The SafeTRIP project

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What is SafeTRIP?

Satellite Applications For Emergency handling, Traffic alerts, Road safety and Incident Prevention

- An integrated project (IP)
  - From user requirements to development, integration, demonstration and evaluation
  - Integration and reuse of emerging technologies developed in other European initiatives

- To improve road safety, mobility and environment protection
  - For passenger vehicles

- Using satellite 2-way satellite communications and positioning
  - Data communication
  - DVB-SH broadcasting
  - GNSS positioning
Project key figures

- Call: FP7-SST-2008-RTD-1
- Project n° SCP8-GA-2009-233976
- Duration: 36 months
- Project Start: 01/10/2009
- Project End: 30/09/2012
- Budget: € 11.250.269
- EC-contribution: € 7.890.199
- 20 partners of 7 countries
- Coordinated by Sanef
SafeTRIP consortium

- **Service operators**
  - Masternaut (fleet management), IMA, MAIF, MACIF (Insurance and assistance), Eurolines (long distance coaches operator)

- **Road operators**
  - Abertis autopistas, Acesa, Sanef

- **Telecommunication providers**
  - Eutelsat, Retevision (Abertis Telecom)

- **Technical partners**
  - DLR, Fraunhofer, Fondazione Ugo Bordoni, Indra Espacio, MBI, Quantum, Masternaut

- **Academia**
  - University of Budapest (BME), University College London (UCL), PIAP Warsaw

- **Project management**
  - Algoé
Some words about the S-Band

• Eutelsat W2A designed to include first European S-band payload
  ▶ launched on April 2009
  ▶ ramp up for commercial services
  ▶ broadcast and unicast (bi-directional) services

• 2 x 30MHz
  ▶ Uplink: 1.98 – 2.01 GHz
  ▶ Downlink: 2.17 – 2.2 GHz

• Exclusive use for Mobile Satellite Services (MSS)
• Pan European authorization granted on May 14th 2009
• 2 way data communication system available from 2011/2012
• Ability to use small omni-directional antennas on the mobile unit
System architecture
SafeTRIP objectives

• To develop and demonstrate an integrated system based on a 2-way satellite communication

• To demonstrate the concept using a set of safety related applications involving 2 terminal manufacturers and 2 transportation modes
  ▶ Passenger cars
  ▶ Bus / coaches

• To evaluate the impact of the SafeTRIP system and services on safety, security and environment
New Services around the Vehicle

1. MEDIA & ENTERTAINMENT
   - Satellite radio/TV
   - Entertainment services

2. NAVIGATION & INFORMATION
   - Map updates
   - Location-based services
   - Road safety alerts
   - Collaborative Road Alerts

3. CAR MANUFACTURERS
   - Software updates
   - Remote vehicle diagnostics

4. FLEET MANAGEMENT
   - Car / truck / trailer / goods tracking
   - Passenger tracking

5. INSURANCE
   - Pay-as-you-drive
   - Stolen vehicle tracking

6. TRANSPORTATION
   - Toll collect / Road charging
   - Traffic management
   - Patrol with eyes

7. PUBLIC SECTOR
   - eCall
   - eCall with Video
   - Intelligent Transport Systems (ITS)
   - Driver alertness service
The Fully Networked Car 2011

Implemented during the project

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Onboard of coaches

SafeTRIP.eu
Strengths of SafeTRIP project

- **Global coverage**
  - Fundamental for safety applications all over Europe
  - Independent of terrestrial network (in case of disaster)

- **Quick and easy deployment**
  - Ensure full coverage as soon as the system is launched
  - Avoid economical problem concerning low populated areas

- **Ecologic oriented**
  - Ability to mix business oriented applications with institutional research
  - Satellite communication is more ecologic than terrestrial repeater

- **Industrial support of broadcast applications (e.g. Satellite Digital Radio)**
  - Increase the popularity of the system
  - Increase the manufacturer’s interest
Distribution of user needs depending on the SafeTRIP platform benefit

SafeTRIP value proposition is at least highly important in 75% of the user needs collected in WP2.1
User needs assessment – public report

- User needs segmentation
  - Partner needs (coaches operator, assistance/insurance company, road operators)
  - Individual needs (vehicle drivers + passengers)
  - Stakeholder needs (individuals, organisations)
  - Needs of organisation and businesses
    - transport companies, MS border crossings

- User needs classification
  - Must have (core)
  - Should have
  - Desirable

- Competing technology and services
  - Review of 19 technologies and services

- Influences
  - Political and macro economic
  - State of the art transport technologies
  - Main EU projects
More information

- Visit our website
  - http://www.safetrip.eu

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