

SEVENTH FRAMEWORK PROGRAMME

THEME: Cooperation, ICT - Information and Communication Technologie
ICT-2011.6.2 ICT systems for energy efficiency, 6.6 Challenge 6: ICT for a low carbon economy

Coordination and Support Actions (Supporting)

Project Acronym: EFCON

Project Full Title: Energy Efficiency with CONtrol center

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List of participants:

Participant no.	Participant organisation name	Organisation short name	Country
1 (Coordinator)	OTIT Ltd. Şti	OTIT	Turkey
2	Marmara University	MU	Turkey
3	Technion – Israel Institute of Technology	TECHNION	Israel
4	Brunel University	BU	United Kingdom
5	INNOVA Consorzio per l'Informatica e la Telematica S.r.l.	INNOVA	Italy
6	Public Foundation for the Development of Industry	IFKA	Hungary
7	KEMA Nederland B.V	KEMA	Netherlands
8	I+DEX Innovation		Spain

Proposal

EFCON aims at:

- Developing a proper algorithm which identify risky patterns of vehicles' swarms, taking into account such factors as movement patterns of vehicles, meteorological conditions, the traffic density, the road conditions;
- On this basis, designing, developing and integrating a V2I warning system;
- Designing and developing an on board device, with an ergonomically optimised man machine interface, that is connected with the Service-Side System;
- Prompting a test site into highways where to perform integration and validation tests on specific risky patterns of vehicles swarms.

The Vehicle Unit (VU), which controls the vehicle-to-infrastructure communication, will be installed in all vehicles chosen as demonstrators. It is situated on the periphery of the network and is acting as end-point receiving and generating information. The VU has an integrated data bus interface. It monitors location of vehicle (via several protocols of positioning system), road conditions, traffic density, and dangerous events on the road. Monitoring information is provided to other vehicles after being routed through and analyzed at the CC (Control Centre). Due to the amount of information provided by such a unit it will have a ergonomically optimised HMI.

