AFIR: Expand electric mobility by providing transparent, convenient and secure payment options

- Consumers want to pay at charging stations using their cards, because they have them readily available and payment by debit or credit card is transparent, convenient and secure. Furthermore, it does not require any additional registration.

- The consumer expects the same payment method at each station. Consistency means reliability: No matter where, you can always pay with the same, familiar payment instrument.

- Internet-based payment methods are no alternative to card acceptance. They are specific isolated solutions and therefore neither widespread nor tested. Such systems are also highly susceptible to errors. Users must register online with highly sensitive data.

On 14 July 2021 the European Commission (COM) published a proposal for the Alternative Fuels Infrastructure Regulation (AFIR) as part of the Fit for 55 package. This regulates, among other things, the payment methods at electric charging stations and filling stations for alternative fuels.

Only consistent acceptance of debit and credit cards at electric charging stations can guarantee that consumers can always charge spontaneously. Simple, convenient and secure payment options are essential for consumer acceptance of electric mobility, thus ensuring a faster achievement of climate targets. The German Federal Government recently also acknowledged this and created corresponding national requirements with the amendment of the German charging station regulation. It is now crucial to establish uniform conditions throughout the EU.

Card payment is simple, convenient and secure
Electricity can be paid for directly with a card, without registering or logging in. Today's payment chaos at charging stations, however, is slowing down the popularity of e-mobility. On average, every e-car driver today has charging cards - in Germany, for example, three on average - from different providers, has to register beforehand providing highly sensitive payment data in apps and on websites and manage various contracts in order to be able to charge with electricity. QR code solutions are cumbersome and do not match the user’s perception of security. Only 9 percent of future e-drivers in Germany prefer to pay by scanning a QR code and entering their payment data via a mobile website. In addition, such systems are highly susceptible to errors. They should therefore be an addition and not an alternative to card acceptance.

Card payment state of the art
Payment terminals for debit and credit cards are successfully used at self-service checkouts, public transport vending machines, snack vending machines and even service station toilets. Just as with the normal plastic card, payment is possible via the digital version on the smartphone via NFC. Card acceptance opens up the possibility of using the most modern smartphone-based payment solutions. Numerous banking apps and the offerings of renowned tech companies such as Apple Pay and Google Pay can be used on these devices.

Card payment is accustomed and reliable and affordable
Card terminals are an inexpensive and common technology. The terminals are able to accept various debit and credit card types of different schemes. Since a card module can be used at charging points for several charging stations, the costs incurred per charging station can also be greatly reduced. Document printers are not required, as documents can be shown on a display of the charging station for example. In addition, card authentication is safer than in-app solutions or QR codes. In addition: An active internet connection and a fully charged smartphone are not necessary, which guarantees the autonomy of the customer.

Card payment ensures price transparency
The displays installed in terminals show the exact price for the charged electricity at the e-charging station. When roaming and using app-based numbers to recharge, consumers often don’t know how much they will end up paying. However, just like the payment option via debit and/or credit card, this point is particularly important to consumers.

Card payment widespread and leads to a wider usage of infrastructure
As of 31 December 2020, there are a total of around 585 million debit cards and around 113 million credit cards issued in the EU. Card payment is internationally widespread and secure. Cross border commuters and holidaymakers are also covered. Card acceptance leads to a significant increase in charging processes per station. This is obvious, because card acceptance increases user-friendliness through easy access for everyone at the charging station.

1 Infas quo survey on electromobility on behalf of the Initiative Deutsche Zahlungssysteme e.V. (German Payment Systems Initiative), September 2021
2 Source: ADAC surveys on municipal infrastructure for alternative drives, 2020, p. 25.
3 Deutsche Bundesbank payment statistics for 2020; excluding Great Britain; not yet published.