

PROJECT

## FOTSIS

# European Field Operational Test on Safe, Intelligent and Sustainable Road Operation

**Funding:** European (7th RTD Framework Programme)

**Duration:** Apr 2011 - Mar 2015

**Status:** Complete

**Total project cost:** €14,137,352

**EU contribution:** €8,053,000



**Call for proposal:** FP7-ICT-2009-6

[CORDIS RCN : 98318](#)

### Background & policy context:

There are more cars and trucks on the roads driving more kilometres. As a result we are facing more traffic jams, higher fuel bills and increased CO2 emissions. More than 40 000 people continue to be killed on EU roads each year. These problems cannot be solved by building additional or extended roads.

Intelligent Transport Systems (ITS) can contribute to the solution by making transport safer, more efficient and competitive, more sustainable and more secure. ITS does this by applying the latest information and communication technologies (telephone, satellite, computer, etc.) to transport. Examples in road transport include travel information, navigation and Electronic Stability Control (ESC).

Use of ITS in road transport in Europe is still uneven, however. A patchwork of national, regional and local solutions is slowing down overall deployment and fails to provide seamless service.

The FOTSis project falls under Action Area 4 of the ITS Directive and related Action Plan Integration of Vehicle and Transport Infrastructure. In the past many EC-funded research efforts (i.e. AIDE, PROSPER, PREVENT, ISIPADAS...) have approached ITS cooperative systems from a vehicle perspective.

### Objectives:

FOTSis (European Field Operational Test on Safe, Intelligent and Sustainable Road Operation) is a large-scale field testing of the road infrastructure management systems needed for the operation of seven close-to-market cooperative I2V, V2I & I2I technologies (the FOTSis Services), in order to assess in detail both 1) their effectiveness and 2) their potential for a full-scale deployment in European roads.

Relying on the common European and open ITS architecture guideline proposal (supported by the project COMeSafety), able to incorporate available and future ITS services and systems, FOTSis aims to contribute to the safety, mobility and sustainability challenges faced nowadays by the European road transport system.

The project represents a major step forward to better connect vehicles, infrastructures and traffic management centres, the main focus being placed on the responsibilities of the road operator.

### Methodology:

FOTSis will test the road infrastructure's capability to incorporate the new cooperative systems technology and provide the following services in four European Test-Communities (Spain, Portugal, Germany and Greece) regrouping 9 Test-Sites:

- S1: Emergency Management
- S2: Safety Incident Management
- S3: Intelligent Congestion Control
- S4: Dynamic Route Planning
- S5: Special Vehicle Tracking

- S6: Advanced Enforcement
- S7: Infrastructure Safety Assessment

Using an integral and comprehensive approach, FOTsis will therefore review the road infrastructure and communication networks required to secure a proper connectivity from the traffic control centres (and all the information they already have available, enhanced with the V2I data) with the users/vehicles.

### Parent Programmes:

[FP7-ICT - Information and Communication Technologies](#)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

### Lead Organisation:

#### Ohl Concesiones Sa

**Address:**

Paseo De La Castellana 259 D  
28046 Madrid  
Spain

**EU Contribution:** €937,228

### Partner Organisations:

#### Association Des Societes Francaises D'autoroutes Et D'ouvrages A Peage

**Address:**

3, rue Edmond Valentin  
75007 PARIS  
France

**EU Contribution:** €120,273

#### Marestrada - Operacoes E Manutencaorodoviaria Sa

**Address:**

Avenida Visconde De Valmor 66/4  
1050242 Lisboa  
Portugal

**EU Contribution:** €412,536

#### Gmvis Skysoft Sa

**Address:**

Av. D.joao li Lote 1.17.02, Torre Fernao Magalhaes 7°  
1998025 Lisboa  
Portugal

**Organisation Website:**

<http://www.skysoft.pt>

**EU Contribution:** €288,808

#### Orange Sa

**Address:**

Rue Olivier De Serres 78  
75015 Paris  
France

**EU Contribution:** €225,014

**Ethniko Kentro Erevnas Kai Technologikis Anaptyxis**

**Address:**

Charilaou Thermi Road  
57001 Thermi Thessaloniki  
Greece

**Organisation Website:**

<http://www.certh.gr>

**EU Contribution:** €262,851

**Federation Internationale De L'automobile**

**Address:**

PLACE DE LA CONCORDE 8  
75008 PARIS  
France

**Organisation Website:**

<https://www.fia.com/>

**EU Contribution:** €40,020

**Terna Energiaki Anonimi Viomihaniki Emporiki Tehniki Eteria Ae (Terna Energy Industrial Commercial And Technical Company S.a)**

**Address:**

Messogion Ave 85  
11526 Athens  
Greece

**EU Contribution:** €347,131

**Asm - Centrum Badan I Analiz Rynku Spolka Z Ograniczona Odpowiedzialnoscia**

**Address:**

UL. GRUNWALDZKA 5  
99 301 KUTNO  
Poland

**Organisation Website:**

<http://www.asm-poland.com.pl>

**EU Contribution:** €203,000

**Centro De Innovacion De Infraestructuras Inteligentes**

**Address:**

Avenida De Buendia 11  
19005 Guadalajara  
Spain

**EU Contribution:** €125,601

**Nos Comunicacoes Sa**

**Address:**

RUA ACTOR ANTONIO SILVA 9 CAMPO GRANDE  
1600 404 LISBOA

Portugal

**EU Contribution:** €150,000

**Autopista Eje Aeropuerto Concesionaria Española Sa**

**Address:**

PASEO DE LA CASTELLANA 259 D  
28046 MADRID  
Spain

**EU Contribution:** €71,212

**Aalto Korkeakoulusäätiö Sr**

**Address:**

N/a  
FIN/A00076 Aalto  
Finland

**Organisation Website:**

<http://www.aalto.fi/en/>

**EU Contribution:** €251,058

**Universidad De Murcia**

**Address:**

Avenida Teniente Flomesta S/n - Edificio Convalecencia  
30003 Murcia  
Spain

**EU Contribution:** €204,000

**Indra**

**Address:**

Avenida de Bruselas, 35  
Alcobendas Madrid  
Spain

**Organisation Website:**

<http://www.indra.es>

**EU Contribution:** €155,625

**Geoville Informationssysteme Und Datenverarbeitung Gmbh**

**Address:**

Sparkassenplatz 2  
6020 Innsbruck  
Austria

**EU Contribution:** €324,752

**Planestrada Operacao E Manutencao Rodoviaria Sa**

**Address:**

Avenida Visconde De Valmor 66 - 4°  
1050242 Lisboa  
Portugal

**EU Contribution:** €380,380

**Transver Gmbh****Address:**

Maximilianstrasse  
80538 Munchen  
Germany

**Organisation Website:**

<http://www.transver.de>

**EU Contribution:** €358,774

**European Union Road Federation****Address:**

Place Stéphanie 6/b  
1050 Bruxelles  
Belgium

**Organisation Website:**

<http://www.erf.be>

**EU Contribution:** €163,030

**Ilmatieteen Laitos****Address:**

Erik Palmenin aukio 1  
00560 HELSINKI  
Finland

**Organisation Website:**

<http://www.fmi.fi>

**EU Contribution:** €256,370

**Autovia De Aragon - Tramo 1 - Sa****Address:**

PASEO DE LA CASTELLANA 259D  
28046 MADRID  
Spain

**EU Contribution:** €176,475

**Nea Odos Anonymi Eteria Parahoris (Nea Odos Concessionaire S.a.)****Address:**

Themistocleous 87  
10683 Athens  
Greece

**EU Contribution:** €565,560

**Rotas Do Algarve Litoral Sa****Address:**

RUA JULIETA FERRAO 10 - 6e andar  
1600-131 LISBOA  
Portugal

**EU Contribution:** €32,979

**Sociedad Iberica De Construcciones Electricas Sa****Address:**

Calle Sepulveda  
28108 Alcobendas (Madrid)  
Spain

**Organisation Website:**

<http://www.sice.com>

**EU Contribution:** €457,855

**Grupo Mecanica Del Vuelo Sistemas S.a.****Address:**

CALLE ISAAC NEWTON, PARQUE TECNOLOGICO DE MADRID 11  
28760 TRES CANTOS - MADRID  
Spain

**Organisation Website:**

<http://www.gmv.com>

**EU Contribution:** €168,343

**Sper, Sociedade Portuguesa Para A Construcao E Exploracao Rodoviaria Sa****Address:**

Rua Julieta Ferrao nº 10 - 6º  
1600-131 Lisboa  
Portugal

**EU Contribution:** €35,407

**Autovia Medinaceli-Calatayud Sociedad Concesionaria Del Estado Sa****Address:**

AVENIDA DEL CAMINO DE SANTIAGO 50  
28050 MADRID  
Spain

**EU Contribution:** €132,499

**Universidad Politécnica De Madrid****Address:**

Avda. Ramiro de Maeztu, 3  
28040 MADRID  
Spain

**Organisation Website:**

<http://www.upm.es>

**EU Contribution:** €645,096

**Iridium Concesiones De Infraestructuras S.a.****Address:**

Avda Del Camino De Santiago 50  
28050 Madrid  
Spain

**EU Contribution:** €271,632

## **Air Traffic Control And Business Systems Gmbh**

### **Address:**

Hauptstrasse 30  
88677 Markdorf  
Germany

**EU Contribution:** €289,491

## **Technologies:**

Infrastructure management  
Field testing of the road infrastructure management  
systems

**Development phase:** Demonstration/prototyping/Pilot Production

Documents:

 [FOTSIS presentation \(Final report\)](#)

**STRIA Roadmaps:** Network and traffic management systems, Infrastructure

**Transport mode:** Road transport

**Transport sectors:** Passenger transport, Freight transport

**Transport policies:** Digitalisation

**Geo-spatial type:** Other