Experience of the CROME Project

Connecting eMobility

Michael Schlick, Bosch Software Innovations GmbH

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aufgrund eines Beschlusses des Deutschen Bundestages
Every **EV** can connect to a charging spot.

Every **user** can authenticate and control the charging process of its **EV**.

- **French & German electric vehicles**
- **Public charging station or place with type-2 & type-3 plug**

**Roaming Service Layer**

**Existing ICT** Service Platforms:
- Access / Authentication services
- Charging
- Billing / roaming services
- Smart functionalities
- Operation

**Partners**:
- **EDF**
- **EnBW**
- **BOSCH**

**Information Communication Technology**

**Hardware Interoperability**

**Service Interoperability**
Roaming Service Layer Requirement

- Connect a dynamic network of independent international partners having their autonomous business and systems.

- Roaming must accelerate the development of Ecosystems by providing a brokering platform to connect services between partners (marketplace) without being a bottleneck – extended service portfolio as a benefit for the end customers.

- Each partner can participate on the highest level of security regarding data protection and data security.

- Partners must be able to offer the end customer a seamless roaming service.
Proposal for Roaming Service Platform

Bosch Roaming Service Platform

Contract Management

- Negotiation
- Agreements

Dynamic Brokerage

- Reporting/
  Monitoring

Transaction Handling

Open (Standard) Interface (WSDL)

Charging Station Operator

- Mobile Device/
  RFID

eMobility Fleet Provider

- OBU/
  Car System

OEM Portal

- OBU/
  Car System

Organized by Hosted by In collaboration with Supported by
Roaming Service Platform Implementation

- Online services implemented: search, authorization, consumption, (reservation, billing) incl. mobile App
- Standardization is the key: RFID card, type 2 / 3 plug, mode 3 charging, OCPP
- System successfully tested
- EnBW, EDF, Bosch/Porsche connected and operational
- Citizens profit from the solution
Roaming Service Platform Implementation
Inter-Roaming Service Platforms Communication

Bosch Roaming Service Platform

Contract Management
Negotiation
Agreements
Dynamic Brokerage
Reporting/Monitoring
Transaction Handling

Connection available:

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Summery & Outlook

- CROME shows service interoperability by roaming of services

- To build a network of independent international partners (competitors) having their autonomous business and systems, the system design has to ensure that each partner keeps his independence (data)

- Standardization (RFID card, type 2 / 3 plug, mode 3 charging, OCPP) is key to enable a marketplace

- Roaming of services will be a key enabler for future mobility solutions
Thank You

Michael Schlick, Bosch Software Innovations GmbH
michael.schlick@bosch-si.com