

DOCKETED	
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In-Charge[™]

We Bring The Power[™]

Charging Today

CEC - ISO 15118 Charger Communications and Interoperability Workshop

Cliff Fietzek

11/10/2021

Why is ISO 15118-2 essential to accelerate EV adoption?

- **Plug and Charge**
 - Seamless charging experience - the driver does not have to do anything beyond connecting the vehicle to the infrastructure.
 - Authentication - identifying and authorizing the vehicle to be charged without any action on the part of the driver.
- **Open access to EV charging (roaming)**
 - giving freedom to EV drivers from closed member networks, multiple RFID cards, app sign ups
- **Cyber Security**
 - providing a mechanism by which messages between the vehicle and the charging infrastructure can be encrypted and decrypted.
- **Vehicle-to-grid charging (V2X)**
 - ISO-15118-20 will be the communication protocol for two-way energy transfer between the vehicles and a load (building, battery or the power grid).

Plug and Charge – a technology breakthrough

Plug and charge rolled out across North America and Europe based on ISO15118-2.

Vehicles supporting PnC: Ford, Mercedes, Porsche, Lucid, etc.

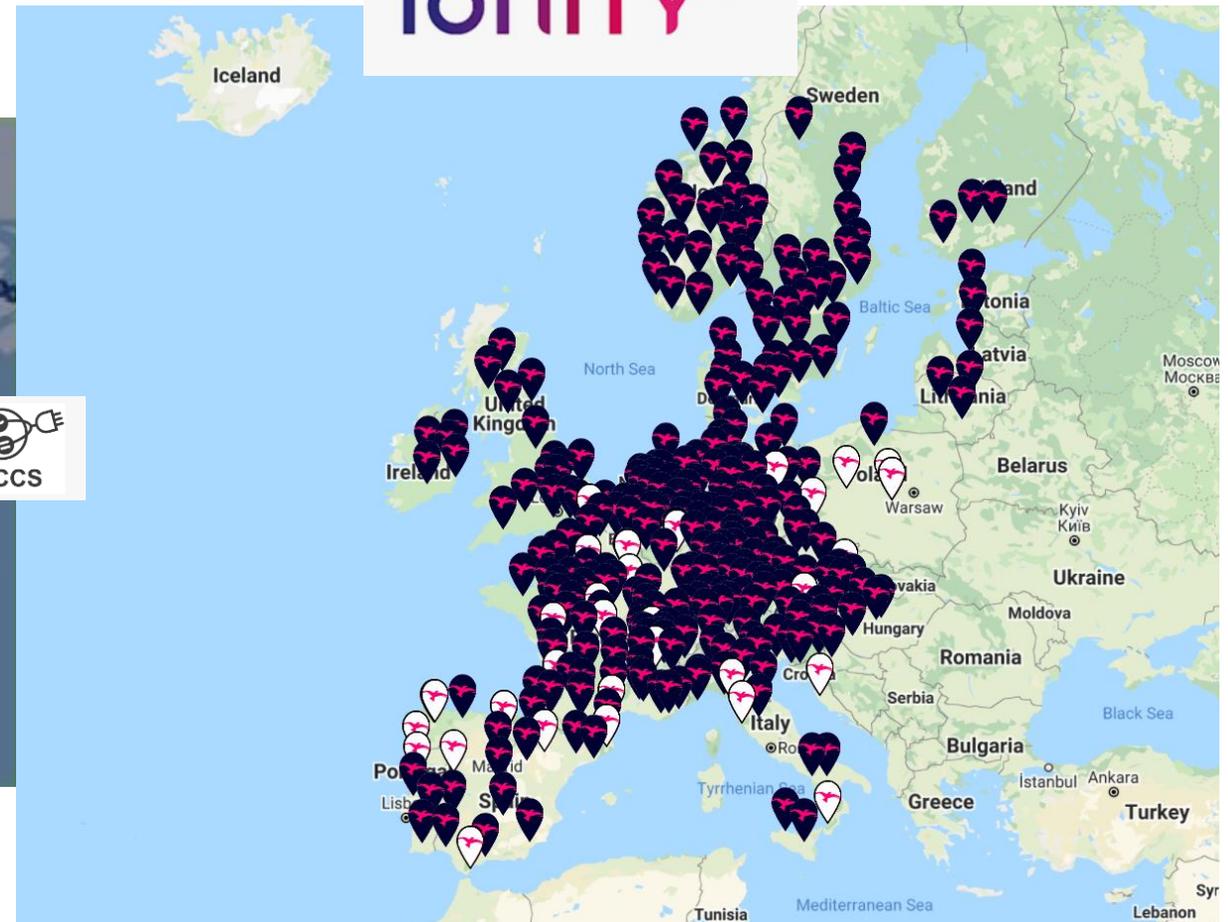


Charging infrastructure supporting Plug'N'Charge with ISO15118-2

North America



Europe



Plug'N'Charge with ISO15118-2 is already supporting multiple PKI's

CPO is creating
the contract
certificate for
the OEM

V2G
Root

CPO

Contract
Cert

OEM is creating
the contract
certificate

V2G
Root

OEM
PKI

CPO

Contract
Cert

Contract
Cert

OEM is creating
the contract
certificate from
the V2G root

V2G
Root

CPO

Contract
Cert

Contract
Cert



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THANK YOU!