NEMo: Hyper-Network for Electromobility

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Service Creation in the NeMo Electromobility Network
Webinar, 1 February 2018
NeMo at a glance

**Call identifier:** H2020-GV-2015

**Topic:** GV-8-2015 Electric vehicles’ enhanced performance and integration into the transport system and the grid

**EC funding:** € 7.8 million

**Duration:** October 2016 – September 2019

**19 partners**

5 test sites & 1 cross-country demonstration

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**Website:** [http://nemo-emobility.eu](http://nemo-emobility.eu)

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1 February 2018 Webinar on Service Creation in the NeMo Electromobility Network
What are the challenges for NeMo?

- Limitation in Electric Vehicle range
- Lack of interoperability in charging infrastructure
- Diversity of eRoaming platforms
- Impact to the Electric grid network
- Lack of common data exchange and commercial framework
NeMo’s approach

Develop a **Hyper-Network of tools, models and services**, which will enable the provision of **seamless and interoperable electromobility services** creating an open, distributed and widely accepted ecosystem for e-mobility.

- improved accessibility to charging infrastructure and ICT services through a **pan-European Inter-Roaming framework**
- facilitate increased availability, better planning and more secure electric grid operation
- create business opportunities (increased B2B connectivity)
Expected impact

Improved attractiveness of electric vehicles (EVs)

- Enhanced driver satisfaction: “Charge anywhere & anytime” across Europe via a single identification, authorisation & payment method;
- Unified charging infrastructures for all operators connected to the NeMo Hyper-Network.

Easy creation and delivery to a wide audience of innovative, interoperable electromobility services via an open cloud marketplace.

Information exchange among all involved actors.

Integration of smart-grid applications and services, to support the EVs integration in the electricity grid.
## Planned NeMo services

| **Horizontal Hyper-Network services:** | Electromobility actors’ monitoring and profiling  
| | Finder and optimiser  
| | Brokerage  
| | Service pricing (static and dynamic) |
| **EV driver / owner services:** | Smart navigation and journey planning  
| | Wireless authentication solution |
| **Grid related services:** | Navigation to Charging Point based on user and grid requirements  
| | Global customer charging behaviour  
| | Grid load management  
| | Load forecasting due to EV charging  
| | Local energy management |
| **EV and battery related services:** | Adaptive State-of-Charge limit  
| | Capacity calculation; Load management; etc. |
NeMo Test sites

**Five test sites** to validate the Hyper-Network via complementary use cases:

- **France**
  - Renault Technical Centre, Versailles

- **Germany**
  - Euref Campus, Berlin

- **Austria**
  - SMATRICS charging network

- **Italy**
  - Orbassano and Susa, Piedmont

- **Spain**
  - Barcelona metropolitan area

A **CROSS-COUNTRY** test to demonstrate the seamless and interoperable inter-Roaming, by locating charging infrastructure and access services will take place in 2019. **A first test drive** from Turin to Barcelona took place in October 2018 to identify key issues and challenges.
Thank you!

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