

Response to OLEV 'Consumer Offer' Letter

*REA EV Forum positions for submission to OLEV
Final as of 23rd June 2020*

Prepared by: Daniel Brown, Policy Manager & EV Lead at the REA – dbrown@r-e-a.net

Prelude

The REA would like to thank OLEV for including us in the discussion relating to the consumer experience of using and paying at public EV charge points in the UK. This is a key issue in the journey towards building a mass market for electric vehicles and one in which our members have taken time to input on in detail. Below you will find REA analysis and positions so far on the topics of:

- Debit/credit card payment
- Data availability
- Reliability
- Pricing Transparency, and
- Accessibility

About the REA

The Association for Renewable Energy and Clean Technology (REA) is the UK's largest trade association for the renewable energy and clean technology sectors, representing over 550 corporate members operating across the decarbonisation of heat, power, transport, and natural capital. The REA EV Forum is comprised of around 75 companies operating across the electric vehicle charging infrastructure value chain, ranging from product manufacturers and installers to Charge Point Operators, eMobility Service Providers, energy suppliers, and financiers.

A list of REA members can be found here: <https://www.r-e-a.net/our-members/our-members-directory/>

On the debit/credit card payment

In order to reach the Government's Net Zero targets and create a mass market for electric vehicles in the UK, consumers will need to easily pay for their charging sessions. Consumers should be able to pay with a simple solution that does not require a standing membership account but should be given the freedom to hold such an account if they choose.

Charge Point Operators, as the organisations holding the greatest commercial risk in the charging infrastructure value chain, should be given the greatest license possible to set their own pricing and terms to ensure return on investment.

The REA welcomes the Ad Hoc payments regulation as part of the Alternative Fuels Infrastructure Directive. We believe that current arrangements could be tightened to provide clarity for operators and consumers.

Specifically:

- Contactless credit / debit card payments should be mandated for all new and existing DC rapid (50 kW+) public charge points.
- Rapid charge point operators should be given the opportunity to engage with other forms of simple payment, including Apple or Google pay. As such, the REA would welcome Government explicitly stating that units with Near-Field Communications (NFC) payment systems are compliant with the AFID regulations (so long as they do not require new membership accounts or interact with additional software such as a website or mobile app).
- 'Chip and pin' card payments should not be mandated for all public rapid charge points. We see this as an unnecessary technical and cost burden at this time, particularly following the Government's decision to increase the contactless payment limit from £30 to £45 per session.
 - We understand there to be a very small proportion of charging transactions that come in over £45 per charging session
 - This may change over time as it is proportional to battery density, and the ability for the payments industry to adapt to electric vehicle merchant category rules
 - Most operators will have an additional means of payment available on their units (e.g. pay via app, RFID or browsing to a website from a mobile phone)
 - Rapid DC operators who do not have an additional means of payment will typically offer a chip-and-pin system voluntarily

We acknowledge that a significant minority of bank account customers are not granted a contactless debit card (for credit risk reasons). Our understanding is that most of these people are, however, able to register for Google pay or Apple pay. As upfront electric car and van costs fall and EVs become more accessible to this portion of the population, having alternative means of payment that are 'contactless' but are not traditional credit cards may be important.

One area where Government and industry can work together to see contactless credit card payments forward is in discussions with Visa and Mastercard, the primary payment providers. Visa, for example, have recently introduced a new merchant category code for EV charging. [Details here](#). However, the security measures around contactless payment are around number of transactions (the REA understands this to be 5 taps) or a spending cap over a 24 hour period. This means that if a driver has repeatedly used contactless in a day, but their particular session comes in at under £45, their card may be blocked from completing more payments.

The REA proposes that industry and Government work with credit card providers to adapt their EV charging merchant categories so that EV charging sessions that are paid for via contactless cards are not constrained by the maximum-usage-per-day or spending cap limits, akin to how toll booths are exempted.

We also note that we do not believe that contactless or chip-and-pin should be mandated for AC charging stations due to the cost burden this places on such chargers. We believe that

the best solution to improving ease and access to these chargers is for operators to adopt roaming agreements with other operators.

We are aware of surveys that highlight consumer interest in contactless payments but also believe that we are at an early stage in the market for payments and numerous other means of payment (e.g. roaming and plug-and-charge) will also become prominent in the future.

REA EV Forum position on roaming

As agreed in our [February 2019 report *The Interoperability of Public EV Charging Infrastructure in the UK*](#), the REA's current position on the topic of public charge point roaming and interoperability are:

On ad-hoc payments at public EV charge points: *"Fundamentally, 'ad hoc' represents a solid first step but does not equip CPOs and MSPs with the ability to fully communicate with each other, it does not set the industry up fully for value added and energy sector services, and it leaves room open for interpretation."* (p15)

On the role of Government and roaming: *"Industry needs to develop solutions, potentially through individual networks adopting common protocols such as OCPI, that strengthen their business cases. Direct Government intervention to force companies to adopt particular protocols or business models is not warranted, but support to foster collaboration between networks and for any industry-led schemes would be welcome."* (p36)

The REA's continued position is that roaming is essential for the UK charging market but, for the time being, Government intervention in this area of the market is not warranted. The market for roaming and payments is still in early stages and significant progress has been made in the past 12 months in these areas following the REA's report including:

- Roaming agreements between ChargePoint and other UK players (peer-to-peer),
- Numerous UK actors have signed up to Hubject and Gireve (roaming hubs),
- Digital Charging Solutions announced a host of partners,
- ZapPay (via ZapMap) has launched,
- CPOs such as Plug-n-Go, Franklin Energy, and Alfa Power have announced roaming agreements,
- Octopus Energy has released a roaming service,
- Traditional market players like AllStar have adapted existing products such as their fuel card to make driving easier.

Whilst not all these examples constitute roaming, they all allude to a rapidly expanding and developing market for payments in the UK.

Updating this position is an area of active discussion within the Association and our view may be subject to change.

On data availability

The REA has been collaborating with and inputting to the OCPD Policy Alpha workstream of Government. We understand that the project is likely to propose that all public charge point operators submit static and dynamic data on unit locations, speed, pricing and availability (amongst other information) to a centralised authority via the open communications protocol OCPI. This new scheme would replace the current National Charge Point Registry.

The REA welcomes this initiative and believes it will be an important step towards building greater mass consumer confidence in public charging. The vast majority of our members are actively involved in the development of OCPI, have adopted it as a protocol, or are in the process of doing so and as such this policy would not add an undue new burden of cost.

The REA would like to better understand who will manage this data, how access will be granted to it, and particularly how market sensitive data (particularly relating to charge point availability) will be held securely.

The REA also supports charge point operators submitting maintenance-related data to this centralised authority. The REA's members involved in charge point manufacture report high uptime across their networks (up to 98% reported), as do members involved in back-end service provision (over 99% reliability reported by some operators). As an association we welcome transparency around maintenance rates so consumers are able to properly plan their journeys and build relationships with the most transparent and reliable charging networks.

On reliability

The REA welcomes the Government's commitment to improving the reliability of charging infrastructure. It is not acceptable to current EV drivers nor is it encouraging to potential EV drivers for stations to be out of service for a prolonged period. We also share your concern that there is a potential safety risk for drivers to be stranded at charging stations that are inaccessible or not working.

The REA recognises the reliability of the public charging network in the Netherlands and agree that 99% is a target the UK should in principal aim for. We note that many of the leading operators in the Dutch market are also members of the REA.

Our membership operates reliable networks with high uptime rates and would like to see the overall bar in the industry raised. We note that many of the maintenance issues cited by consumers are derived from older charging equipment, some of which installed in the early days of the charging sector by local authorities who did not put in place adequate maintenance contracts.

With charge point networks submitting dynamic data relating to maintenance in the future as part of OCPD Policy Alpha we believe consumers will be able to make more informed choices about the networks they choose to frequent. We note that data provided by CPOs as part of that programme could be used by Government to monitor the uptime of networks.

As Charge Point Operators are hold the largest amount if risk in the charging value chain and actively compete with each other for business we believe consumers will 'vote with their feet' and frequent more the networks with greater levels of reliability.

If Government were to intervene in this area we would wish to see clarity around exactly what would be regulated (e.g. sites, units, or a CPO's overall network), response times expected to address faults (higher response times often come with higher costs to networks which in turn are often passed on to consumers), and penalty mechanisms. We would hope that future regulation in this area does not penalise those companies already trading on their reliability and instead targets outliers in the market.

If the Government is to intervene, any future regulation in this space should:

- Reflect that there a number of reasons for public charge point 'faults' including hardware failures, the CPO back-office, the mobile network operator / SIM provider, the EV, the grid, and vandalism.
- Reflect the difference between AC and rapid (50k/Wh+ DC) charging infrastructure
- Reflect the differences between 'responding to a fault notification' (which could refer to operators being available over the phone to consumers encountering a fault), addressing emergency response (e.g. fixing an actively unsafe charger), and resolving a fault with a charger that is otherwise safe.
- Recognise that a two-day timeframe to fix a charger not operating but is otherwise safe is something already practiced by many charge point operators, as is a 4-hour 'make safe' response rate to unsafe chargers.
- Take into account that regulation forcing charge point operators to respond to safe but otherwise non-operational charger in overly tight timelines (typically using a third-party company) could increase costs which may be in turn passed on to drivers.

Pricing transparency

The REA welcomes the Government's interest in pricing transparency. Our members overwhelmingly use the p/kWh pricing model and it is one we believe should become the industry standard. Depending on the operator, some additionally charge a minimum amount per charging session (to cover potential vendor fees), a connection charge, a late stay charge, and surge charge depending on network demand / wholesale power prices, all of which we believe should continue to be allowed.

We do not believe that mandating pricing in pence per mile to be technically or commercial viable. This would be analogous to implying that a 12 litre V8 Ford Mustang would travel the same distance as a 1.1 litre Ford Fiesta on the same quantity of fuel. This is why the norm in the petrol and diesel sales sector is pence per litre. Therefore, if Government is to intervene, regulations should reference pence per kilowatt hour. This is due to charging rates of vehicles, battery/charger efficiency, and the real-world ability for a charger to deliver its stated power rating (due to the heat of a batter and/or any site power capacity issues).

We also believe that, for many of the same reasons, Government should not be looking to regulate on a pence-per-minute basis.

Our members are actively committed to pricing transparency. Some are already taking the steps to break the constituent cost of a session to drivers down the amount paid to a Charge Point Operator compared to the associated eMobility Service Provider.

Future regulation in the space should not inhibit innovation in the payments sector. We note start-ups and established entities in this space looking to sell 'bundled' kW from multiple charging networks to drivers, those launching roaming products, those designing electric fuel card schemes, those developing 'plug-and-charge' products, those integrating with a home electricity supply tariff, and those providing mobile charging services that guarantee drivers a minimum state of charge at certain times of day. Given the UK's large footprint in the financial services and fintech sectors, we believe that this sector should be allowed to flourish if exportable products and services are to emerge.

Subscription fees are separate from the price paid at the charging station. Drivers should retain the freedom to subscribe to a particular charging network and operators should be able to retain the commercial freedom to be able to offer subscriptions. Subscription fees may be bundled with a company car, new vehicle, or energy supplier and can build loyalty for charge point operators.

The REA notes that one area of pricing that is currently unclear relates to parking fees. Some drivers will find that parking locations are at private, barrier-controlled locations and that they need to pay additional fees to charge at such a location. The REA would welcome greater up-front clarity for consumers from charging companies and private car park operators if there are additional costs associated with the usage of a station.

Accessibility of public charging infrastructure

Following discussions with the Office for Low Emission Vehicles the REA is canvassing member views on the topic of accessibility.

We believe that ensuring public information about where charging stations are accessible to those with disabilities (be they relating to sight, movement, etc) is important. Our members recognise the importance of this topic and we are working with them to publicise where and how certain stations are disability friendly.

We do not believe further regulation in this space is presently warranted.