



Feasibility analysis and development of on-road charging solutions
for future electric vehicles



Press Release

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FABRIC - "FeAsiBility analysis and development of on-Road charging solutions for future electric vehICles "

Paving the way for large scale deployment of electromobility

A new EU project has launched to promote the large scale deployment of electromobility in Europe focusing on on-road charging solutions.

Over the next four years the €9 million FABRIC integrated project will address directly the technological feasibility, economic viability and socio-environmental sustainability of dynamic on-road charging of electric vehicles. The project officially launched its activities with the organisation of the consortium kick-off meeting that was held in Athens, Greece from 3 to 5 February 2014 and was hosted by the project coordinator, the Institute of Communication and Computer Systems (<http://i-sense.iccs.gr>). High level representatives from the European Commission, EUCAR and ERTICO have joined the meeting and addressed the 60 participants.

In the pursuit of the decarbonisation of road transportation and mobility, it is widely recognized that electro-mobility, or 'e-mobility', i.e. using either fully electric or highly electrified vehicles such as plug-in hybrids, is expected to play a key role. However the key to the future success of e-mobility, particularly from the perspective of the commercial viability of electric vehicles, will be the achievement of large scale

acceptance, meaning wide support for innovative, clean mobility solutions by the general public, in addition to the policy makers.

From this perspective, one of the critical parameters for the acceptance of fully electric vehicles relates to the fact that energy storage in batteries still suffers from a number of serious drawbacks such as limited specific energy which causes what is commonly known as “range anxiety” to the driver, and in general limited vehicle range plus long recharging times, which make electro-mobility fully suitable only for urban usage.

In this context, the FABRIC project responds to the need to assess the potential and feasibility of a more extensive integration of electric vehicles in the mobility and transportation system, focusing primarily on dynamic, on-the-go, wireless charging which would allow practically the main drawbacks of on-board battery packs to be avoided.

By engaging a highly-qualified, expert and comprehensive group of key stakeholders within its consortium, FABRIC will collect and assess the end-user requirements that in turn could determine the success potential in various application sectors, the technology drivers and challenges that impact the widespread implementation of wireless charging technology, and the technology gaps to be bridged in order to identify rational and cost-effective solutions for the grid and road infrastructures.

In the framework of the project activities different charging solutions will be assessed from the technological, social and economic point of view to determine the impact of competitive charging technologies. Moreover, FABRIC will implement and test advanced solutions, conceived to enable full integration in the grid and road infrastructure, for application to the wider possible range of future electric vehicles. The systems that will be developed in FABRIC will be tested in test sites in France and Italy to ensure interoperability and validity of the proposed solutions while additional testing of other assessed solutions will take place in Sweden.

The ultimate goal of the FABRIC consortium, which consists of 24 partners from 9 European countries, including OEMs, suppliers and service providers from the automotive, road and energy infrastructure domains and research organisations, is to provide a pivotal contribution to the evolution of e-mobility in Europe by identifying the benefits and costs so that the investments required in the coming years for widespread implementation and exploitation can be identified.

Editor notes

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Total cost: 9.000.580,64€

EC contribution: 6.495.000,00€



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Coordinator: Institute of Communication and Computer Systems, (ICCS), Dr. Angelos Amditis



Partners: The 23 project partners are:

ICCS (<http://i-sense.iccs.gr>), **AMET** (www.amet.it), **CEA** (www.cea.fr), **CIRCE** (www.fcirce.es), **CRF** (www.crf.it), **ENIDE** (www.enide.eu), **ERTICO** (www.ertico.com), **FKA** (www.fka.de), **IREN** (www.irenenergia.it), **KTH** (www.kth.se), **MECT** (www.mect.it), **POLITO** (<http://www.polito.it>), **TECNOSITAF** (www.tecnositaf.it), **TNO** (www.tno.nl), **TRL** (www.trl.co.uk), **VOLVO** (www.volvogroup.com), **UNIGE-DITEN** (www.dibe.unige.it), **SCANIA** (www.scania.com/), **VeDeCom** (www.fondation-moveotec.com), **ATA** (www.ata.it), **SaNeF** (www.sanef.com), **QIE** (www.qi-energy.es), **SAET** (www.saetgroup.com)

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For more information please contact:

Dr. Angelos Amditis
Project coordinator, ICCS
Email: a.amditis@iccs.gr