

# EMVCo EV Open Payment

E-Laden so einfach wie Uber-Zahlen

**ProfitCard 2026**

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2026-01-21





SIZE

**900+**

experts, 14.000+ at G+D



REVENUE

**110+**

EUR Million, 3+ EUR Billion (G+D)



EXPERIENCE

**29+**

Years in Software development;  
20+ years in 3-D Secure; **179 years** of G+D

Founded **1996** in Switzerland

Part of the  Group since 2024

# In the **digital age, we orchestrate real-world banking and payment experiences** with human-centric security technology.

## G+D IN PAYTECH

### → Our Portfolio

International and domestic payment applications

Issuing banks, FinTechs, eCommerce customers plus Public Sector, Transit and Enterprise customers



#### Payment Cards

Design, co-creation and production – globally scalable & resilient



#### Issuance Services

Classic and digitally enhanced personalization services across the globe



#### Digital Solutions

eCommerce check-out, 3DS, Tokenization digital banking and passwordless authentication

# We serve various digital domains with distinct business offerings



## Payment & Identity

Trusted digital payment experience for consumers and Financial institutions.



## Digital Banking

One-stop shop for seamless user journeys in mobile and web banking.



## Financial Technology

Securely enable and organize the digital world for people's assets.



## Digital Enterprise

Digitize touchpoints between business and users in mobility, health, and publishing.

# 20+ years of interconnecting the payment ecosystem

## Issuing domain

- 3DS ACS
- CloudPay (HCE)
- Tokenization
- **Click to Pay / SRC**
- Passkeys
- Crypto-Wallet



## Acceptance domain

- **Click to Pay (SRCI)**
- 3DS Server (SaaS)
- 3DS SDK (Android & iOS)
- E-commerce Tokenization

## Network domain

- 3DS Directory Server
- **SRC System**
- Passkeys



# G+D Netcetera digital references

## Acquiring



## Issuing



# EMVCo



- **EMVCo** is the global technical body of Mastercard, Visa, Amex, Discover, JCB and China Union Pay that plays a central role in ensuring **secure and interoperable payment transactions worldwide**.
- It develops global standards in form of **EMV® specifications** and also provides testing processes to certify that payment products comply with EMV standards
- Example: EMV chip on credit card, EMV card terminal
- **G+D Netcetera** is **EMVCo Associate** and member of **EMVCo Board of Advisors**.
- Latest EMVCo protocol: **EMV Secure Remote Commerce (SRC)**

# 1. SRC Use Case

Click to Pay

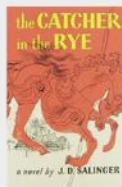


## Your Gateway to Literary Wonder

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## The Catcher in the Rye

By J.D. Salinger



Price: 5.99 EUR



## Crime and Punishment

By Fyodor Dostoevsky



Price: 10.99 EUR

## Checkout

## Order Summary

- The Catcher in the Rye
- The Great Gatsby

Shipping

Total

## Choose Payment Method



Credit / Debit



Pay with Apple Pay



Pay with Google Pay



Pay with Klarna

## Checkout

## Order Summary

The Catcher in the Rye	5.99 EUR
The Great Gatsby	13.99 EUR
Shipping	10.00 EUR
Total	29.98 EUR



j\*\*n@company.com  
Switch ID



MASTERCARD \*\*\*\* 2 0 0 3



VISA \*\*\*\* 7 8 5 4

More cards

PAY 29.98 EUR

OR USE

Manual card entry

# SRC Initiator (SRCI)

Shopping Cart

Of Mice and Men  
By John Steinbeck  
1 11.99 EUR

The Catcher in the Rye  
By J.D. Salinger  
1 10 EUR

Shipping Details

John Smith  
5-th Ave, New York  
USA  
john@smith.com  
+44 01212 112233

Payment section (highlighted by dashed blue box):

Payment methods: AMEX, MASTERCARD

PAY 21.99 EUR

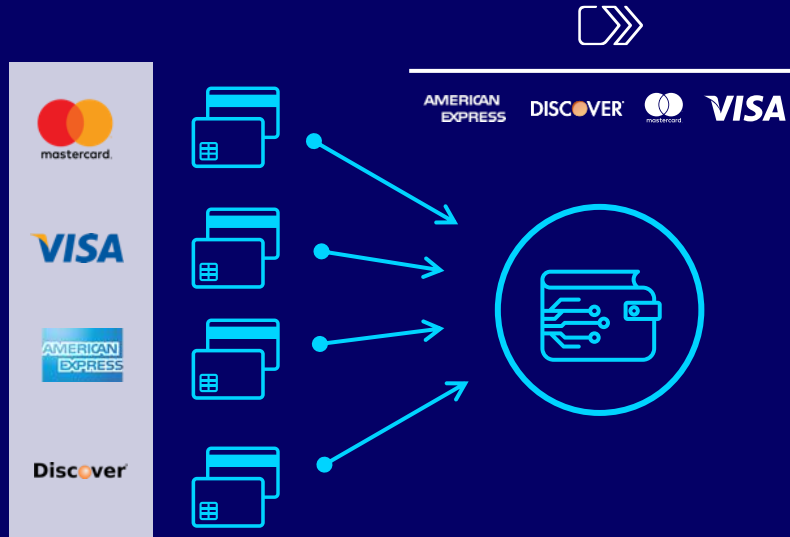
Manual card entry

Component governed  
by SRCI

The SRCI handles the interaction with the SRC Systems

- **Non-payment flow:** SRC **enrollment** of card and meta data, either into existing SRC Profile or creating a new SRC Profile; **recognition**; **card tray**;
- **Payment flow:** checkout flow retrieving **payload** consisting of token PAN and one-time cryptogram

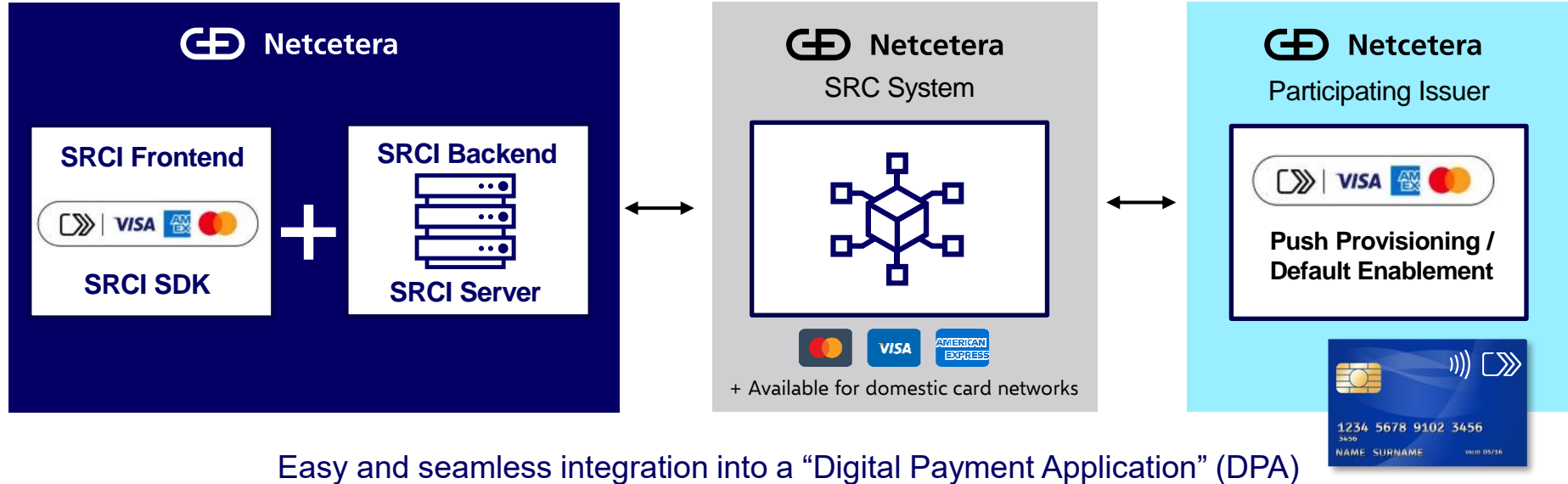
# How SRC works



EMV SRC allows consumers to store all their major debit and credit cards in their SRC Profiles

- Each card is stored in an **SRC Profile** at the **SRC System** of the respective card brand.
- Each card is stored in the form of a “**network token**”, represented by a token PAN and a reference ID pointing to the token, called **srcDigitalCardID**.
- The SRC Profile also contains the **email** and **mobile number** as unique identifiers.
- The SRC Profile can also contain customer meta data

# G+D Netceteras SRC – solution overview



## 2. SRC Use Case

### EV Open Payment (EVOP)



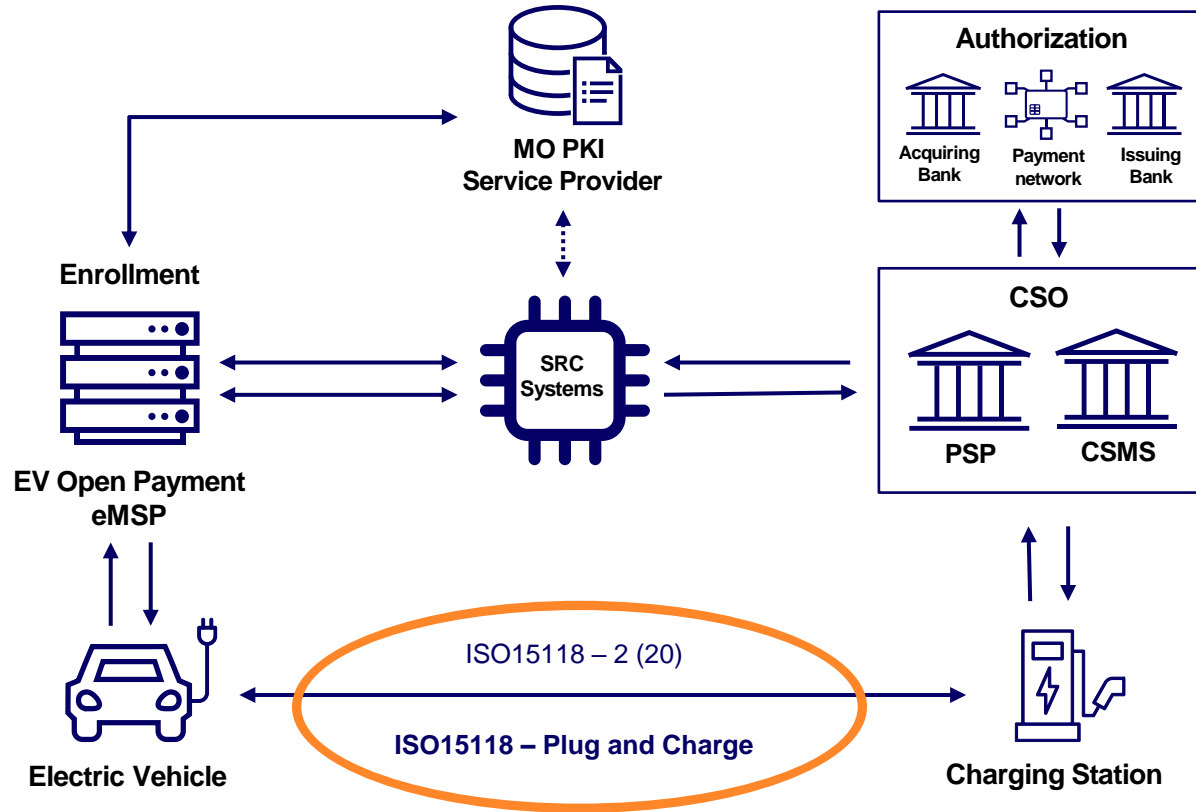
**EMV<sup>®</sup>**

## **Secure Remote Commerce**

### **Electric Vehicle Open Payments Use Case**

Version 1.0 DRAFT

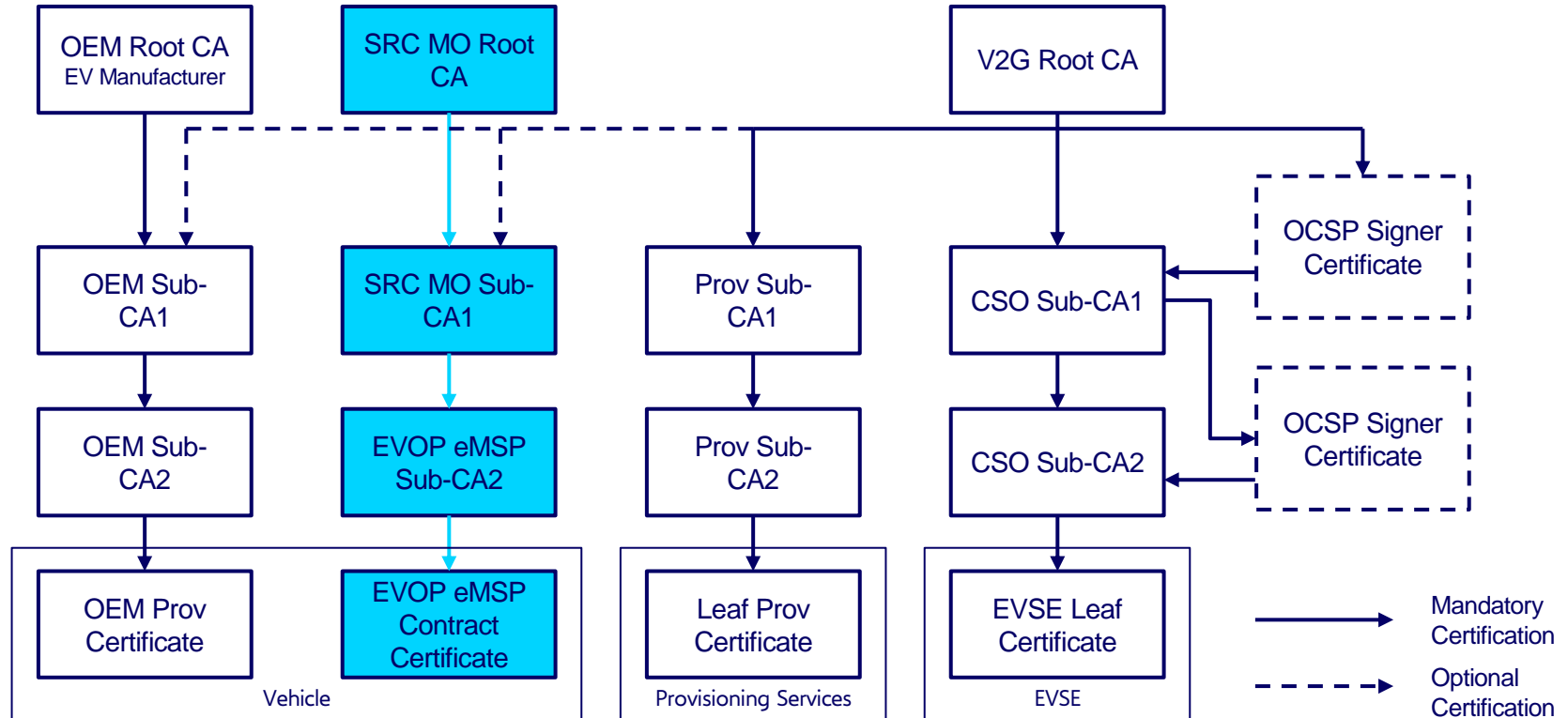
# Plug and Charge ecosystem entities that interact with SRC

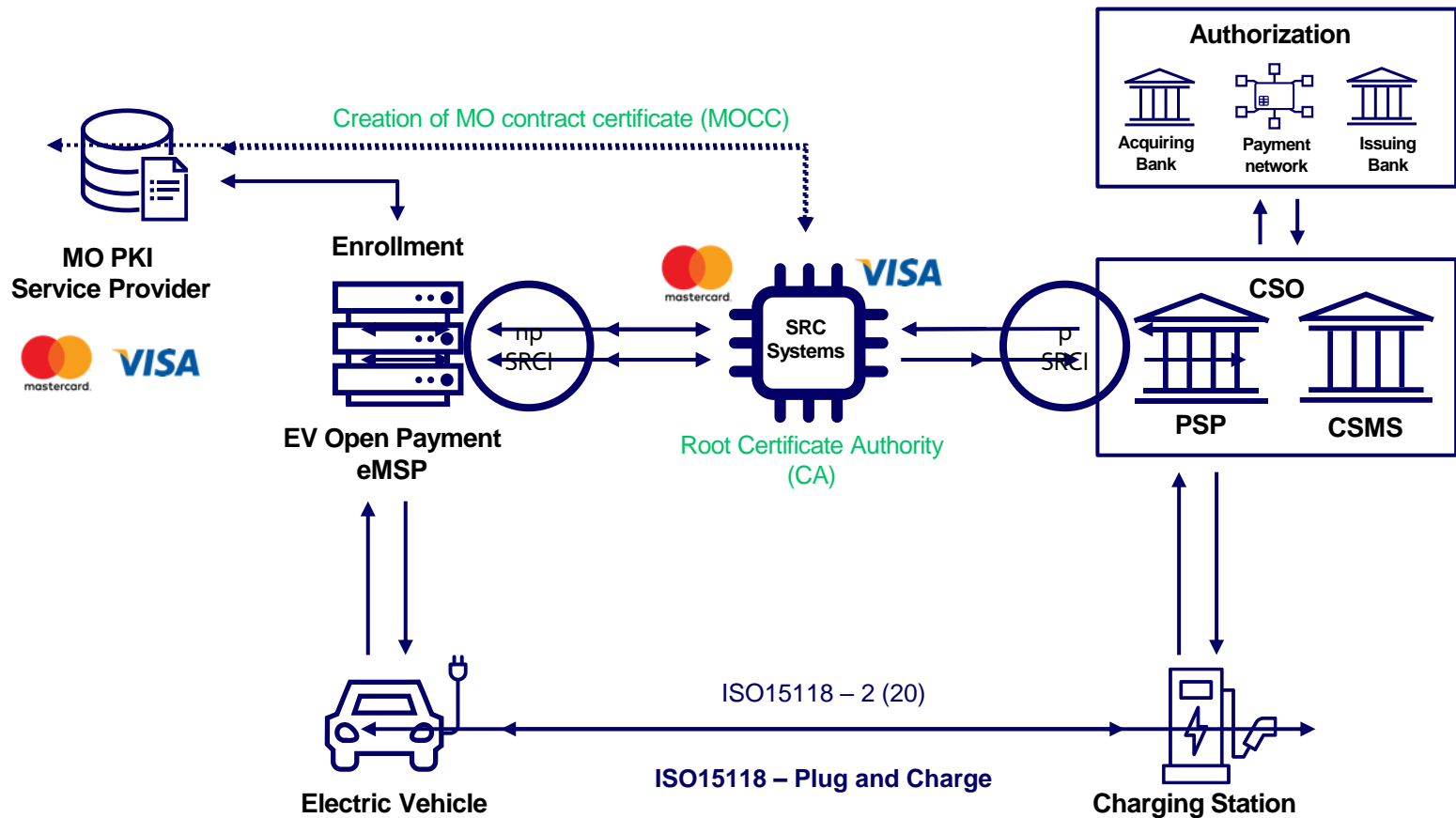


MO: Mobility Operator  
eMSP: e-Mobility Service Provider



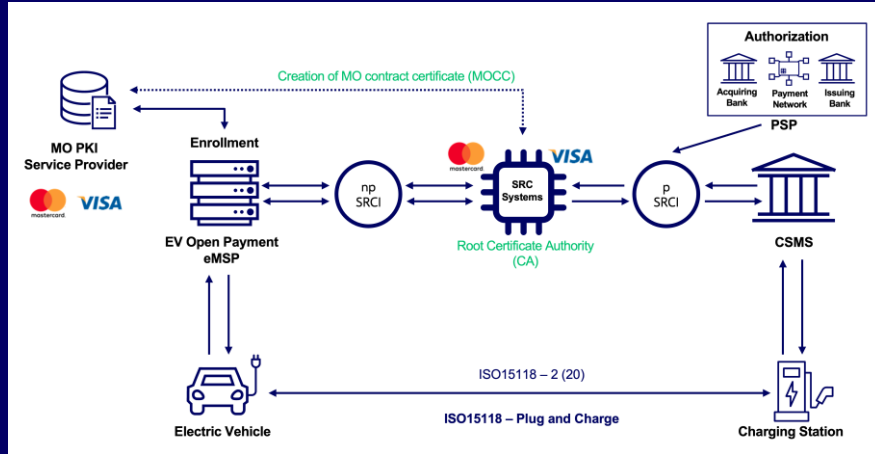
# ISO 15118 Public Key Infrastructure (PKI)





eMSP: e-Mobility Service Provider

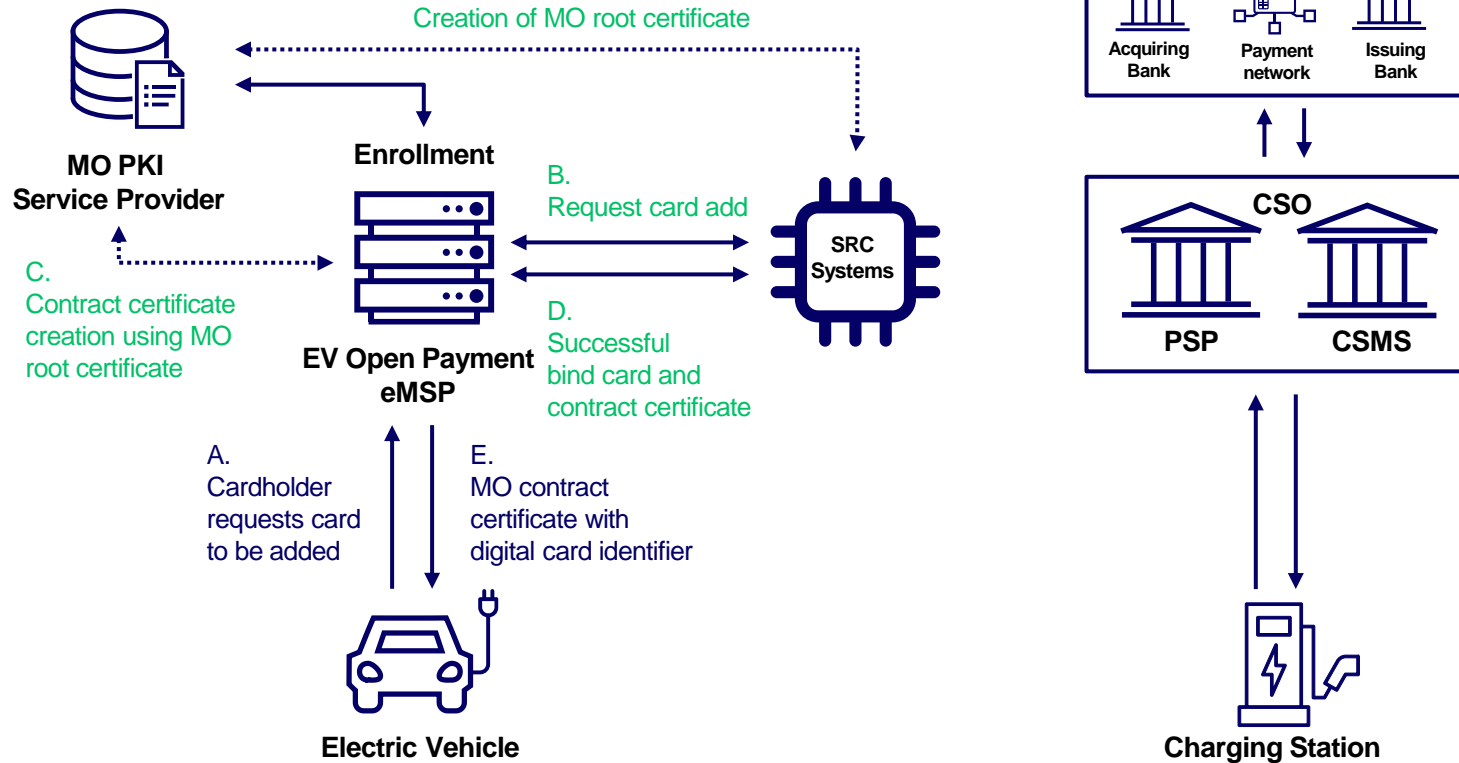
# EVOP



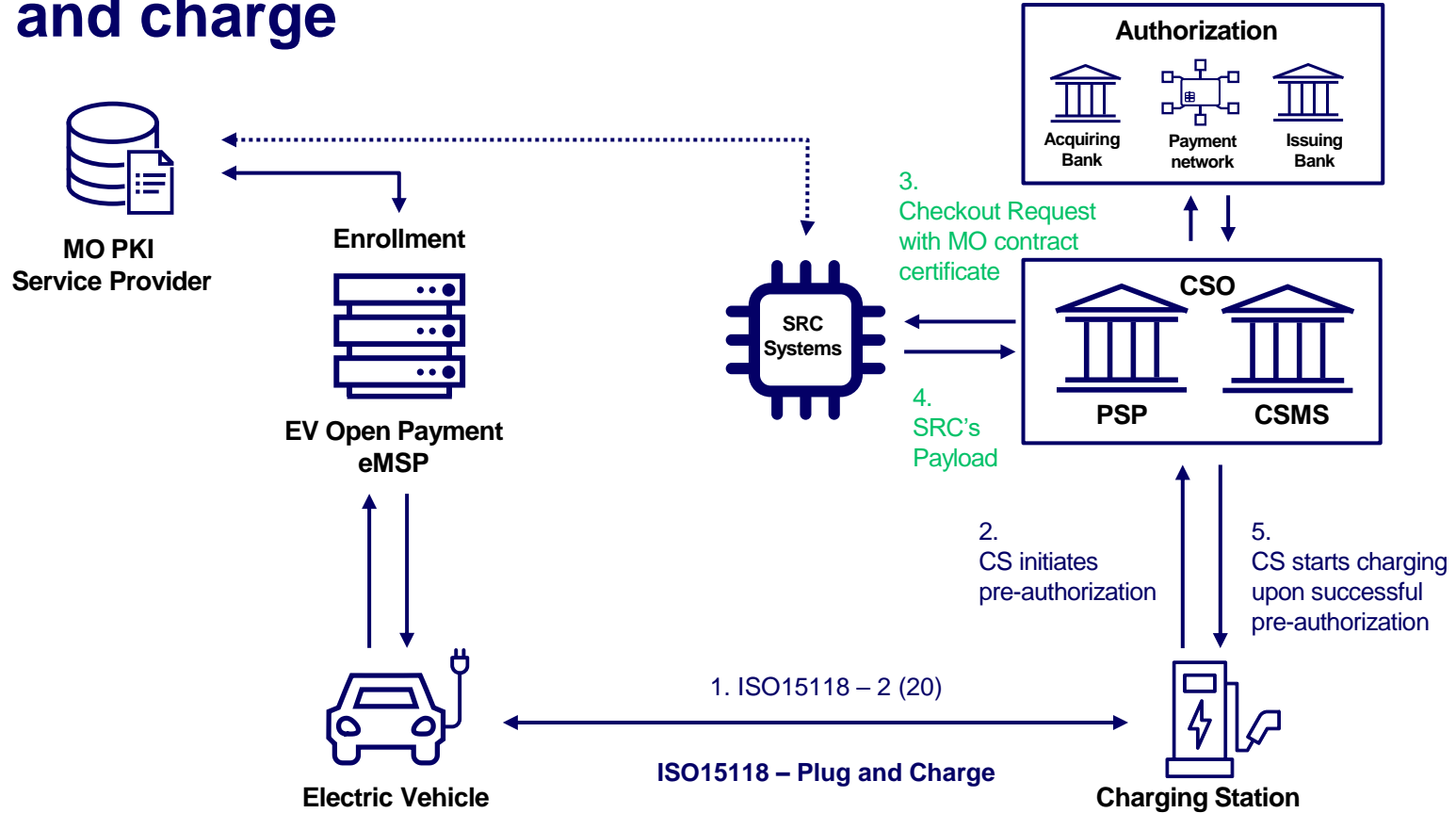
## EV charging entities and roles in EVOP

- **SRC Systems** (Visa, Mastercard, etc.) act as the **root Certificate Authorities (CA)** for the **MO contract certificates (MOCC)**
- Consequently, the **schemes** assume the role of **Mobility Operator (MO) PKI Service Provider**
- The **MOCC** containing the **srcDigitalCardId**, created by the PnC wallet, together with the **EV\_ID** is **bound to the card** in the **SRC Profile**.
- The **MOCC** and associated private key is then **stored in the electric vehicle**.
- Upon checkout, the **CSMS** receives and **forwards** the **MO contract certificate** incl. **srcDigitalCardId** and **EV\_ID** to the **SRC System** to receive the **token PAN** and cryptogram

# Enrollment and binding



# Plug and charge





## Other use cases in the car-mobility sector

### Tolling

- Alternative to expensive RFID devices or non-robust license plate readers
- Involving telematics

### Parking

- Could involve telematics as well

# Thank you



**Dr. Thomas Fromherz**

Fellow

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