

“Car2Car - Information
protocol of road events,
vehicle-to-vehicle
communication”

INVEST IN SPAIN

“Investment opportunities in the automotive sector in Spain”



GOBIERNO
DE ESPAÑA

MINISTERIO
DE ECONOMÍA
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I. Introduction

Aim:

Design of a communication protocol that can enable the creation of cumulative intelligence between vehicles, as a Web 2.0

Business scope and technologies:

- ✦ Technology based on WLAN net, each vehicle is a router, repeats and amplifies the received signal
- ✦ C2C, or V2V (Car2Car or Vehicle-2-Vehicle) communication: information exchange between 2 near vehicles on the traffic ways
- ✦ Assistance to the driver, stepping up its security:
 - ⇒ Reduction of the number of accidents
 - ⇒ Mitigating unavoidable accidents
- ✦ Clearing a lane for priority vehicles (ambulances, fire brigade)
- ✦ Warning drivers about traffic problems
 - ⇒ Congestion anticipation (braking)
 - ⇒ Route change



II. Current situation of the business in Spain

Business situation in Spain:

- MARTA project (Movilidad y Automoción con Redes de Transportes Avanzadas) financed by CDTI in the ZENIT Program: Development of networks and protocols, vehicle equipment (sensors, communication modules, actuators), human-machine interfaces, equipment for infrastructures, services for the end user, services to increase the efficiency of the road network, integrating vehicle and certification.
- MARTA project have finished during 2011 having established solid R&D capabilities to exploit.

Main companies involved:

- SEAT and FICOSA as OEM and TIER1 supplier, with approach on embedded technology.
- Telefónica, ETRA GMV, with approach on networks and infrastructures
- Other partners: ADTelecom, Agnitio, AT4Wireless, Atipic, IDOM, Moviquity, Opnatel, SGI y TSS.
- PRIs (Public Research Institutes) and Universities.

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III. Evolution forecast, opportunities and strategy

- New technology: possibility to launch new applications and services, free or not, to enter in the market.
- Two clear business opportunities: providing / operating the technology.
- Worldwide business, possibly subsidized by the administration, based on technology ready to use.

IV. Requirements

📌 Legislation:

- ⇒ UE has set an operation frequency (5,9 GHz) and a bandwidth (30MHz) for the V2V system in all member countries.
- ⇒ Range between 5,885 GHz and 5,915GHz to not interfere (without counting with the guard bands).
- ⇒ USA and Japan have similar operation frequencies.

📌 Economic aspects:

- ⇒ Active participation by the cities and urbanizations (equip streets and roads with this technology).
- ⇒ Communication limits between vehicles must be improved.

📌 Product specification:

- ⇒ Already operative.

What is Invest in Spain?

We share mutual
Interests



Taking advantage of this opportunity

INVEST IN SPAIN offers, without charge, an integrated investment support service

I. Study and assessment of opportunities:

- i. We provide reports tailor-made studies and all the relevant information you need to establish yourself in Spain.
- ii. Starting-up: finding the ideal location identifying suitable partners and/or consultants and assessors, offering institutional contacts; lawyers, management services, accountants, employment agencies and executive headhunting services, assessment in permit and licensing procedures.
- iii. Post-investment: specialized assistance and support, facilitating contact with the relevant players, assessing the regulatory and legal environment, with a permanent service of monitoring opportunities and aid, thereby facilitating your integration into the Spanish industrial fabric and its sectorized networks