

Visa Europe response – Proposal to Amend the Act on infrastructure for alternative fuels and proposal for new regulation – follow up of the national charging strategy

Thank you for the opportunity to comment on these proposals. We are fully aligned with the Ministry's aims to ensure consumers are able to pay for electric vehicle (EV) charging as conveniently and securely as possible, which will in turn support and encourage uptake and usage of EVs.

We are very supportive of the proposed requirement to mandate a card-based payment option for EV charging on the public EV charging infrastructure.

To facilitate and promote a successful rollout of EVs, it is critical to support uptake from consumers and ensure all barriers are addressed. Charging anxiety remains a key concern for current EV owners and a major barrier for potential EV users. Ensuring that consumers can be confident that they will have unfettered access to all charging stations without being forced into a particular registration or membership is central to address their fears. In terms of payment, this means being able to use a payment method that consumers feel comfortable and familiar with, and not being required to download a new app and/or sign up to a contractual arrangement in order to charge their vehicle.

Open loop card payment schemes equip the EV ecosystem with tried and tested technology and industry best practice when it comes to payment infrastructure and consumer experience. Cards are a ubiquitous payment type; in 2021, Norges Bank reported that approximately 97% of the Norwegian population from 16-79 have at least one payment card, with over 90% owning more than one. Many card terminals also support dynamic price transparency. Therefore, in our view, card payments would reassure consumers of the wide accessibility and ease of use of the existing EV charging infrastructure, and will also enable those travelling to Norway to use EV charging infrastructure more easily.

We also agree that card payment would be more effective than roaming in terms of establishing an accessible, frictionless public charging infrastructure with interoperability between different payment options. In contrast to card payment, roaming does not currently provide an effective solution for consumers without smartphones or who are vulnerable and are unable or unwilling to use apps. Roaming also fails to address instances where mobile network connectivity is low and/or scenarios where there is down period in app services. It also would not effectively support those who only need to charge once cause they are renting or borrowing an EV, instead requiring them to sign up to a particular app in order to charge. Moreover, roaming solutions in other sectors (i.e. telecoms) have also demonstrated a poor track record in terms of implementation periods, making it likely that more innovative solutions such as ISO 15118 plug and charge will be mainstream before interoperable roaming solutions would be agreed and deployed.

However, we believe there could be some adjustments to the proposals to fully drive the uptake of EVs and realise the potential benefits of an interoperable public charging infrastructure

Firstly, we would strongly recommend requiring mandatory introduction of Near Field Communication (NFC) open loop card readers at all public EV charging points. Open loop NFC functionality can play a critical role in guaranteeing consumers the maximum convenience and freedom of choice both now and in the future. A card terminal with NFC allows for both physical card payments and also modern, innovative card-based mobile and wearable payments such as Apple Pay, Google Pay, Samsung Pay, Garmin Pay, Fitbit Pay, etc, as well as supporting existing (closed loop) radio frequency identification (RFID) cards.

By enabling all payment methods, this approach would ensure open access to new service providers, ensure consumers are not locked in to any particular or incumbent solution and promote competition. Open loop systems also bring benefits to all stakeholders in the EV ecosystem:

- Consumers can simply continue to use what they already have in their wallets, benefiting from a simplified and enhanced charging experience;
- Consumers also have access to the broadest range of payment options, providing alternatives and contingency in the event of a disruption with one payment type;
- Charge point operators (CPOs) are enabled with cost efficient and interoperable solutions that are easy to install, secure and compatible with the most innovative payment solutions;
- Original Equipment Manufacturers can integrate innovative digital payment methods into the car seamlessly and conveniently, with flexible scaling up, deployment and integration with the existing payment infrastructure;
- Open loop payment solutions unlock broader data insights about consumers and market demands, creating opportunities to develop new products and services in line with evolving user needs.

The EU Payment Services Directive (PSD2) Strong Customer Authentication (SCA) requirements sets per transaction and cumulative value limits on contactless transactions, requiring access to PIN terminals at CPO points of sale. NFC terminals can include PIN functionality (both traditional and 'pin on glass') which would address PSD2/SCA requirements in a cost-effective way without jeopardizing the integrity of the infrastructure and the safety and security of the consumer and the CPO.

We would also recommend setting an ambitious timeline for retrofitting existing charging points to enable card payments within this legislation. Retrofitting existing chargers with card payment terminals will take some time, however there is not a barrier in terms of the technical solution. We are aware of at least 2 potential payment terminal providers (e.g. Worldline and Payter) which have solutions readily available, including terminals in stock, that can support both card-based payments and also the existing form factors being used today (e.g. closed loop dongles and payments via app, browser or QR code) that integrate seamlessly with CPOs via application programming interfaces (APIs). We would recommend a deadline of two years to retrofit all chargers with card payment terminals from the date of entry into force of the regulation, and within one year for CPOs most highly visited public EV chargers, for example those that together make up 30% of kWh sold.

Similarly, we would recommend removing the exemption for charging points below 50kW, or reducing the threshold to e.g. 22kW, which would capture the vast majority of retail

chargers. The current limitations in the proposal in relation to existing terminals and fast chargers risks undermining the ultimate aim of encouraging EV usage, confusing consumers and negatively impacting their ability to plan their journey and daily commutes, conditioning their access to charging stations, and their confidence that they can recharge their vehicle using a payment method that is easily accessible to them, and seamless to use.

Transparency and choice are critical will be critical considerations for implementation

It is important to note that we believe the expected implementation costs set out in the proposal may be overestimated and we would welcome further discussion with legislators and relevant stakeholders. The cost of a new card payment terminal is actually significantly lower than the 50-60,000 NOK outlined in the proposal; for example, new terminals provided by Worldline cost a maximum of €1250. EMVCo terminals which support international scheme card payments in particular present the easiest and cheapest option for CPOs, due to the wide range of acquiring partners and terminal suppliers available. These terminals can be obtained from a wide range of international providers offering a high capacity of terminal stock. An open loop payments approach can also bring benefits to CPOs by reducing the cost associated with the account management that is required under closed-loop subscription-based systems.

When implementing card payment terminals for EV charging, it is critical to ensure this is done in a way that enables the consumer to choose their payment brand. The majority of debit cards in Norway are 'co-badged', where two payment brands – specifically BankAxept and an international scheme (Visa or Mastercard) - are combined onto the same card. European Interchange Fee Regulation requires that consumers must be able to choose which scheme to pay with when using a co-badged card. CPOs as merchants can make a default scheme pre-selection, but cardholders must be able to override this and have the ultimate choice. However, payment terminals are often not properly updated to comply with this regulation and do not offer a clear choice for the consumer.

The ability of consumers to choose their payment brand is critical so they are able to access all available benefits and functionalities and make the best choice for them. For example, when using Visa consumers have access to world-leading fraud prevention and cyber security, they are protected in the event of any unauthorised use of their card and have access to the cutting edge of innovative functionalities, such as contactless mobile payments. Merchants also benefit from the ability to receive payments from customers around the world, benefit from Visa's world-leading reliability and security and are protected by an unlimited payment guarantee.

The Visa scheme also supports the ecosystem with tailored frameworks to facilitate specific use cases such as EV charging, where the final amount of the transaction may not be known at the time of the initial payment authorisation. With Visa, merchants can obtain a pre-authorisation at the beginning of the charging session which can be topped up with an incremental transaction when the charging is complete. This maintains a smooth experience for the consumer while ensuring the transaction takes place in line with regulation such as Strong Customer Authentication. We understand that the domestic scheme does not offer similar capability.

Finally, we note that the proposal does not address any requirements around consumers' use of cash for EV charging. In line with the separate legislative proposals on strengthening consumers' right to pay in cash, we understand that the right to pay in cash would not apply to EV charging due to this falling into the category of unattended terminals. We would recommend that this be clarified in the final bill.

To conclude, we believe that mandating open loop payment acceptance is the best path to future proof regulation as well as to create the right conditions and incentives for the uptake of EVs, and for industry stakeholders to continue to compete and innovate, bringing overall infrastructure costs down. Below we have proposed some specific changes to the draft legislative text and regulations in line with the recommendations above. As suggested, additional provisions could also be added to reflect a retrofitting timeline and consumer choice on payment method.

Proposed amendments to the legislative and regulatory text – proposed amendments in *red*

Forslag til endring av lov om infrastruktur for alternativt drivstoff

§ 2.Forskrift om betalingsløsning og brukerinformasjon

Departementet kan i forskrift gi nærmere regler om

- a. betalingsløsninger ved lading av elektrisk drevne kjøretøy,*
- b. krav til informasjon på energistasjoner, på ladepunkt, på kjøretøy og hos bilforhandlere.*

Prisen som betales for å lade et elektrisk drevet kjøretøy på et ladepunkt som er tilgjengelig for allmennheten, skal være rimelig, tydelig og transparent med spesifisert kostnadsfordeling for ladeinfrastrukturen, objektiv og ikke-diskriminerende.

Offentlig tilgjengelige ladepunkter skal gi brukere av elektriske kjøretøy adgang til å lade på ad-hoc basis og betale for ladingen uten å måtte laste ned en dedikert betalingsapplikasjon eller inngå en avtale med operatøren.

Operatører av ladepunkter kan inngå utvikle og tilby avtaler av lengre varighet med til kunder om levering av ladetjenester, jf. avtaleloven 4de kapitel. Operatøren er skal være den som er driftsansvarlig for ladepunktet.

Forslag til forskrift om betalingsløsning for betaling ved lading av elektrisk drevet kjøretøy

§ 2. Virkeområde

Forskriften gjelder for virksomheter som etablerer eller drifter et offentlig tilgjengelig ladepunkt eller en ladestasjon for lading av elektrisk drevet kjøretøy. Forskriften gjelder for ladepunkt med et effektuttak over 50 kW. / Forskriften gjelder for ladepunkt med et effektuttak over 22 kW.

Med ladepunkt menes et grensesnitt hvor ett elektrisk kjøretøy om gangen kan lades eller få byttet batteri. Et ladepunkt er offentlig tilgjengelig hvis allmenhetens tilgang ikke er begrenset *for brukere av elektriske kjøretøy uten en kontraktfestet avtale.*

§ 3. Krav til betalingsløsning

For *nye* ladepunkt eller ladestasjoner *som etableres etter at forskriften har trådt i kraft* skal betalingsoppgjør for lading av elektrisk drevet kjøretøy kunne gjøres ved en betalingsterminal som er knyttet til ladepunktet eller ladestasjon.

~~*Et ladepunkt defineres som nytt når det er fysisk etablert.*~~ En ladestasjon er en samling av ladepunkt som betjenes av samme operatør.

En operatør er den driftsansvarlige for et ladepunkt eller en ladestasjon.

En betalingsterminal er en elektronisk kortavleser med ~~*eller uten en NFC-basert*~~ kontaktløs funksjon som gjør det mulig for brukeren av ladepunktet å betale for lading av elektrisk kjøretøy med de fleste typer fysiske betalingskort eller som kan aktiveres med en smartklokke, mobiltelefon eller andre elektroniske enheter.