specific functionality, like export measurement and more sophisticated load control, and multi user access/control (e.g. suppliers, network companies, aggregators) and possibly the ability to optimise import/export based on different price inputs.