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ElectroMobility charging and interoperability
Overview

- ElectroMobility Programme @ Ertico
- Interoperability versus standard
- eMI³
- European strategy for interoperability
eMobility programme @
Scope & background

• **Electro-Mobility (eMobility)** is:
  – Electric Vehicles (EVs): Plug-in Hybrid (PHEV) and Full EVs (FEV)
  – supported by ICT (in-vehicle information, connected infrastructure)
  – using charging and grid infrastructure
  – focusing on ITS for EVs

• **European priority supporting eMobility**:
  – EC research programmes: in particular European Green Cars Initiative

• **ERTICO task force on ITS for Electro-Mobility (2010-12):**

*emIf* eMobility ICT Interoperability Innovation platform
eMobility programme @
Overall Objective

Full deployment of EVs
with dedicated and interoperable services
using roaming / marketplace solution
integrated in a global mobility service offer

Challenge: Multitude of cross-sector actors leading to information and interoperability issue
# Standard versus Interoperability

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

- eMI³ represents different industries and different countries which are active in the e-mobility ecosystem.
- Evolved in 2012 mainly from the Green eMotion project and therefore has a strong foundation within the EU commission.
- eMI³ transformed into a non-profit organization under Belgium law (AISBL) coordinated by ERTICO.
- The organization is consensus based.

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

• Enable global Electric Vehicles (EV) services interoperability by harmonizing existing ICT data and protocols, and proposing new ones where none are yet defined.

• Strive to rapidly grow a large market by supporting all required business processes to ease and speed-up the introduction of new services.

• Liaise and coordinate with other EV organizations and initiatives to maximize interoperability and minimize effort.
AISBL members

Full
- AFIREV
- alleging
- BMW
- BOSCH
- CEIJA
- ChargePoint
- EDF
- e-laad.nl
- enel
- e-on
- here
- RENULT
- Schneider Electric
- TNO
- TomTom

Associate
- Alfazer
- AIDIVE
- cenex
- eViolin.nl
- Gireve
- HUBJeCT
- IL
- PHENIX CONTACT
- smartlab

Supporter
- bridging
- ChargeMap
- CIRCONTROL
- CISC
- ENIO
- FULLCHARGER
Achievement and current activities

• 23/06/2015: submitted document on EV interoperability to EC-DG-Move
• 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:
• 05/12/2015: session @ COP21 on EV interoperability 2016
• active participation in the EC - Sustainable Transport Forum SG to foster the creation of an ElectroMobility market of services
• Focus on Use cases Smart Charging
EC strategy vs Interoperability

Sustainable Transport Forum

SG to foster the creation of an ElectroMobility market of services

Target of the SG is to:

• define interoperability and formulate minimum requirements for EU charging points;
• recommend common European standards and procedures beyond the Directive 2014/94/EU, to help the deployment of eMobility services;
• propose guidance to develop a European framework for an eMobility market of services.

Result:

MoU on the adoption of common data Formats & Communication protocols to identify charging points and contracts
Thank you

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