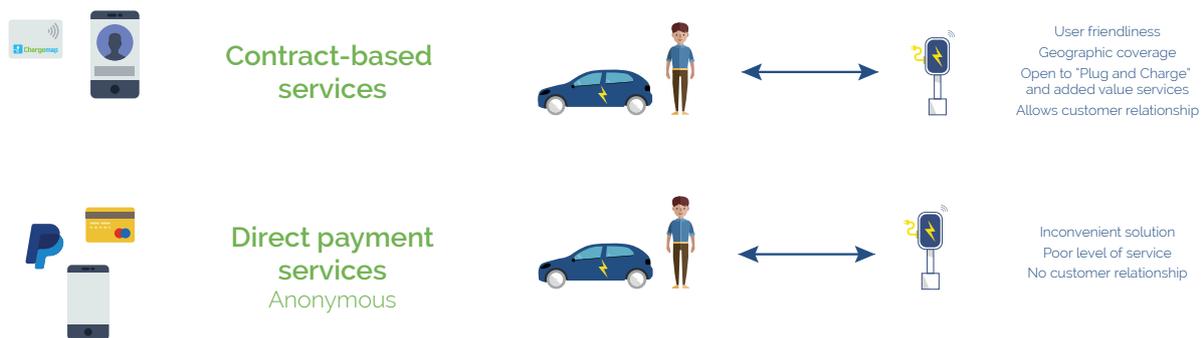


## HOW COULD AN EV DRIVER ACCESS A PUBLIC CHARGING SERVICE?

There are 2 ways of accessing a public charge point, but only one is likely to satisfy EV drivers needs in the long term:

- 1. Pay as You Go:** an end-user accesses the service in an anonymous way, typically using a credit card (no connected services)
- 2. Contract-based subscription** with a service operator, typically via an RFID card and/or a mobile app allowing connected services



Even if the Alternative Fuels Infrastructure Directive (AFID) mandates that all charge points offer customers 'direct payment' access, this should only be seen as a "minimum requirement" or a stepping-stone necessary to promote the e-Mobility market. Only contract-based access is likely to satisfy customer needs in the long term: marketed by global e-Mobility Service Providers, they provide user-friendly digital services accessible through a dedicated App, ensuring a seamless access to a large number of networks, all that using only one invoice.

As stated recently by the British Renewable Energy Association (REA): *"Whilst ensuring ad hoc access is an important move towards improving the customer experience, it is only a first step towards an interoperable system and does not result in a seamless experience of charging between networks partly due to the diversity of possible implementations. It also does not address the potential value-added services that shared communications and information between CPOs can bring or set up the charging network for full engagement with future energy sector products and services. Energy security, cyber security, mass EV uptake and smart charging are also issues that may be enhanced by 'going beyond ad hoc' that were raised in the interview process"*

## WHO ARE THE MAIN PLAYERS IN THE E-MOBILITY MARKET ?

In Europe, two main business positions are being developed:

- **Charge Point Operators (CPO)** manage charging infrastructures; they deliver direct payment services to EV drivers and/or provide EMPs with wholesales charging services
- **e-Mobility Service Providers (EMP or eMSP)** provide retail service to EV drivers, including access to charging (thanks to agreements with CPOs) but also other value-added services.

## AN OPEN MARKET OF E-MOBILITY SERVICES AND A FAIR COMPETITION BETWEEN MARKET PLAYERS ARE KEY

In a contract-based market model, the key point is to enable **any EMP to enter in business relationship with any CPO**, which will eventually benefit to the end-users: in such a case, an EV driver, being free to sign up with any EMP of the market without discrimination, can access any charging point, regardless its CPO, with only one contract (one App, one invoice).

Such a market organization is illustrated as below:



This market model is often used in various industries where roaming of services is used on a daily basis (telco, railways, highways, energy, etc.). **This market organization is the only set-up which promotes a fair and open competition by unbundling the management of heavy infrastructure and the delivery of B2C services** (in contrast to a situation where, one unique operator can do both). It is the only way for an open market of e-mobility services to emerge in Europe.

## WHAT IS THE ROLE OF PUBLIC AUTHORITIES?

If charging an EV is too complicated, too inconvenient, or doesn't sufficiently benefits to customers, then consumers will not engage. **Charging services must therefore be open, affordable, good value, simple to engage with and convenient.** To meet that goal, it is key to offer a wide range of solutions and with that view, to avoid any monopoly situation, where an EV driver would have no option but to subscribe to a given EMP to charge his car. Public authorities can play a key role in setting up such a market organization in their countries, to the benefit of EV drivers. Moreover, public intervention in an early market can avoid a more costly and potentially more disruptive intervention at a later stage. **The simplest and quickest way to make roaming of charging services happen, is to leverage public financing schemes, by clearly requesting that any subsidized charging point must:**

1. be enabled to IT communication
2. and "open" to any third-party service provider without any discrimination

This has been successfully done in France<sup>1</sup> (through public financing schemes first, then reinforced by law), Germany, Netherlands or recently in Slovakia<sup>2</sup>. It begins to be more and more practiced in the UK.

<sup>1</sup> Since 2017, France makes it legal for a CPO to open its service to any third party EMP without any discrimination and considers that a CPO connected to a roaming platform meets that requirement

<sup>2</sup> As an example, the recent Slovakian financing program states that all charging points must be connected to one of the largest roaming platform in EU (GIREVE, Hubject or e-clearing) within 3 months after commissioning