SISCOGA
Sistemas COoperativos Galicia
Cooperative Systems National FOT

CTAG
Centro Tecnológico de Automoción de Galicia
Non-Profit R&D automotive technological center located in Vigo (Spain)
Began operations in 2002
Around 250 employees
Since 2005, Electronics & ITS division
80 people
70% customer related projects – 30% internal research projects
National & EU projects

1. Introduction
2. Previous Developments - C2ECom
3. SISCOGA
4. Conclusions

A little bit of history…

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A little bit of history… (II): Fields of competence

Active Safety
HMI

Green Drive

H&W & SW

Communic. & Mobility

Testing & Validation

Comfort & Interior

Infrastruct.

Previous Developments

C2ECom

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Previous Developments – C2ECom – Basic Data

- Objectives:
  - Develop safety & convenience applications based on C2X technologies
  - Implementation in research vehicle
  - Validation
- Partners:
  - CTAG
  - University of Vigo
- Budget:
  - 216 K€, 140 K€ funded by the regional government

Previous Developments – C2ECom – Developments (I)

- Accident / Traffic jam information
- Floating Car Data (FCD)
- Variable speed limit

Previous Developments – C2ECom – Developments (II)

- Road Works information
- Merge Assisted
- Alternative route information

Previous Developments – C2ECom – Outcomes

- A first set of applications has been developed
  - 1st approach: 802.11b protocol
  - Current activities: 802.11p usage
- System implemented in two research vehicles and one RSU
- Project end: September 2010
  - Experience in the research of systems based on C2X Technologies
  - Development of a set of applications ready to be tested in a larger scale

SISCOGA

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SISCOGA – Basic Data

- C2ECom follow-up SISCOGA
- Objectives:
  - Preparation of an intelligent corridor for C2X FOT purposes
  - Pilot testing of the corridor with C2ECom functions
  - Definition and implementation of evaluation methodologies applied to cooperative systems
  - Interoperability assessment between different C2X technology providers and vehicles
  - Final FOT with 20 vehicles / users and assessment of results
- Project Partners:
  - CTAG
  - DGT (Spanish Road Ministry)
- Budget:
  - 345 K€
SISCOGA – Methodology

- Follow-up of FESTA methodology

The FOT Chain

The intelligent corridor includes around 60 km of motorway roads, controlled by the Traffic Management Center of Galicia (DGT)
- It includes city exits, sharp bends and tunnel sections
- Possibility to include some traffic signal controlled intersections
- Cross Border (Portugal Autoestradas) possibilities
- RSU equipment: under decision

SISCOGA – Intelligent Corridor (I)

SISCOGA – Intelligent Corridor (II)

SISCOGA – Intelligent Corridor (III)

SISCOGA – Intelligent Corridor (IV)
SISCOGA – Current Status & Next Steps

- Ongoing work
  - Development of methodology (Functions & UCs already known)
  - Final decision on equipment & vehicle architecture
  - HMI definition
  - Final Driver & Vehicle selection
  - Adaptation of functions

- Next Steps
  - Acquisition & Implementation of RSUs
  - Hypothesis & Data Selection definition
  - Preparation of the intelligent corridor
  - Preparation of the vehicles
  - Pilot Testing
  - FOT deployment

Conclusions

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- C2ECom & SISCOGA → approach of CTAG to the development & testing of C2X-based systems
- 60 km of intelligent corridor available for further tests – FOTs
- Development & Implementation of a FESTA-based methodology for a C2X-based FOT
- Testing & analysis of the whole data-chain
- Results expected by last quarter 2011 → be patient!

muchas gracias

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