



KEY FACTS HUBJECT

A SHORT INTRODUCTION INTO HUBJECT AND THE OPEN eROAMING MARKET MODEL

HUBJECT
connecting emobility networks

Martin Petschnig

HUBJECT IN A NUTSHELL

WHERE DID HUBJECT COME FROM?

- Founded in March 2012 by six pioneering companies in the field of eMobility based in Berlin (EUREF Campus)
- Today: Europe's leading eRoaming/ interoperability platform with the mission to digitally connect charge point operators (CPOs) with emobility providers (EMPs)

VISION:

- Seamless EV charging for everyone. Everywhere.

FUNKTIONAL BRAND: intercharge



SHAREHOLDERS:

BMW
GROUP



BOSCH
Technik fürs Leben

DAIMLER

EnBW

VORWEG GEHEN

SIEMENS



2 CORE TRADEMARKS: HUBJECT WITH B2B FOCUS - INTERCHARGE AS FUNCTIONAL B2C-TRADEMARK

HUBJECT®

HUBJECT

- The Hubject trademark is only used in B2B business and is related to the Hubject services
- All contracts between Hubject and its partners are closed under the Hubject trademark

intercharge®



- The intercharge trademark is used as functional brand and compatibility sign for charging stations, which can be accessed via Hubject.
- All charging stations in the intercharge network are branded with the intercharge symbol and guarantee cross-operator accessibility



KEY ACHIEVEMENTS HUBJECT GMBH

PROOF OF CONCEPT:

- eRoaming via Hubeject already became industry standard in various markets – the partner network is growing exponentially
- Hubeject services are being bought equally by corporations, SMEs and start-ups from different fields

HUBJECT IS A MARKET- AND TECHNOLOGY LEADER:

The **market leadership** in the eRoaming field is being defined by:

- Highest amount of B2B customers and market coverage in Europe
- Best country coverage of all international platforms
- Highest amount of cross-operator accessible charging stations

The **technology leadership** is being defined by:

- A unique 100% digital eRoaming-platform approach
- intercharge is the only cross-country charging infrastructure network, which is 100% real-time connected
- Further development of digital value added services like direct payment, parking sensor information and reservation of charging stations

HUBJECT NETWORK– EUROPE'S CHARGING NETWORK WITH MORE THAN 220 PARTNERS AND 40,000 CHARGE POINTS



CREATING NEW ELECTRIC MOBILITY SERVICES through

INNOVATION

INTERCONNECTION

DIGITALISATION

EV INTEROPERABILITY



ANALOGY: WHAT DO YOU NEED TO PLACE A PHONE CALL IN EUROPE



1 contract

1 Sim



WHAT DO YOU NEED TO CHARGE YOUR EV IN EUROPE WITHOUT INTEROPERABILITY

MORE THAN 400 CONTRACTS AND CHARGING CARDS FROM VARIOUS OPERATORS



THE GOAL OF ALL eROAMING/ INTEROPERABILITY ACTIVITIES

**CROSS-OPARTOR ACCESS
TO CHARGING STATIONS IN
EUROPE WITH ONLY...**



1 card



1 contract



CREATING NEW ELECTRIC MOBILITY SERVICES through

INNOVATION

INTERCONNECTION

DIGITALISATION

CUSTOMER JOURNEY



**EASY ACCESS TO CHARGING
INFRASTRUCTURE EVERYWHERE**

**Where can I
charge?**



How can I charge?

WHERE CAN I CHARGE?

FIND



POI data is delivered to the EMP via the Hubeit platform and integrated to their apps, station finders or navigation devices

LOCATE



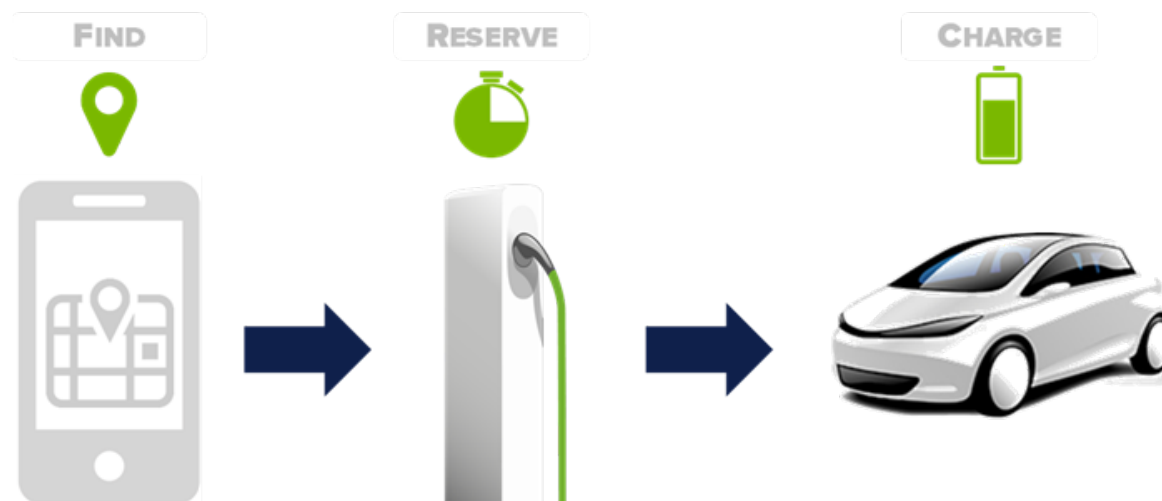
Intercharge-compatible charging points to be recognized by the compatibility symbol

CHARGE



Dynamic information such as the availability of charging points or parking spots are delivered in real-time

RESERVATION OF CHARGING POINTS – PREDICTABLE ACCESS TO CHARGING INFRASTRUCTURE



**A reservation service optimizes the charging experience of EV drivers
and increases the attractiveness of charging solution**

**AVAILABILITY OF PARKING SPOTS –
INTEGRATION OF PARKING SENSOR DATA
VIA THE EXISTING TECHNICAL INTERFACE**



**Information about the availability of parking spaces
as a distinctive feature of emobility solution**

**EASY ACCESS TO CHARGING
INFRASTRUCTURE EVERYWHERE**

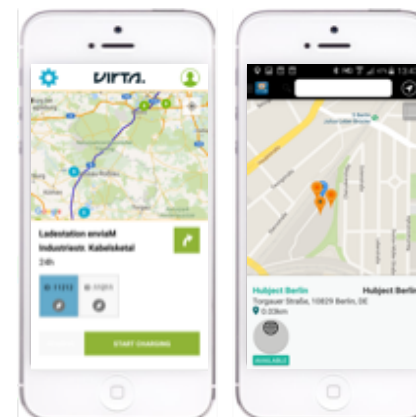
**Where can I
charge?**



How can I charge?

HOW CAN I CHARGE?

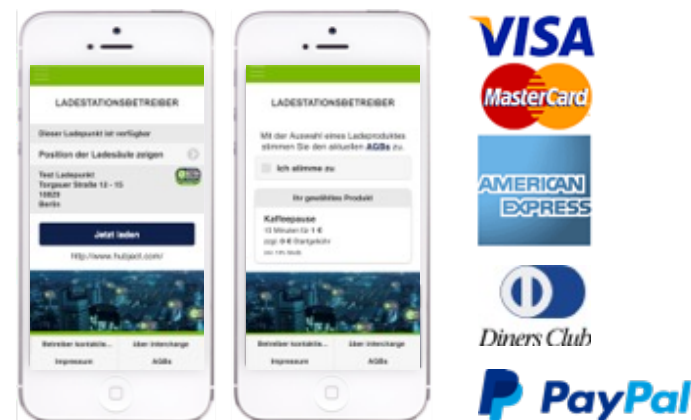
CHARGING SESSION WITH A CONTRACT



I can use my EV electricity contract

HOW CAN I CHARGE?

CHARGING SESSION BY DIRECT PAYMENT



I can pay directly at the charging station
and choose my preferred payment method

HOW CAN I CHARGE?



**THE CONNECTION THROUGH 1 INTERFACE OFFERS NEW
SERVICE OPPORTUNITIES FOR A CUSTOMER-FRIENDLY
ELECTRIC MOBILITY**

HOW CAN I CHARGE?

SUBSCRIPTION WITH AN EV ELECTRICITY PROVIDER



DIRECT PAYMENT WITHOUT SUBSCRIPTION



AUTHENTICATION METHODS



CREATING NEW ELECTRIC MOBILITY SERVICES through

INNOVATION

INTERCONNECTION

DIGITALISATION

**OVERVIEW HUBJECT
PRODUCT SOLUTIONS**





CONNECT FOR EMOBILITY PROVIDERS

Access to all charging stations within the interchange network by using one RFID card, Mobile App or Plug&Charge Service

Supply of up-to-date information about the charging points, availability, and location



SHARE FOR CHARGE POINT OPERATORS

Integration of your infrastructure into the interchange network to open your charging stations to customers of established EV emobility providers

Upgrade: **intercharge direct**
Let any EV driver charge and pay directly at your charging stations



CHECK FOR CHARGE POINT INFRASTRUCTURE PRODUCERS

Certification of the Hubject compatibility for your charging station systems and customer management systems

Certification of the Hubject compatibility for your charging stations



PROJECT & CONSULTING FOR COMPANIES OFFERING EMOBILITY SERVICES

Development of individual strategic and operative concepts for an interoperable market approach by offering a customized interoperable charging solution

Business model and requirement analysis as well as and consultation for customer-specific solutions – individually

CREATING NEW ELECTRIC MOBILITY SERVICES through

INNOVATION

INTERCONNECTION

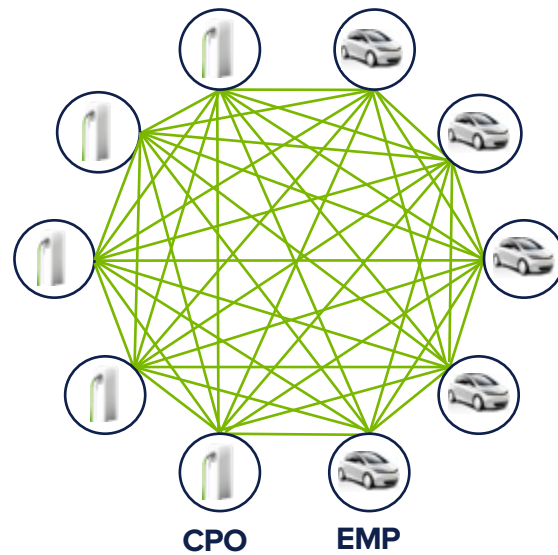
DIGITALISATION

eROAMING MODEL

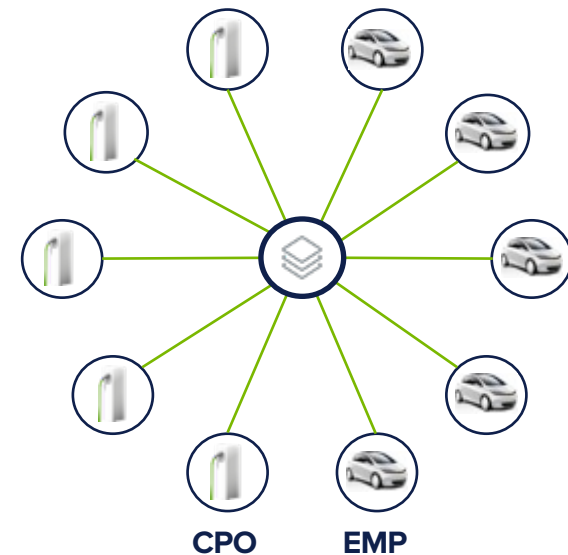


OVERVIEW eROAMING MODELS

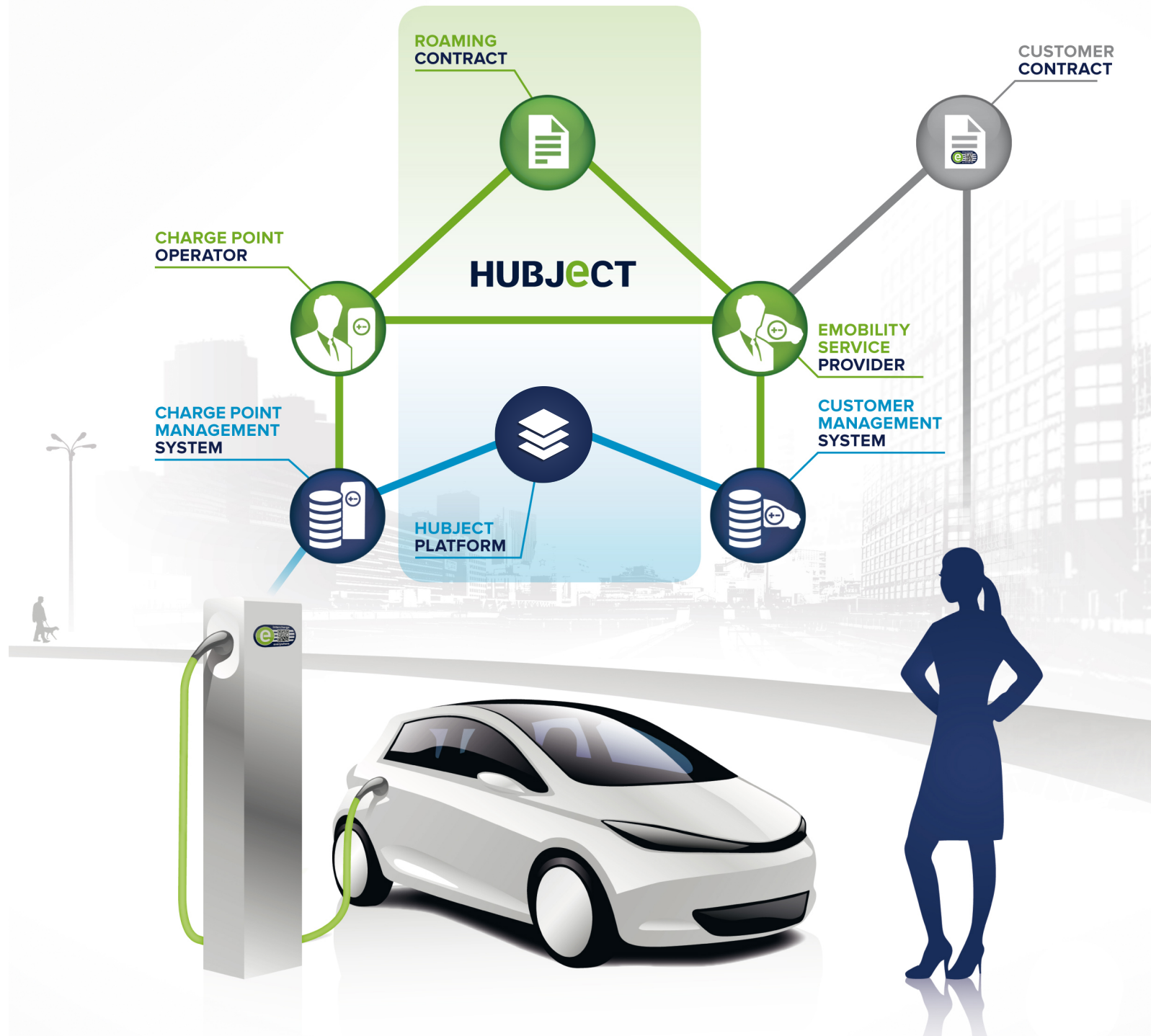
WITHOUT A HUB



WITH A HUB

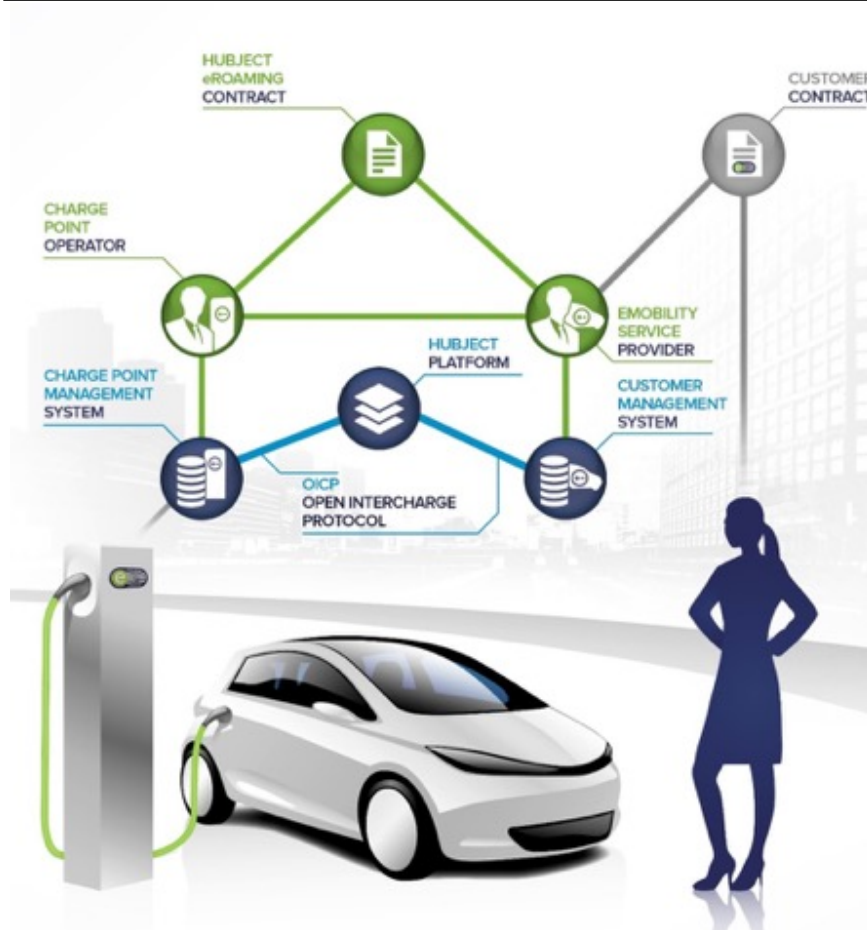


1 INTERFACE • 1 CONTRACT • n PARTNERS



THE HUBJECT BUSINESS MODEL ENABLES HIGHLY EFFICIENT SCALABLE B2B CHARGING SERVICES

1 contract + 1 interface = n new partners



*CPO: Charge Point Operator (e.g. RWE, EnBW, EDF) **EMP: Emobility Service Provider (e.g. BMW, Daimler, PlugSurfing)

eRoaming via the HUBJECT platform

- Access to the complete cross-operator charging network with just one contract and one IT interface
- Standardised contractual and IT framework between CPOs* und EMPs** with harmonised SLAs create a homogeneous network
- EV drivers have the free choice of an EMP (compare telecom industry) but can use a cross-operator charging infrastructure

Scalable business model:

- ✓ EMP pays annual service/ maintenance fee + licence fee per EV-driver (~25€/year per customer)
- ✓ CPO only pays annual service/ maintenance fee (~1.200€/year)

CONTACT:

Dr. Martin Petschnig
martin.petschnig@hsubject.com
0049 171 1679394

Hsubject GmbH
EUREF Campus
Torgauer Straße 12-15
10829 Berlin

