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Markets | Competition and Markets Authority
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Submission to UK Gov Electric vehicle charging market study

Thank you for the invitation to participate in the Competition and Markets Authority study. As a way of introduction, we are an Austrian eMobility software firm that is a market leader in interoperable and scalable EV charging solutions. We are now the largest in Europe with over 180,000 charge points, and 5,6 million charging sessions facilitated with our platform, be.ENERGISED. We employ more than 100 employees from ten nations who work at the headquarters in the federal province of Salzburg and our offices in Berlin, Düsseldorf, Munich, and Vienna. Since 2019, the Volkswagen Group has been a strong strategic partner.

Thanks in large part to our advocacy and technological advances, it is now the norm in Central Europe for EV drivers to drive long distances without any charge point range or access anxiety. EV drivers and fleet managers know that they have easy access to charge points that they can either pay for as a guest or within their own charging plan easily. This was recently tested by Guinness World Record Holder Rainer Zietlow who we co-sponsored to travel 28,198 kilometres across Germany and visited 652 charging stations without any access restrictions. It is based on this success and our firsthand experience that we provide you with our submission in hopes that it will be of use to the developing UK Mobility market.

1) Theme one: developing competition while incentivizing investment

#4. What are the main existing and potential barriers to entry and expansion for EV charging providers and how can these be addressed?

For UK businesses and communities to participate in the EV charging market and open their stations as public charging stations they must be able to make a profit. Typically, EV charging is not their primary focus. They often acquire stations because of the potential additional revenue streams, initial government grants and incentives and to contribute to do their part to contribute to the environment. However, they do not always have the additional resources to administer and maintain the station or the tools and know how to profit.

To make a profit, their station needs to:

- appear in all charging maps,
- have a flexible tariff system so certain groups of users can charge at different rates e.g. Employees can charge at a discounted rate or during certain times and the payment system
- allow drivers to be able to pay without having to install multiple apps or carry several RFID cards that can be lost or forgotten.
- have access to white label solutions for monitoring, billing and administration.

has·to·be gmbh helped establish widespread interoperability in the DACH region with government and business cooperation and through our own software advances. Our product, be.ENERGISED COMMUNITY enables charge point operators (CPOs) and mobility service providers (MSPs) to not have to deal with cumbersome and individualised roaming contracts. Rather they can simply connect to our platform, which bundles them and pushes them to a roaming hub, creating a vast, interconnected network and lowering cost and administration. CPOs and MSPs with networked stations then have the option to let all administrative tasks involved fully automated with white label services take care of billing, taxation, 24/7 customer hotline, remote monitoring, legal regulations, dynamic pricing, confidentiality data laws, fleet management, etc. removing a huge barrier for many particularly smaller CPOs and MSPs to participate in the market.

Theme two: effective consumer interaction with the sector

#1 What challenges or difficulties related to charge points might act as a barrier to consumers switching from a conventionally fuelled passenger vehicle to an EV and how might these be overcome?

has·to·be gmbh's sees that there are at least six key areas of interoperability that consumers need to make the switch to EV which we have broken down in the following table.

Six key areas of interoperability that consumers need to make the switch to EV:

Interoperability affects:	Without Interoperability:	With Interoperability:
Access	Driver must download apps or carry multiple cards. Fleet managers must provide staff drivers with credit cards to complete journey.	Access to all charge points. Smaller communities and SMEs can profit by making their station available to the public.
Payment	Drivers must hold multiple network specific access cards, apps to pay for a charging session. Some require providing an upfront deposit to cover the cost of the charging session.	Fleet managers and individual drivers can opt for no up-front payments and receive a consolidated monthly bill reducing complications and making it easier for new EV drivers to enter the market.
Affordability	CPOs can set pricing schemes that vary greatly between different stations and even with in the same station with different charge points. They can range from time based to kWh based or a flat fee adding a layer of complexity for consumers to work out the actual end cost. Charging stations in remote or areas without off-street parking can exploit customers with extortionate pricing.	Market driven pricing that easy to compare prices and follows the same standards of unit pricing. Drivers can easily compare options.
Availability	Drivers risk arriving at a station with charge points that are unavailable due to the hardware being offline, damaged, blocked by a parked vehicle no longer charging. Apps to find stations are network specific so even though there might be an available station near by the driver does not see it on the map.	Navigate to any available charge point and be able to immediately charge. Broken or offline stations are immediately updated on the map informing drivers and reported to a technician for prompt repair. Option to pre-book charge point to facilitate timely charging sessions.
Date security	Details about the driver, their habits, address locations risk security breaches.	Secure data certificates ensure driver private and confidential data is handled securely. Transparency software protects the consumer to ensure measured values are accurate.
Socket Standards	Station connectors vary by region or auto maker, drivers must locate where stations have which plugs e.g., Fast charger DC plug.	Universal plugs for all stations but also compatible with scalable OEMs so as start ups go out of business, are bought up, pivot with fast growing market etc. are still usable within charging networks.

#7. Are existing protections offered by consumer law and other measures (such as sector regulations) sufficient?

As you know, **the Alternative Fuels Infrastructure Directive (AFID)** is fully implemented in Europe, including the UK for new and existing charge point infrastructure. A core component of AFID is to mandate that all charge point operators need to offer customers 'ad hoc' access to their chargers. The provision of ad hoc access means that all new and existing public charge points must be accessible without entering a pre-existing contract. Although this law is widely upheld in the UK, **has·to·be gmbh is of the opinion alone,** it is not enough. There are several value-added services, data protection, and consumer protections that interoperability can provide. We refer to the above table for the six key areas that could be further protected with policy development and legislation.

German Calibration Law introduced in 2015 may also be of interest regarding data protection and UK consumer protection rights. German calibration laws require all components involved in the collection and processing of measured values by charging station up to the invoice amount must be trustworthy, or at least that it must be possible to check the invoice exclusively based on the accuracy of the components to ultimately protect consumers. This has resulted in a uniform regulations framework throughout Germany. Operators of German charging devices are required to also implement these calibration requirements in their equipment.

In practical terms, drivers can download the digitally signed measured values after receiving their invoice and check them with so-called transparency software. The transparency software determines whether the signature of the measured values matches the public key of the charging station. This ensures that the values were not manipulated or falsified after entry and that the settlement was issued correctly.

We hope you found this helpful. Please do not hesitate to contact us for additional information or explanation.

Best regards,

Louisa Russell
for has·to·be GmbH