



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

## FABRIC Project

**Dr. Angelos Amditis – ICCS**


FABRIC Deployment Scenarios Workshop  
Strasbourg, 19 June 2017



# Paving the way for wireless dynamic charging

Present

Future

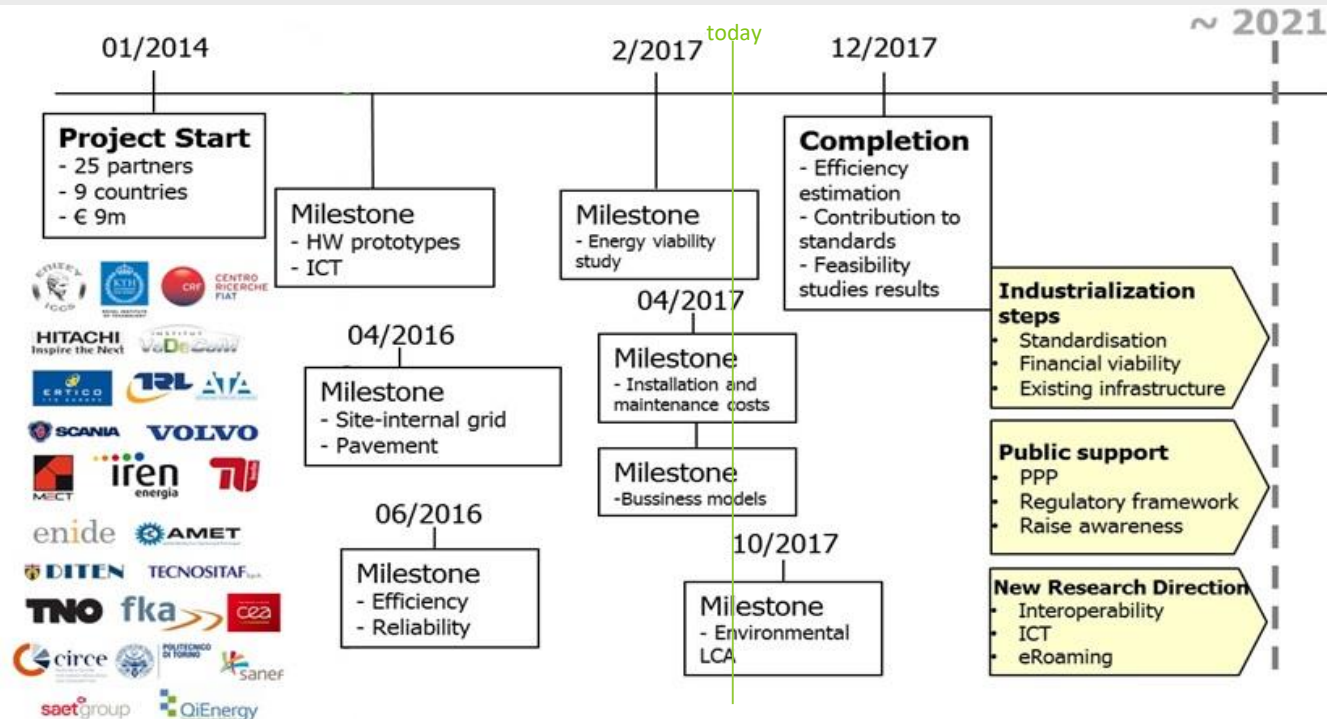
Plug-in static		Conductive dynamic		Inductive dynamic	
Cons	Pros	Cons	Pros	Cons	Pros
User discomfort		Visual/noise(?) pollution	Easy installation	Expensive infrastructure	Smaller batteries
Long charging duration		Expensive pantograph systems	Smaller batteries		Cheaper EVs
Large and expensive batteries			Extended range		Extended range
Expensive EVs			Comfort		Comfort
Vehicle must be parked			Increased mobility		Increased mobility
					No visual or noise pollution

# Goals of FABRIC Workshop



# Some information on FABRIC

Objective: to develop, test and evaluate the efficiency of dynamic charging prototypes to assess the feasibility of large-scale deployment of dynamic wireless charging.



# More information on FABRIC

Website [www.fabric-project.eu](http://www.fabric-project.eu)

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

About Fabric | About Electromobility | Test sites | News and Events | Media Centre | Downloads | Interactions

**Paving the way for large scale deployment of electromobility.**

Over the next four years the €7 million FABRIC integrated project will address the key challenges of feasibility, economic viability and technological sustainability of dynamic on-road charging of electric vehicles.

**Latest Advances**  
Even though electromobility penetration levels worldwide are not impressive, the trend is upward and more car makers intend to develop electric models to the market. At the same time, investments in EV charging infrastructure continue to grow.

**Objectives**  
The main scientific and technological objective of FABRIC is to conduct feasibility studies of on-road charging technologies for long-term electric vehicle range extension technologies for long-term electric vehicle range extension.

**Test Sites**  
FABRIC targets various types of vehicles, including passenger cars, light weight duty vehicles and heavy vehicles and buses. Appropriate charging solutions will be integrated and tested in different sites covering an extensive part of Europe from Italy in the South, through France, to Sweden in the North.

**Expected Impact**  
FABRIC is expected to save the way for the future E-mobility, by addressing important challenges related to charging and ICT solution for electric vehicles. FABRIC will both increase the market share for EVs and contribute in meeting the environmental demands on future mobility.

**Project videos**  
The first project video is now released! Watch this video you will find more about FABRIC, the project expected impact and the vision of the EC, the vehicle manufacturers, and the relevant stakeholders towards Electromobility.

**Watch here**

**Latest News**  
FABRIC @ the UNPLUGGED final event @ 20 February 2015  
FABRIC @ ESARS 2015 @ 29 January 2015

**Receive FABRIC news**  
Register here to receive updates:  
Full name: \_\_\_\_\_  
Affiliation: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
p n 3  
Subscription

**Consortium**  
saet group | TRL | Intel | cea

**Contact**  
Coordinator  
Member of Communication and Computer Systems (CCS)  
Dr. Angelos Amditis | a.amditis@iccs.gr  
15th Kifissias Avenue, 15122 Athens, Greece  
+ Tel: +30 210 7727298  
+ Fax: +30 210 7727293

**Useful Links**  
European Commission DG Research and Innovation  
7th Framework Programme - Transport  
European Green Vehicles Initiative (EGVI)  
European technology platform for the electricity networks of the future

**Imprint**  
The FABRIC project is supported and co-funded by the European Union in the Seventh Framework Programme for research, technological development and demonstration under grant agreement no. 604605. FABRIC is also supported by ESCAR (European Council for Automotive R&D) and ERICoHTS Europe.

**Contact Us** | **Read More**

This project has received funding from the EU's 7th Framework Programme for research, technological development and demonstration under grant agreement no. 604605.

Sponsored by: **EUCLAR** | **ERICOHTS**

LinkedIn group

**FABRIC Integrated Project**  
47 members | Member

Discussions | Promotions | Jobs | Members | Search | Manage

Click here to edit your hero image

Members of this Group  
Vangelis Lymas  
Researcher at CCS  
Online 4 days ago

Start a discussion or share something with the group.

**FABRIC @ ESARS2015**  
En Brevista  
dissemination expert at ICCS NTUA  
24 March 2015 | Athens, Germany  
A FABRIC paper will be presented by ICCS during the ESARS2015. Learn more here: <http://www.fabric-project.eu/index.php/news-and-events/upcoming-events>  
Like · Comment · Unfollow · 14 days ago

**FABRIC presentation @ Medpower IET conference**  
En Brevista  
dissemination expert at ICCS NTUA  
4/11/2014 | Athens, Greece  
Special Panel: Enabling Technologies for wireless charging of electric vehicles  
Find the presentation performed by Yannis Demetris ICCS here: [http://www.fabric-project.eu/index.php/news-and-events/upcoming-events/FABRIC\\_-\\_events/IEVC\\_Workshop\\_description\\_v11.pdf](http://www.fabric-project.eu/index.php/news-and-events/upcoming-events/FABRIC_-_events/IEVC_Workshop_description_v11.pdf)  
Like · Comment · Unfollow · 3 months ago

**Europe meets IEVC workshop@ Florence**  
En Brevista  
dissemination expert at ICCS NTUA  
Friday, May 19 December 2014 (11:00-13:00)  
IEEE - IEVC 2014  
Find the presentation performed by Yannis Demetris ICCS here: [http://www.fabric-project.eu/index.php/news-and-events/upcoming-events/FABRIC\\_-\\_events/IEVC\\_Workshop\\_description\\_v11.pdf](http://www.fabric-project.eu/index.php/news-and-events/upcoming-events/FABRIC_-_events/IEVC_Workshop_description_v11.pdf)  
Like · Comment · Unfollow · 3 months ago

**FABRIC Standardisation Workshop @ IEVC 2014**  
En Brevista  
dissemination expert at ICCS NTUA  
The FABRIC project is organizing a workshop entitled "Wireless Charging Related Standards and needs" in the framework of the IEEE International Electric Vehicle Conference 2014. The  
Like · Comment · Unfollow · 3 months ago

Like · Comment · Unfollow · 14 days ago

Like · Comment · Unfollow · 3 months ago

About | Feedback | Privacy & Terms  
LinkedIn | LinkedIn Corp. © 2015

Join the ERG



Coordinator: [a.amditis@iccs.gr](mailto:a.amditis@iccs.gr)

19.06.2017

FABRIC, Deployment Scenarios Workshop, Strasbourg

# Agenda topics

## ❖ Preliminary results presentation on:

- ❖ Life Cycle Cost analysis
- ❖ Life Cycle assessment
- ❖ SWOT analysis
- ❖ Demand for E-roads forecast
- ❖ Supply chain concerns

## ❖ Discussion on the topics above and most importantly

- ❖ Collection of input/views/concerns from all
- ❖ Networking and further cooperation in the future



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

# Thank you!

Dr. Angelos Amditis  
FABRIC Coordinator  
a.amditis@iccs.gr

