

AUTONOMOUS. SEAMLESS. SECURE.

Plug&Charge

Intuitives und Sicheres Laden

E-MOBILITY FORUM Kreis Konstanz
October 21th 2022

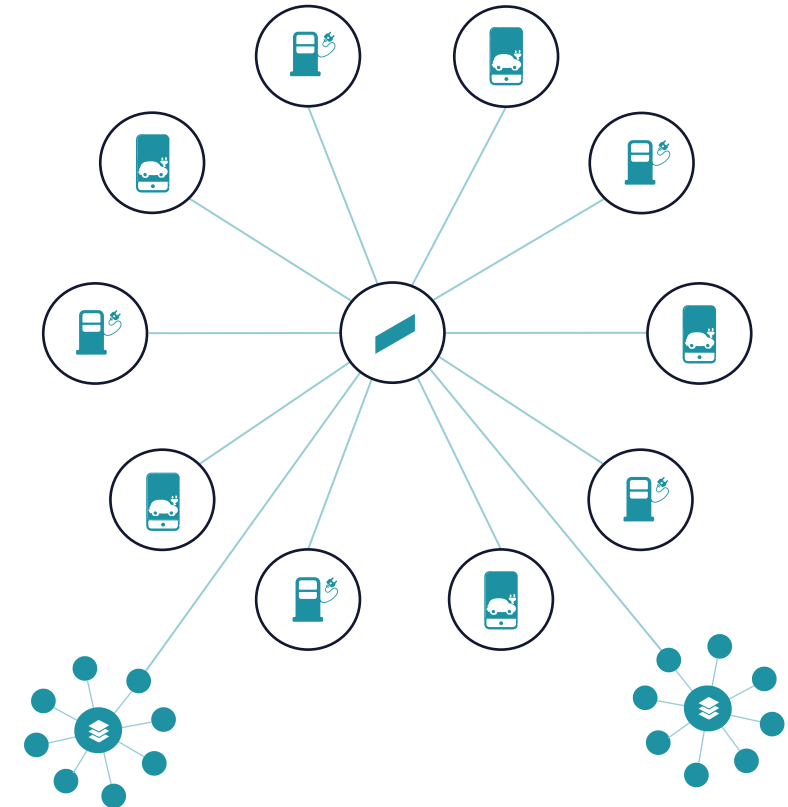


SOLUTION



WITHOUT HUBJECT

* CPO – Charge Point Operator; EMP – Electric Mobility Provider



WITH HUBJECT

What does the future look like?

- CHARGING POINTS ALL ON A **SINGLE MAP**
- CHARGE **ANYWHERE** ANYTIME
- SEAMLESS** CHARGING WITH YOUR PREFERRED PAYMENT METHOD
- ALL CHARGING STATIONS ARE **SAFE AND SECURE**

Our Services

#1

E-ROAMING

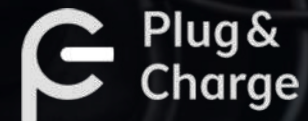
WITH MORE THAN 1000 PARTNERS, THE HUBJECT PLATFORM IS THE BIGGEST INTERNATIONAL DIGITAL B2B MARKET PLACE FOR SERVICES RELATED TO THE CHARGING OF ELECTRIC VEHICLES.



#2

PLUG & CHARGE

WITH PLUG&CHARGE VIA ISO 15118 HUBJECT NOW PROVIDES A MARKET-READY, GAME-CHANGING TECHNOLOGY FOR INTUITIVE AND SECURE CHARGING.



#3

CONSULTING

CATALYST FOR LEADING GLOBAL ENERGY, MOBILITY AND SOFTWARE INDUSTRIES.
SPEARHEADING DIGITAL MOBILITY.



Intuitives und sicheres Laden mit **Plug&Charge**

E-MOBILITY FORUM Kreis Konstanz
21.Oktober 2022 Insel Mainau

1

Einführung und Markt

2

Grundlagen zu Plug&Charge

3

Technische Umsetzung

4

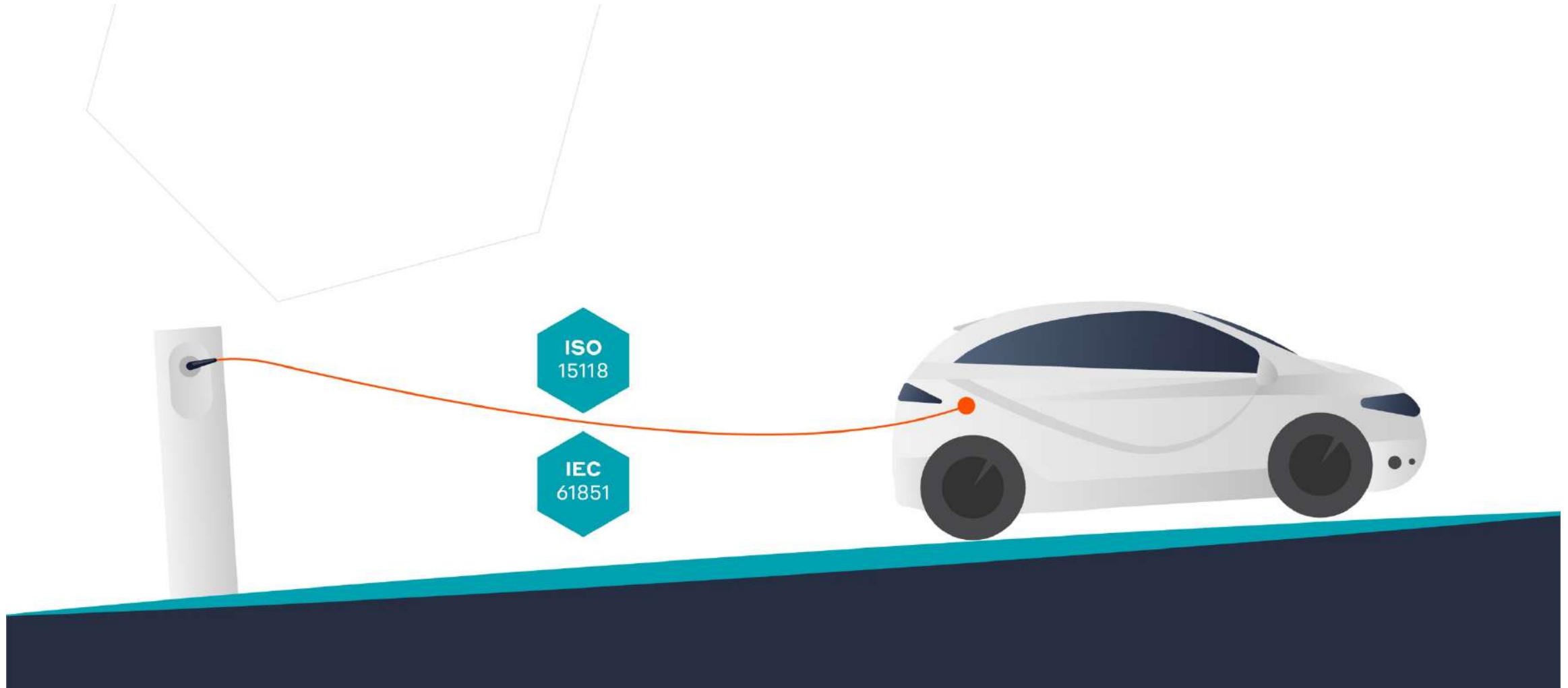
Hubject USP

5

Q&A

Introduction & Market Adoption

What is Plug&Charge?



Introduction to Plug & Charge



Manually activated charging



Automated charging

+ Best user experience

- ✓ Fully **automated** digital charging experience

+ Secure

- ✓ **Most secure** method of charging authentication (acc. ISO15118 standards)

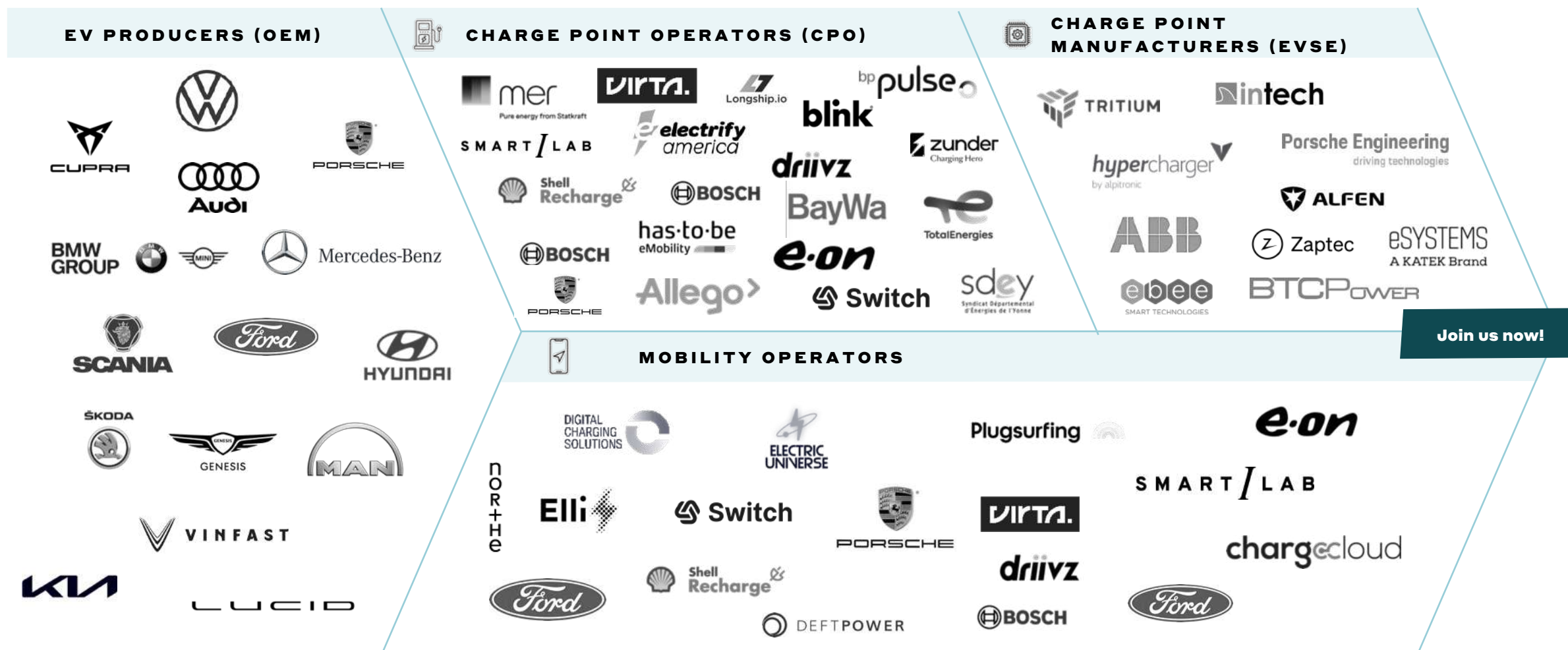
+ Digital communication between EV and EVSE

- ✓ **Enabler** for communication driven features:
Smart charging, Reverse charging

+ Facilitating new value adding features

- ✓ Prospects of secure information driven, value adding features:
Internet, software updates, digital payments etc.

Hubject is establishing the global Plug&Charge ecosystem



OEMs Plug&Charge capability*



ID.x series: ID.3, ID.4, ID.5, ID.6, ID. Buzz and the ID. Buzz Cargo



Mach-E, E-Transit



Enyaq



Bus



e-tron 50, 55 and S model
produced from CW 48/2021



EQS, EQA, PHEV



Taycan



iX



..... upcoming



Born



Ioniq

LUCID



Air

Foundations and Technical Implementation

ISO 15118: High level use cases based on secure communication

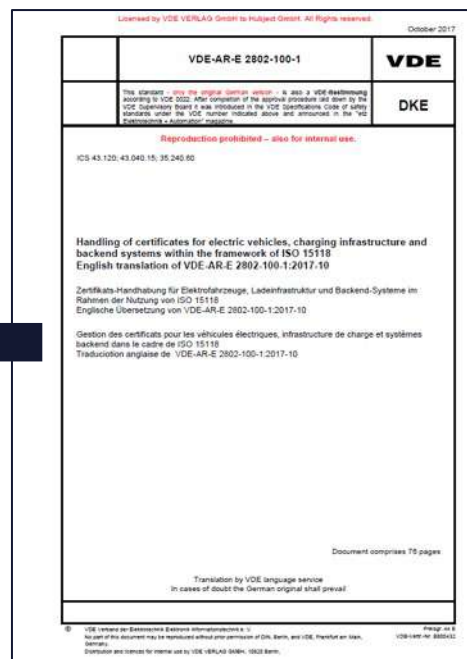


ISO 15118 and the VDE Application Guide are basis to the Hubject Plug&Charge Ecosystem and V2G PKI

ISO 15118-2



VDE Application Guide



PNC ECOSYSTEM

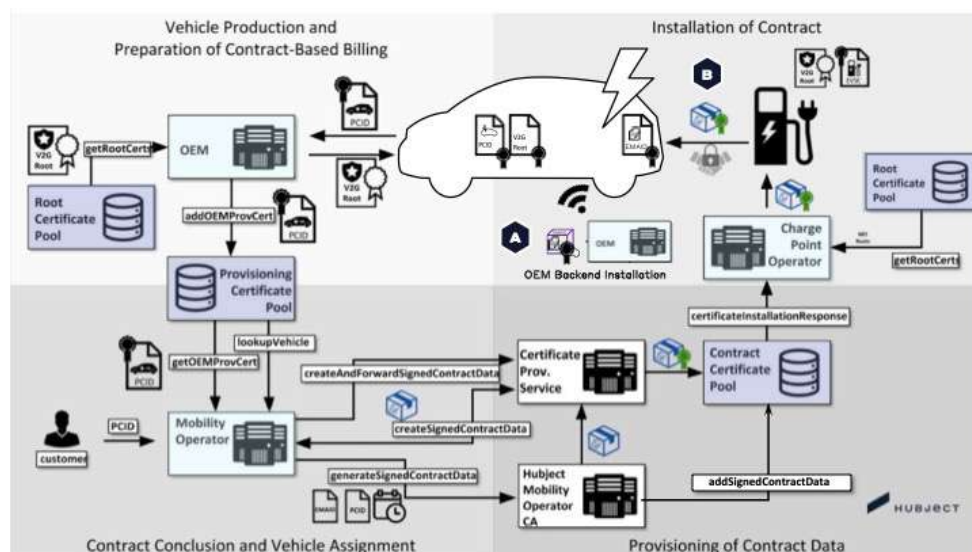


V2G ROOT PKI

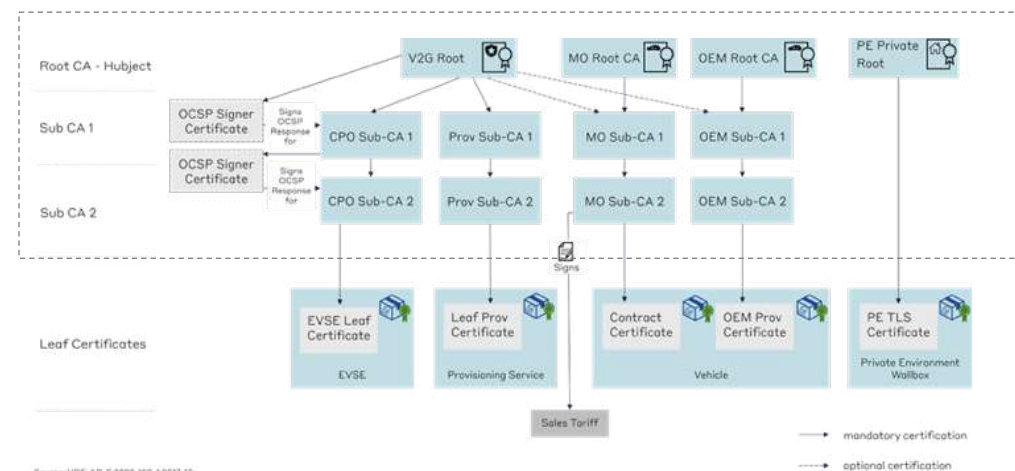


Hubject Plug&Charge consists of two IT Systems: The Plug&Charge Ecosystem and the Public Key Infrastructure (PKI)

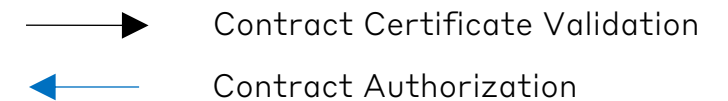
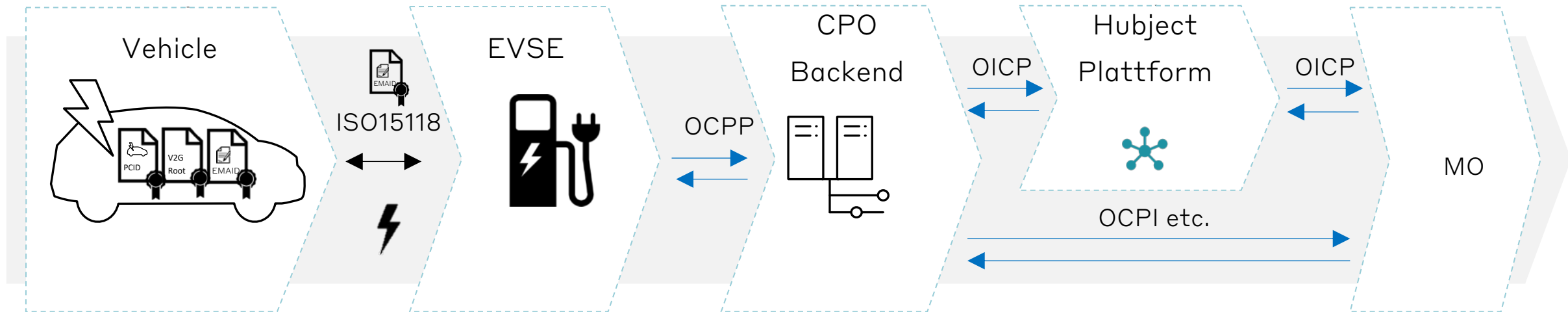
PnC ECOSYSTEM



V2G ROOT PKI WITH V2G ROOT CA

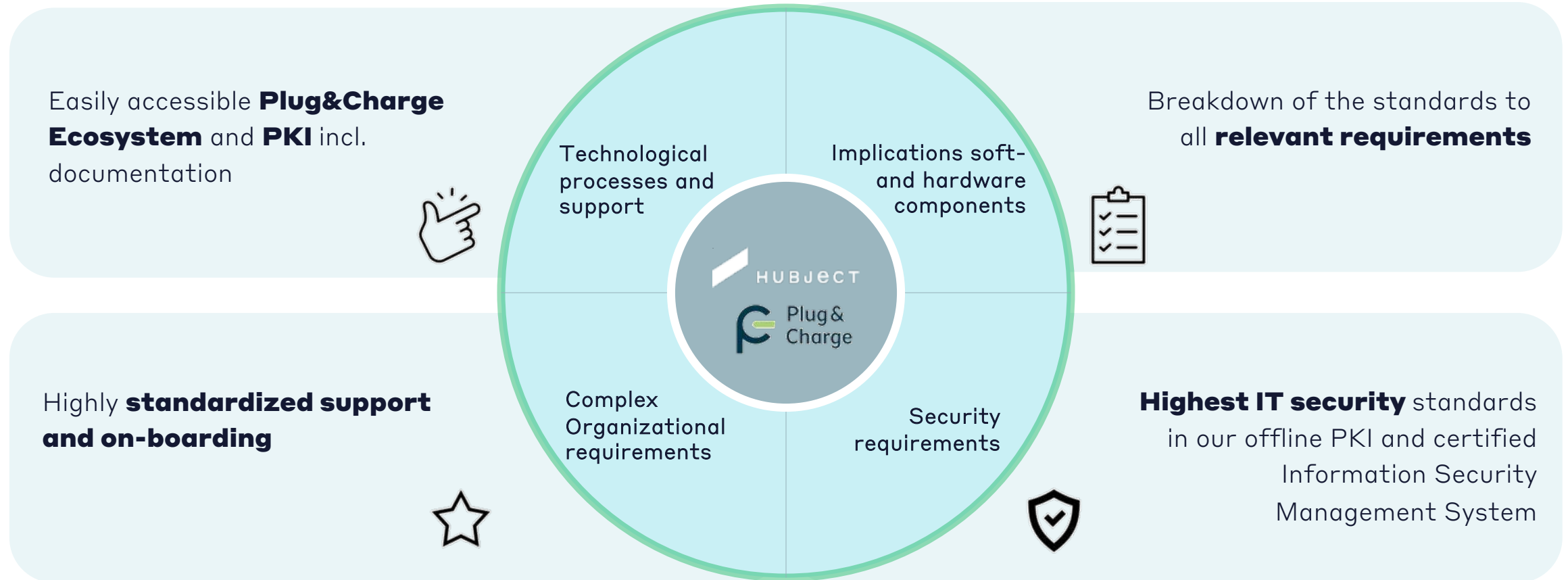


Authenticate and authorize Charging Session



Hubject Plug&Charge Solutions & USP

Hubject's Plug&Charge Value proposition

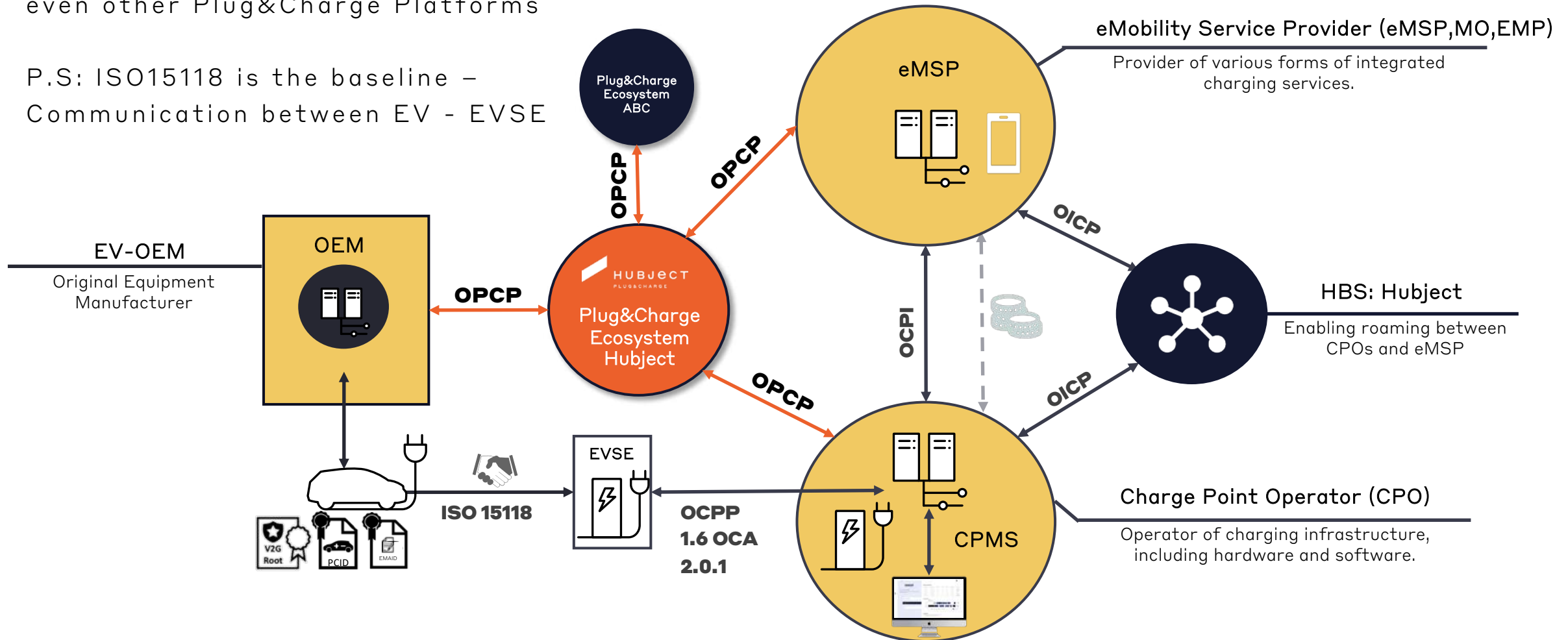


Protocol Landscape

Github - <https://github.com/hubject/opcp/>

OPCP connects OEMs, MOs, CPOs and even other Plug&Charge Platforms

P.S: ISO15118 is the baseline –
Communication between EV - EVSE



Get in touch with our Plug&Charge experts now!



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