

eMobility ICT Interoperability Innovation Group

Accelerating E-Mobility to the next level through Open ICT Standards

eMI³ platform for interoperability in ElectroMobility

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Why are interoperable ICT standards important to eMobility?

- We need to create a seamless driver experience
- Bridge the gap towards compelling products and services that bring EV driving the convenience needed to break the vicious circle
- Support a wide array of potential convenience – and value-adding services
- Without common, harmonised data identifiers, for instance, it will be impossible for a EV driver to roam from his home-charging network to another one for which he does not have a contract.

What benefits do interoperable ICT standards bring?

- Accelerate global EV market development
- Reducing the operational costs and complexity to setup interconnectivity amongst actors and platforms
- Enabling ‘best-of-breed’ services
- Insuring speed, flexibility, and scalability
- Facilitating systems integration

What is the eMI3?



- The eMI³ represents different industries and different countries which are active in the e-mobility ecosystem.
- Evolved in 2012 mainly from the greenEmotion project and therefore has a strong foundation within the EU commission .
- The eMI³ transformed into a non-profit organization within Belgium law (AISBL).
- The organization is consensus based and decisions are taken by a democratic process and every member company has the same right to get involved.
- Because of that the **eMI³** can be considered as **independent**

Full members (24)



Associate members (10)



Supporter members (6)



eMI³ – Vision and key beliefs

An open and cross industry organization is best suited to drive ICT standardization

Remove key obstacles to, and drive faster the development of a larger global eMobility market



Drive global growth and utilisation of EV related products and services

Increase the convenience and adoption rate of electric vehicles.

eMI³ – Scope and Goals

Enable global EV services interoperability by harmonising existing ICT data and protocols, and proposing new ones where none are yet defined;

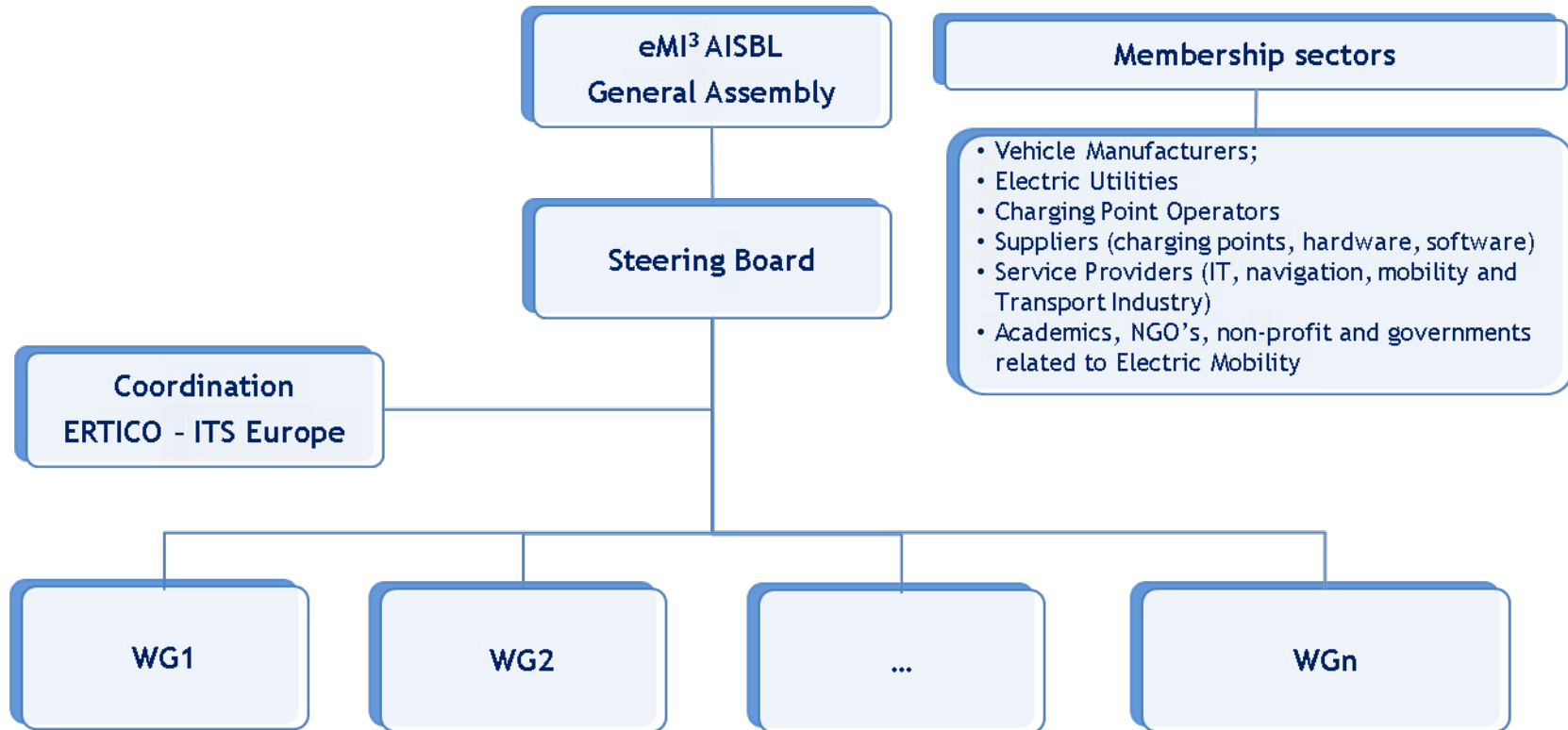


Harmonise, promote and improve cross-sector implementation

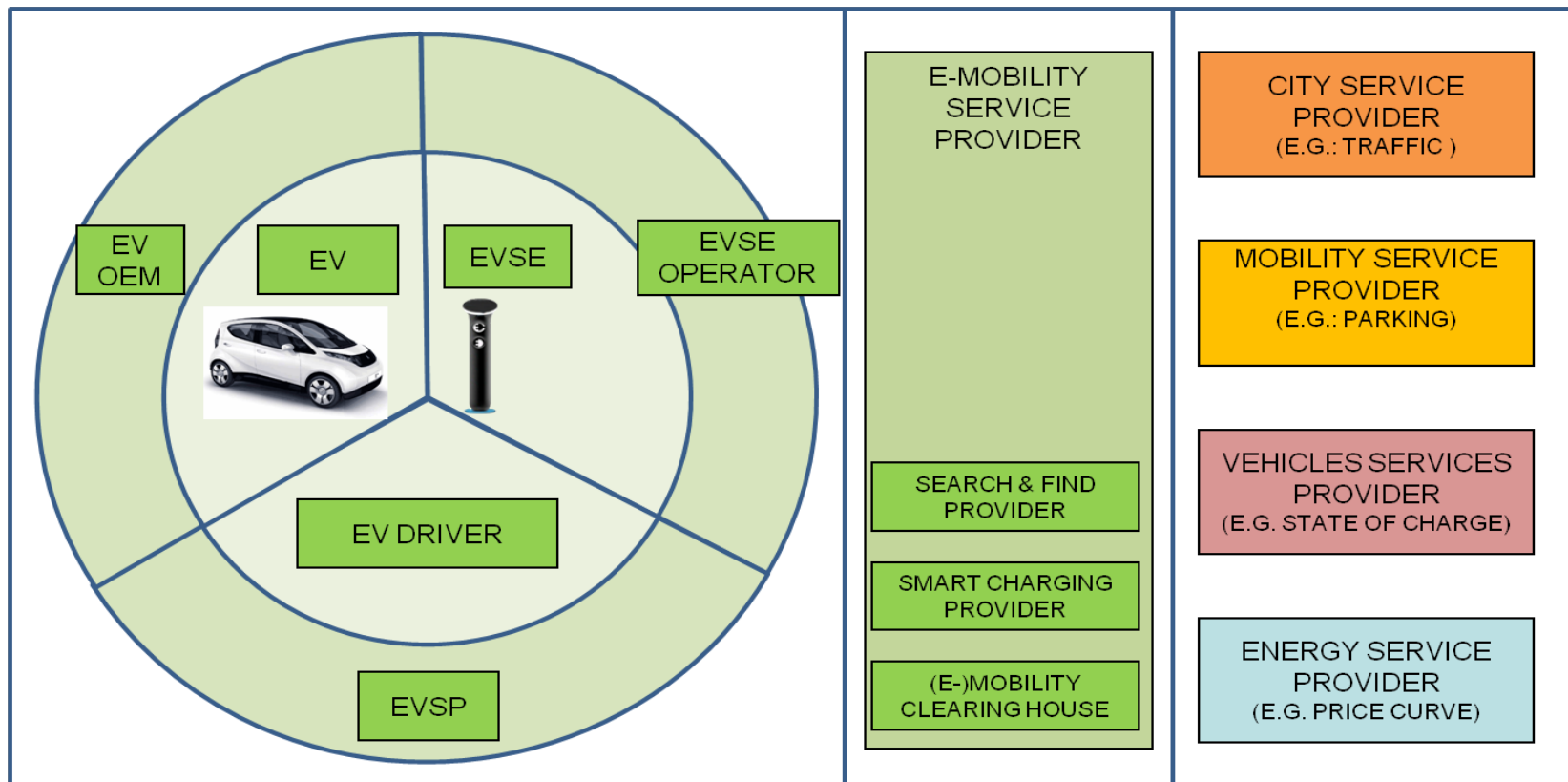
Strive to rapidly grow a large market by supporting all required business processes to ease and speed-up the introduction of new services and provide a richness of compelling services to EV users

Liaise and co-ordinate with other EV organisations and initiatives to maximise interoperability and minimise effort.

eMI³ – Organisation and structure



Overview Scope & Actors of eMI³



Results and prospects

- Results 2015:
 - 23/06/2015: submitted document on EV interoperability to DG-Move, released to the public on 16/11
 - 16/11/2015: eMI³ Standard v1.0 released
 - Terms, definitions and abbreviations
 - Part 1: Overview & Use Cases
 - Part 2: Business Objects
 - 01/12/2015: eMI³ AISBL created in December 2015, with:
 - 21 members (19 in the process to sign in), chair is Renault, vice chair Bosch
 - Target is 45 members by the end of 2016
 - 05/12/2015: session @ COP21 on EV interoperability
- Prospect 2016:
 - Focus on Smart charging use case and business objects
 - Increase membership and international visibility

Thank you for your attention

Join us...

We invite all EV market players to join us.
Please visit our website:

www.eMI3group.com

Contact:

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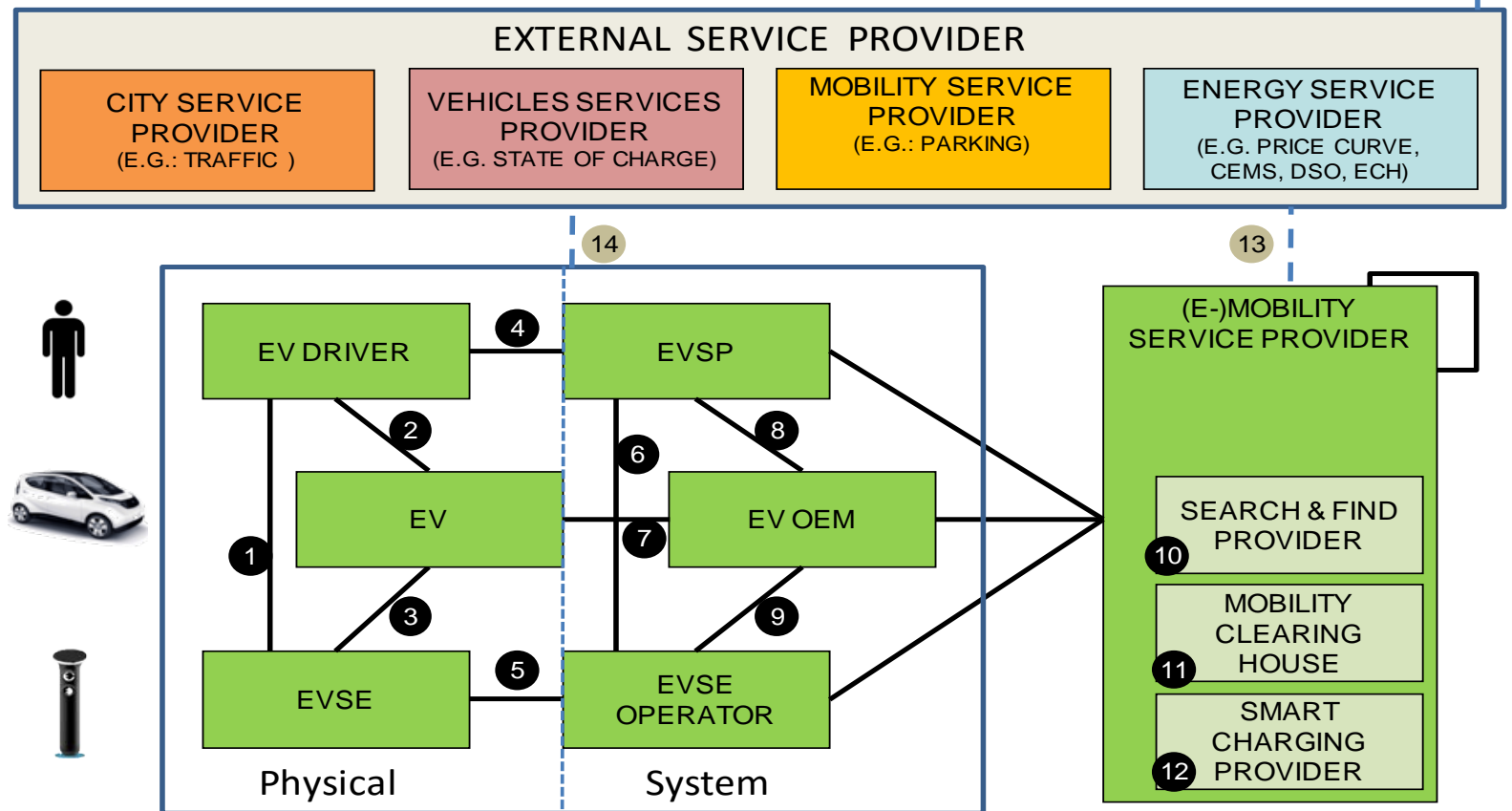


Standards vs Interoperability

EVSE Attribute – Type of Plug Table

Value	Specifications / Description
DOMESTIC-A	Standard/Domestic household, type "A" 
DOMESTIC-B	Standard/Domestic household, type "B" 
DOMESTIC-C	Standard/Domestic household, type "C" 
DOMESTIC-D	Standard/Domestic household, type "D" 
DOMESTIC-E	Standard/Domestic household, type "E" 
DOMESTIC-F	Standard/Domestic household, type "F" 
DOMESTIC-E-F	Standard/Domestic household, type "E+F" 
DOMESTIC-G	Standard/Domestic household, type "G" 
DOMESTIC-H	Standard/Domestic household, type "H" 
DOMESTIC-I	Standard/Domestic household, type "I" 
DOMESTIC-J	Standard/Domestic household, type "J" 
DOMESTIC-K	Standard/Domestic household, type "K" 
DOMESTIC-L	Standard/Domestic household, type "L" 
DOMESTIC-M	Standard/Domestic household, type "M" 

Overview of main roles and interfaces in focus



Dashed lines: going out of EMI3 scope
Solid lines: within scope of EMI3

Diagram covers possible Interfaces. Contents of interfaces are interrelated and strongly depend on the chosen architecture.