

Making of EV-roaming solution: integration of payment schemes in France

FOURTH CHADEMO MEMBER MEETING
Barcelona, 2013-11-20

Gilles BERNARD
GIREVE
Chairman of the Board

GIREVE: a company created by 5 major actors implied in e-mobility



2009

2010

2011

2012

2013

French Plan of Action for e-mobility.
W.G. on payment & Roaming

Oct. 2012 : agreement to create
GIREVE Co

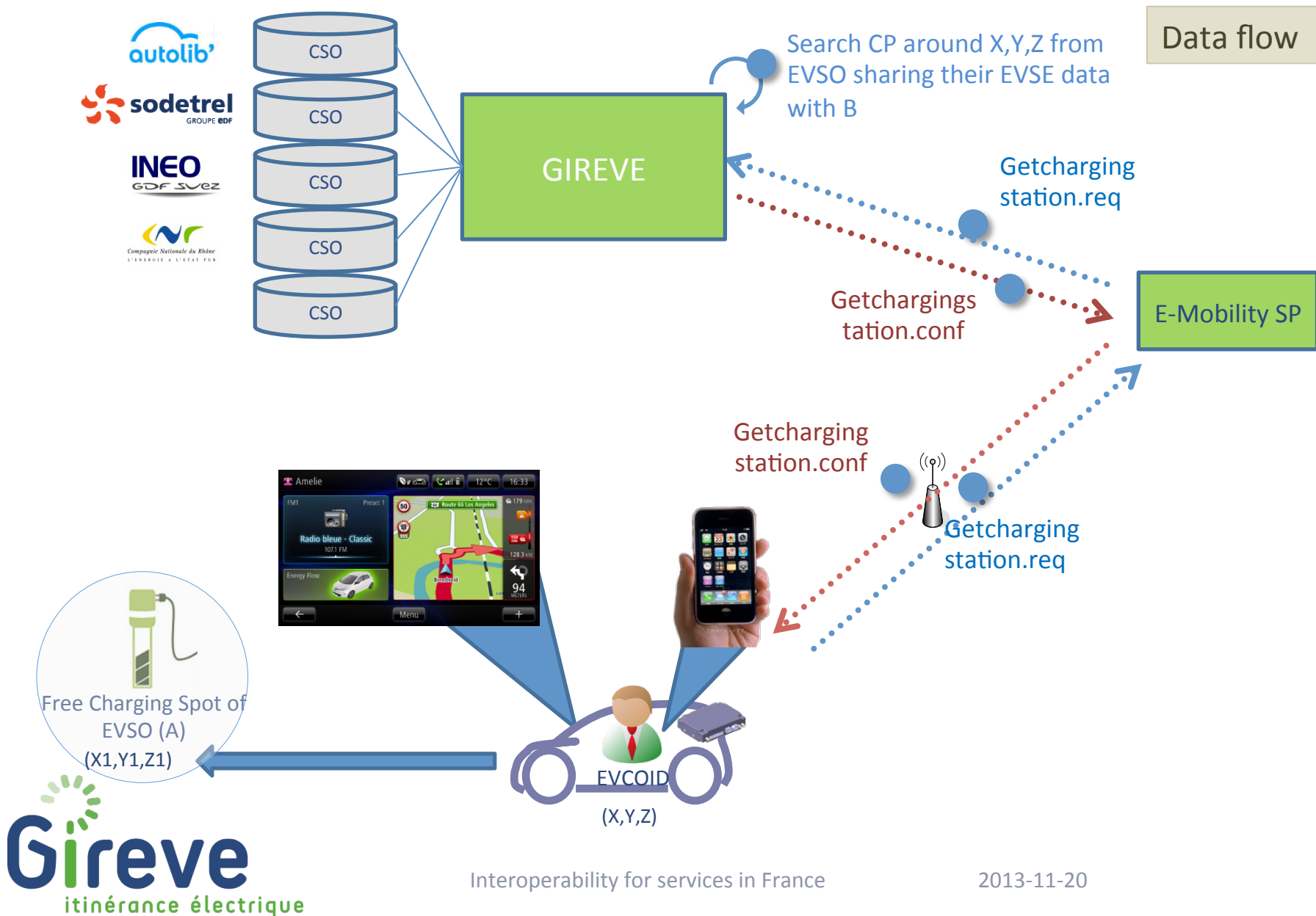
July 2013 :
**GIREVE
SAS**

« Dedicated to a charging infrastructure visible, accessible and interoperable »

A need for real time data exchange for end user convenience

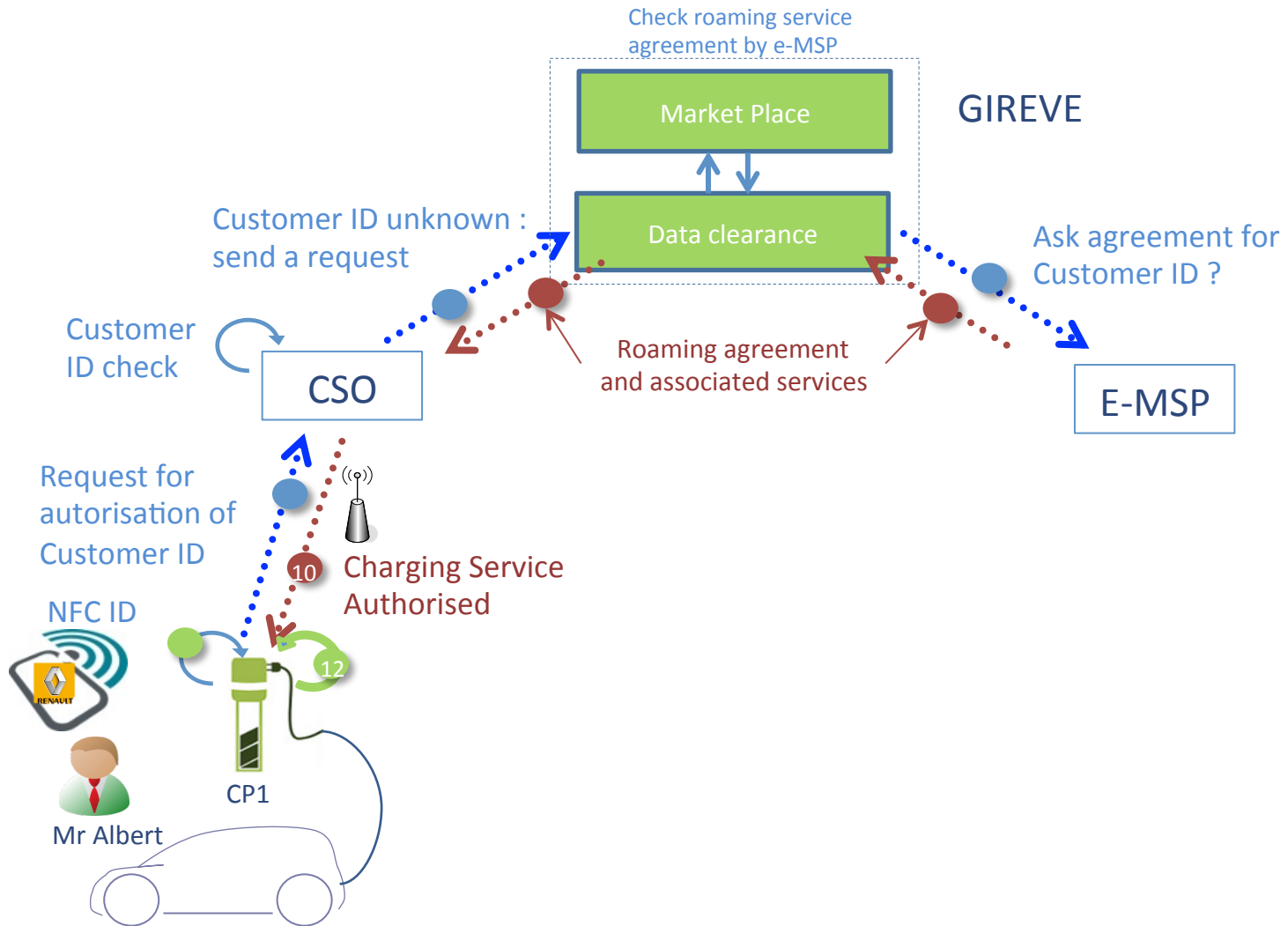
- Mapping of publicly accessible charging points (CP) is under development, but end users need more :
- Information on status of the CP : available or not.
- Possibility to reserve a CP at the destination proximity.
- Authorization to charge for a customer having a mobility contract with another operator.
- Charging conditions settlement for the sake of the end customer
- Payment through a single contract with an e-Mobility service provider.
- Smart charging for energy efficiency
- ...

« Charge Spot Finder »: Find available charge spots

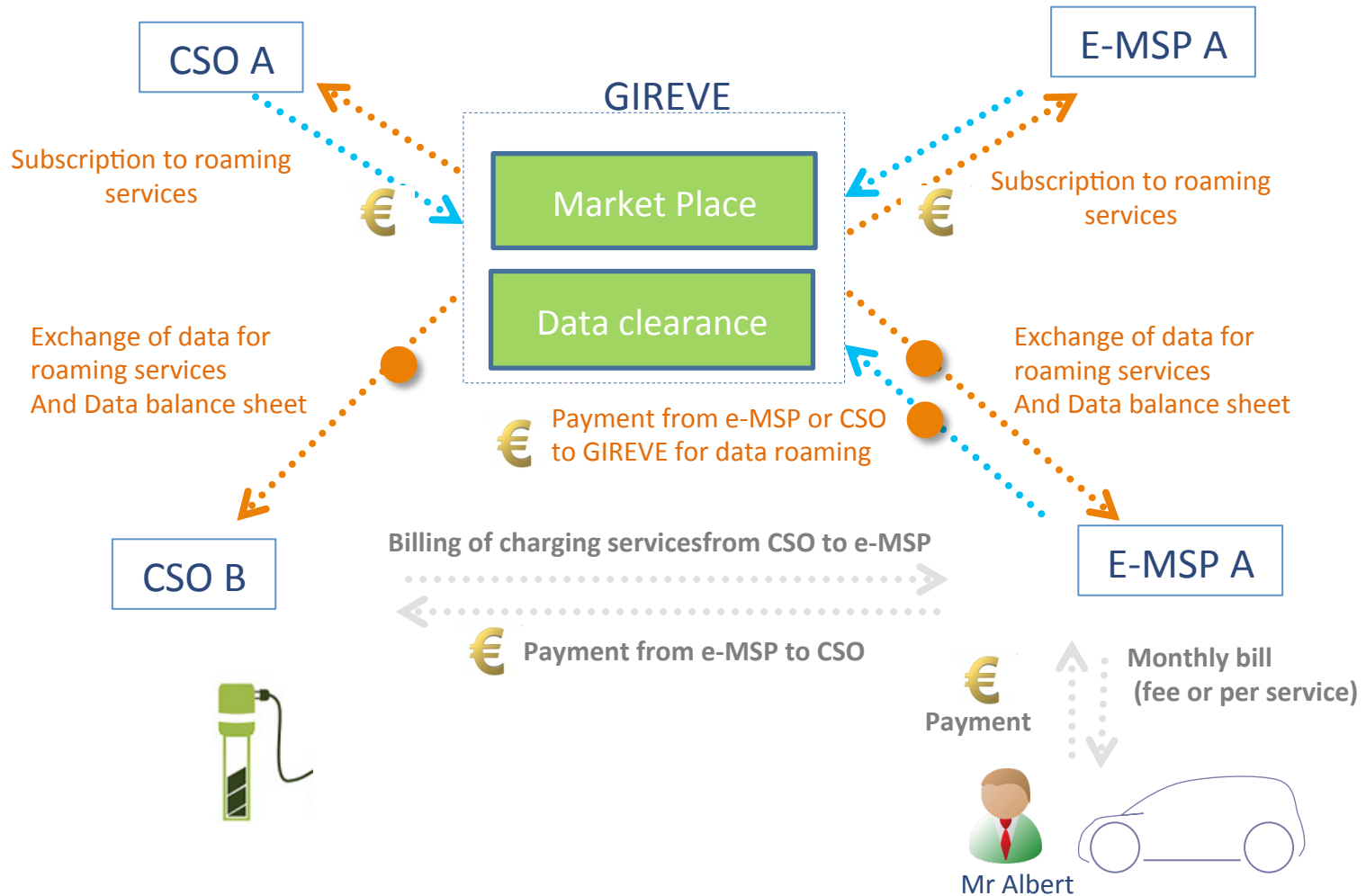


Data flow

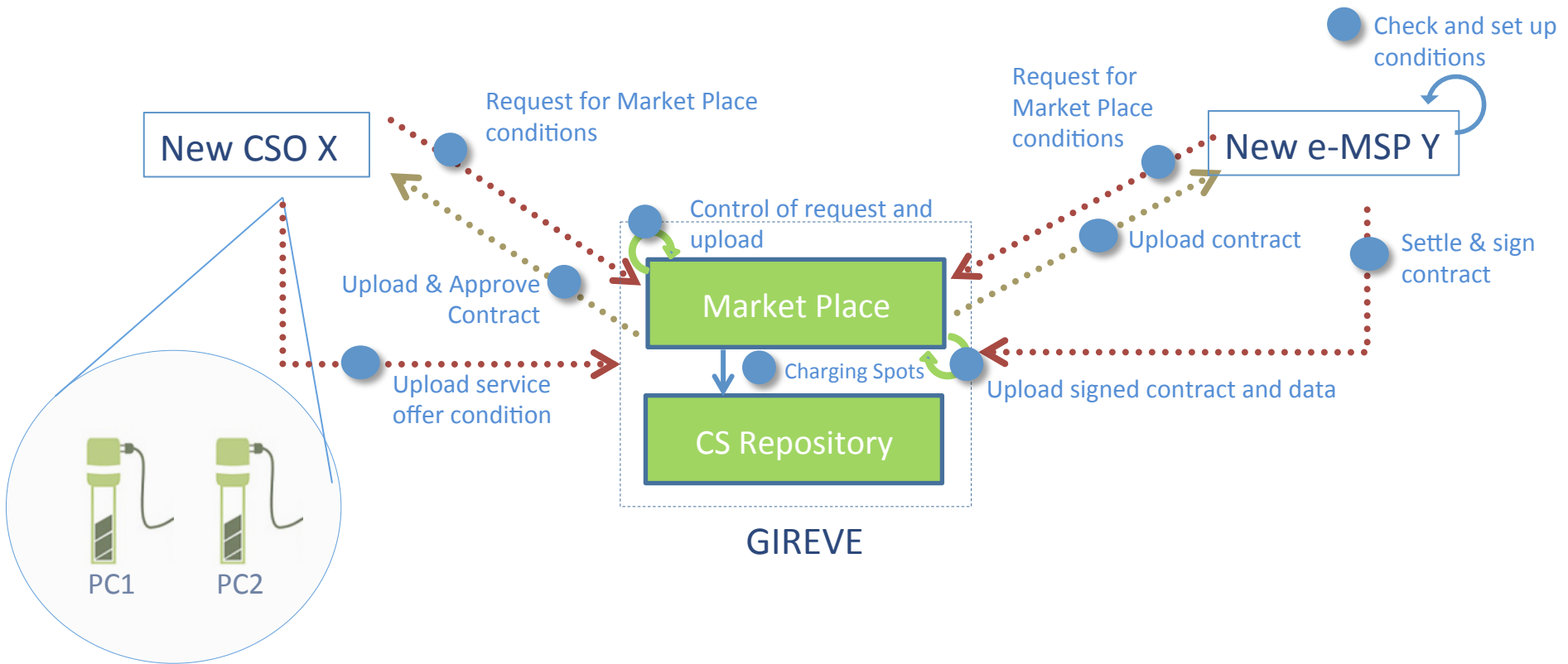
« Charge service Authorisation »: Access to a charging spot



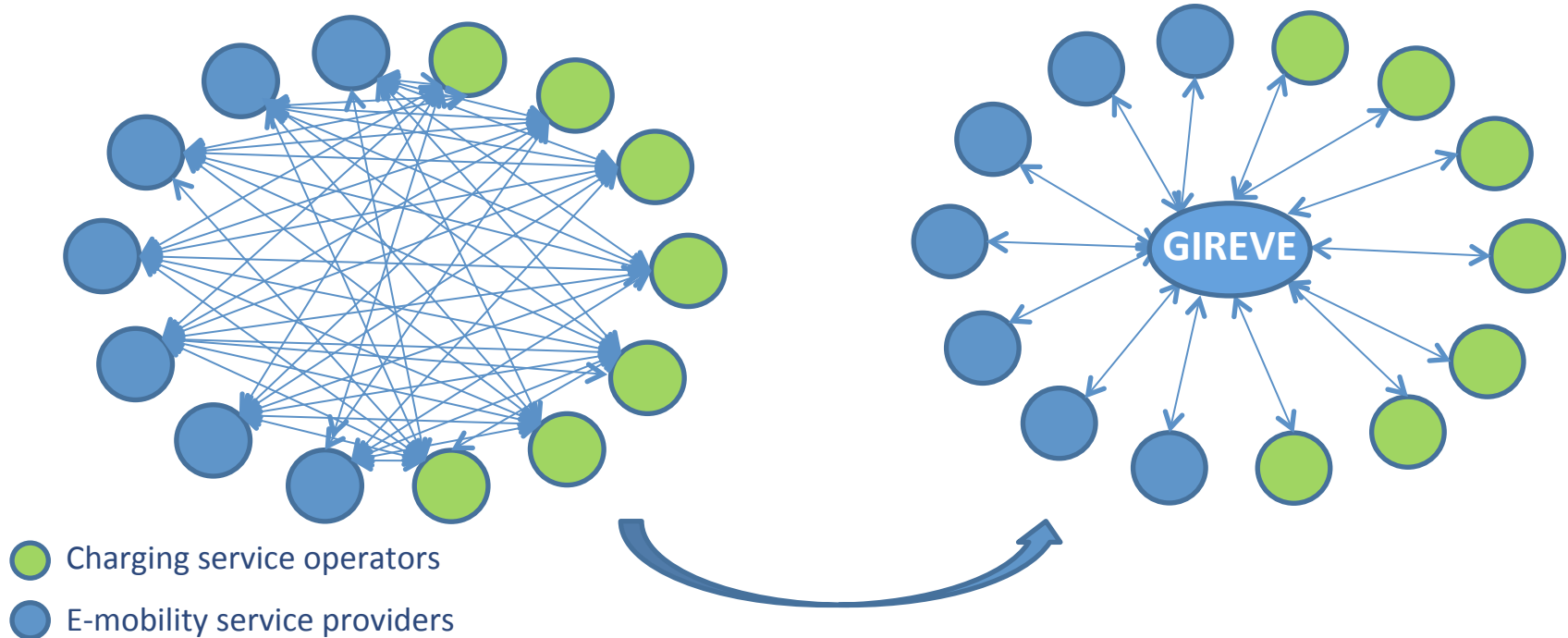
« Data clearance »: Exchange of data and balance sheet emission for roaming services



Easy introduction of new players on the market

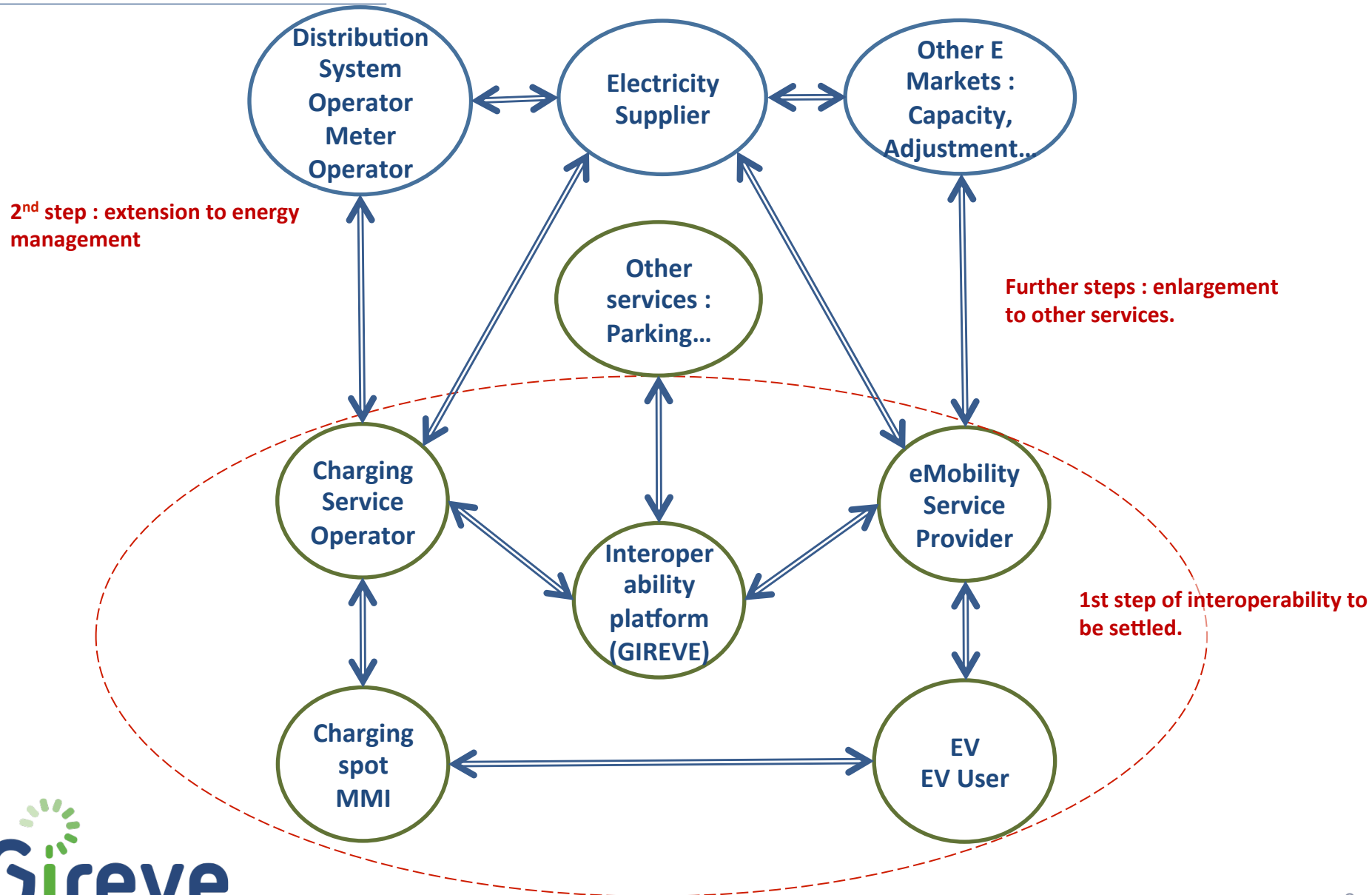


Interoperability platform for an open and fluid market of services.

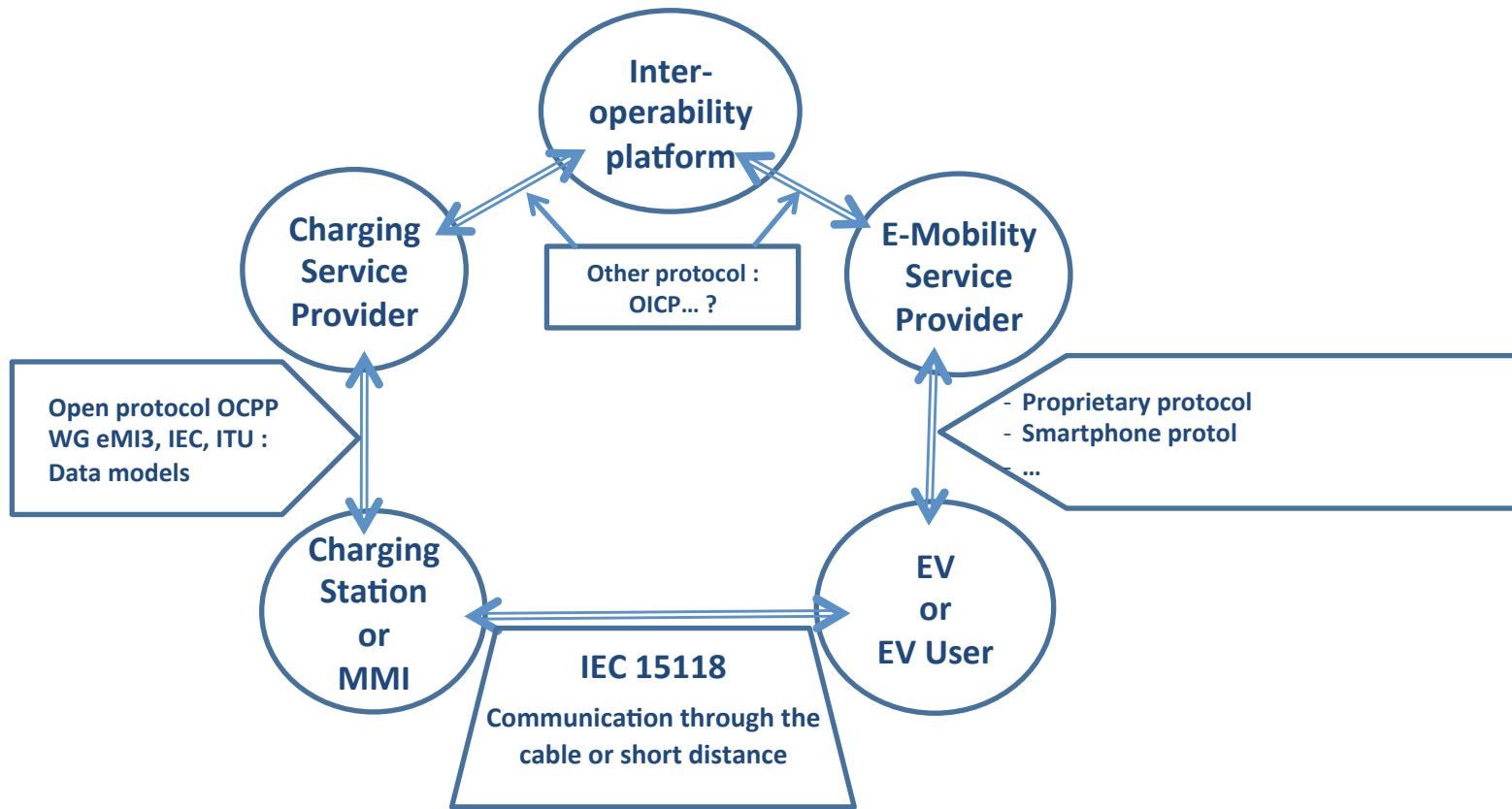


👉 **A place to create an open and competitive market of operators producing high value services for the final customer using an EV, freeing him from the burden of autonomy and charging management.**

System design : codification of roles and their interactions.



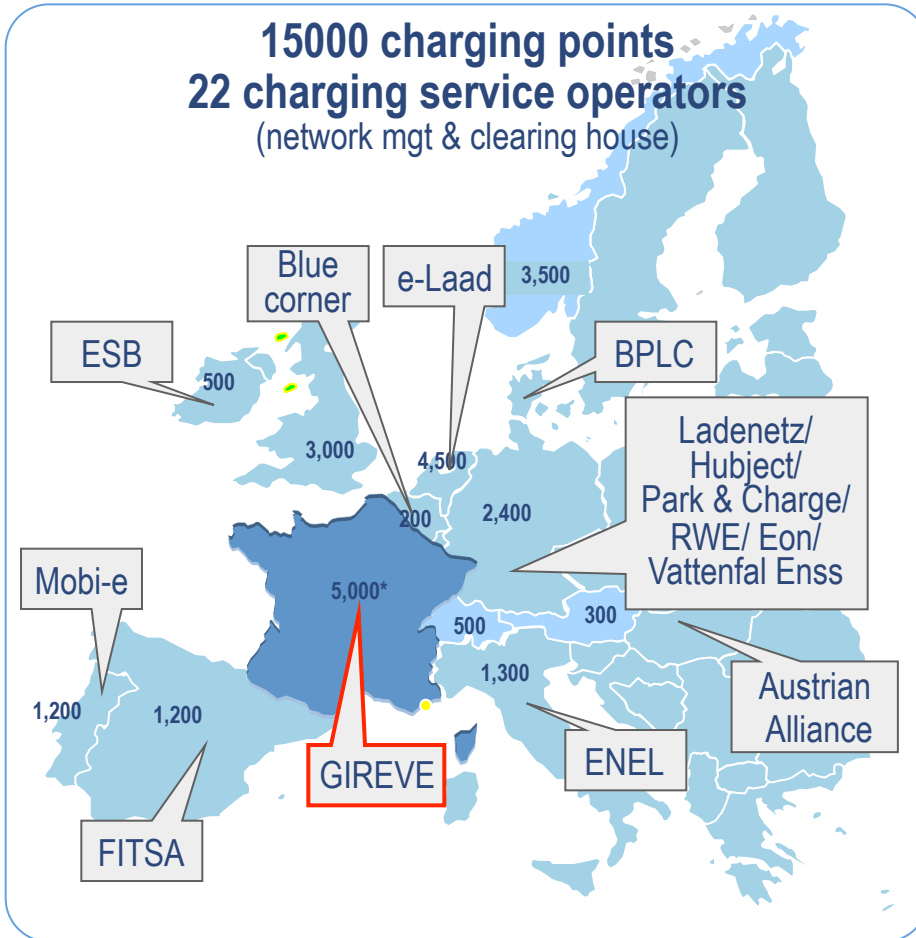
System design : standardisation of protocols between different roles (under construction).



Situation in France for the time being

- **Public charging points are installed in streets, public parking and private parking (supermarkets, hotels, and also businesses...) -> # 10 000 CP by end 2013.**
- **Multiple investors : mostly public (local communities) and private (parking operators, trading centers, hotels, Companies...)**
- **Either they are dumb (not communicating), or they are operated in a closed perimeter (Autolib, Charging service operators).**
- **Some private initiatives are launched to create e-mobility service providers through bilateral agreements with charging service operators.**

Similar initiatives in Europe



Standardisation process for e-mobility and charging interoperability (beyond plugs).



Multiple European initiatives



Mobi-Europe (DG Connect)



Green e-Motion (DG Transport)

Platforms for eRoaming

eMI3

Alliance to establish interoperability standards