Future of Charging in 2025?

Presentation 19.2.2019 “Future of Charging”
FUTURE OF CHARGING 2025?

3 THESIS
EMOBILITY PROVIDERS DO NOT EXIST
Nearly 500 emobility providers (EMPS) are registered in Germany.

https://bdew-codes.de/Codenumbers/EMobilityId/OperatorIdList
In 2025: No independent EMPs but automotives taking the share with very few EMPs for fleet business
CPO MARKET HIGHLY FRAGMENTED WITH FEW SOFTWARE PROVIDERS
In Germany we currently see 524 registered CPOs whilst data of CSMS software providers is currently lacking.

Tbd (Report in March)

524
In 2025: Millions of Charge Point Operators especially on private premises and consolidation on software side

IT

Tbd
(Report in March)

524

>1,000,000
Whilst settlement complexity will increase the technical interface interoperability challenge will decrease.

- Much less technical interfaces
- Many more transactions and contractual partners
SMALL ROLE FOR CPOSI IN SMART CHARGING
In most of the current smart charging projects CPOs still have a prominent role...
... but smart charging relevant data will be transferred directly from the car to the grid operator (or some aggregators)

Geo Data, SOC, price sensitivity
In 2025: Mainly P2P communication and transactions with few hubs
Share&Charge is convinced of OCPI and does see a very high value in combining it with distributed ledger technology.

Communication (OCPI)
New P2P standard between CPOs and MSPs with very high adoption amongst incumbents

Transaction (Blockchain)
Highest level of automatization with wallets and smart contracts for payment and identification
Share&Charge enables seamless and smart charging with an open network approach for more security and efficiency.

- **Locations**: Describes the charging locations of CPO.
- **Tariffs**: Provides the MSP knowledge about prices of charging sessions.
- **Sessions**: Describes charging sessions in the CPO backend-system.
- **Commands & Tokens**: Enables direct communication and authorization of charging sessions.
- **Decentralized Registry**: Enables automated and safe sharing of CPO & MSP business data.
- **Decentralized Message Bus**: Connects CPO and MSP via an OCPI hub by utilizing the decentralized registry.
- **Instant Payment & ERP Integration**: Allows direct payment of charging sessions based on CDRs and integration to company administration.
- **Charge Detail Records (CDR)**: Describes concluded charging sessions.

**OCPI Modules**

**S&C Modules**
1. Emobility providers do not exist.
2. CPO market highly fragmented with few software providers.
3. Small role for CPOS in smart charging.
Thank you very much

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