



**11<sup>th</sup> ITS EUROPEAN CONGRESS**  
**DELIVERING FUTURE CITIES NOW**

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## Extract from the speech

# **Connected vehicle applications for safe and elastic mobility**

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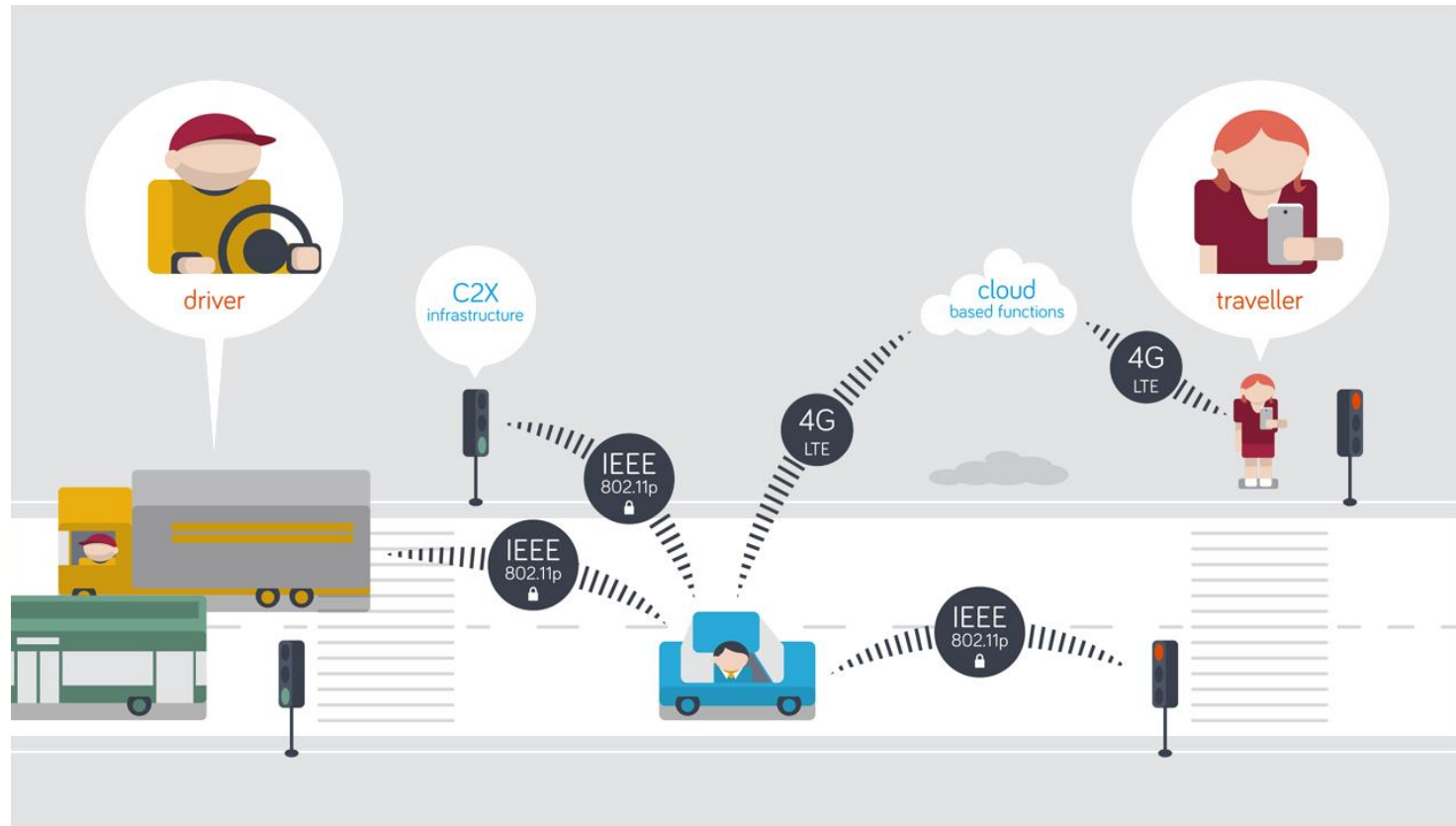


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# TEAM tomorrow elastic mobility

**Collaboration** integrates all people needs



# TEAM project objectives



## Create

basic technologies

- Advance vehicle-2-x systems with LTE technologies
- Develop an automotive cloud-computing platform

## Integrate

infrastructure-  
centric technologies  
and algorithms

- Develop proactive infrastructure-centric algorithms
- Enable behavioural change taking into account real-time needs and constraints

## Demonstrate

distributed  
technologies and  
algorithms

- Develop proactive user-, community- and group-centric algorithms
- Realise massively distributed collaborative control and optimization concepts






## Evaluate

the European scope

- Conduct pan-European Euro-EcoChallenge to demonstrate and evaluate TEAM results

# TEAM innovation

Build the elastic mobility management system

	Communication	Converged communication channels
	Infrastructure	Distributed sensing and “best effort” balancing of needs according to local policies
	Data	Consolidated sensor input available in real-time
	Applications	Novel collaborative applications interconnected through automotive cloud
	Traveller/driver	Active participation and collaboration

# TEAM collaborative applications

## infrastructure based

- (1) Pro-active urban/inter-urban monitoring and ad-hoc control
- (2) Co-modal route planning
- (3) Co-modal coaching with support from virtual/avatar users
- (4) smart intersection for intelligent priorities
- (5) Public transport optimization
- (6) Dynamic corridors

# TEAM collaborative applications

## vehicle based

- (1) Collaborative adaptive cruise control
- (2) Eco-friendly parking
- (3) Collaborative driving and merging
- (4) Green & safe driving: serious game and community building
- (5) Eco-friendly navigation

# TEAM Test Sites

## **Germany** – Berlin

Co-modality on public transport system and urban traffic management

## **Italy** – Turin and Trento Province

TEAM service continuity for drivers & travellers

## **Sweden** – Gothenburg

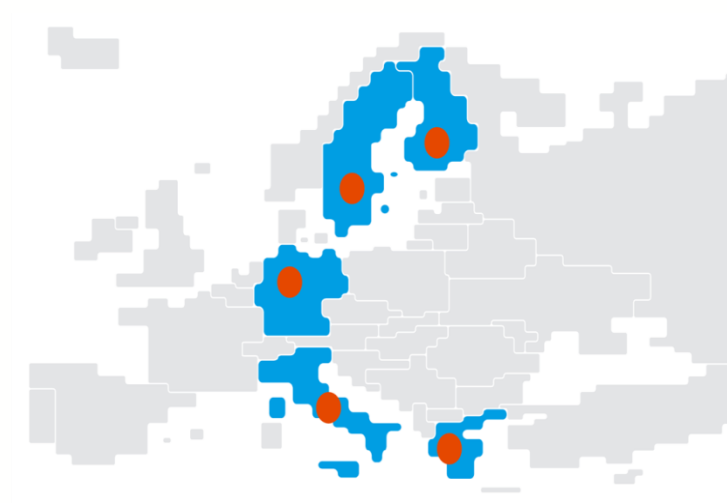
Interurban applications and vehicle to vehicle communication

## **Greece** – Athens and Trikala

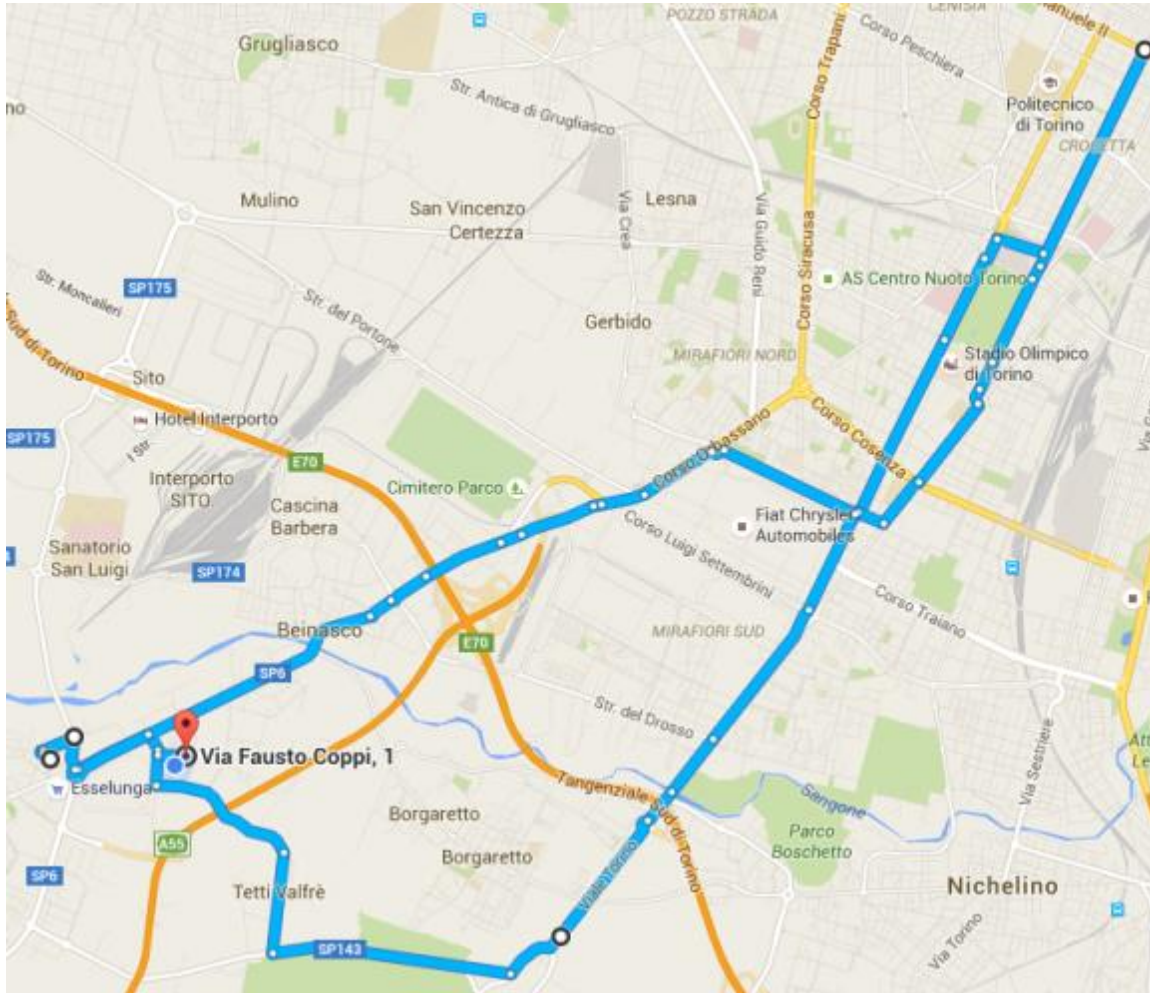
All infrastructure based applications

## **Finland** – Tampere and Helsinki

Vehicle & infrastructure based applications



# TEAM Euro-Eco Challenge: Turin



## CMC



Collaborative urban monitoring and ad-hoc control

## CONAV



Collaborative eco-friendly navigation

## CCA



Co-modal coaching with support from virtual/avatar users

## EFP



Collaborative eco-friendly parking

## SG&CB



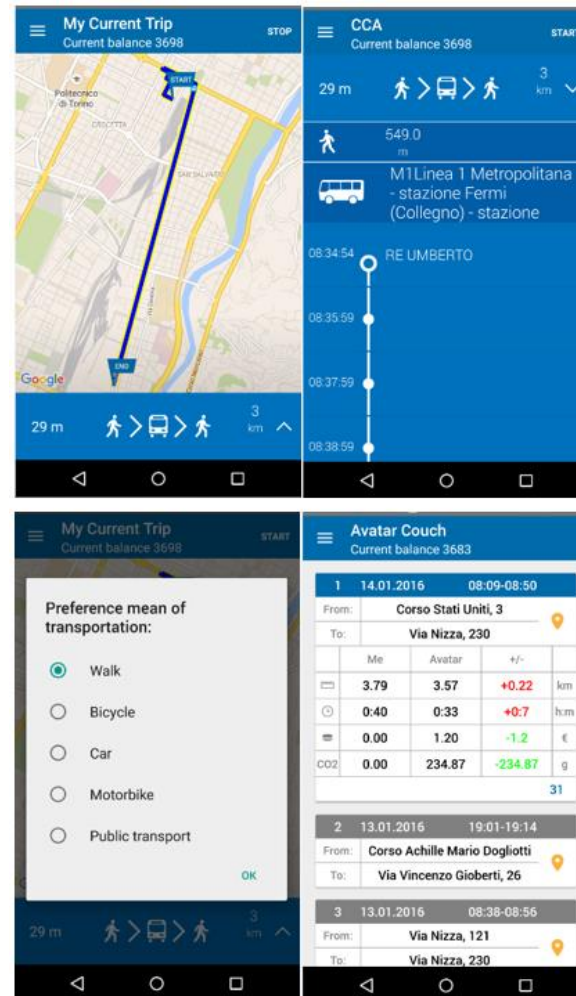
Serious game and community building

## CDM



Collaborative driving and merging

# 1. Plan a trip from starting point



Pre-trip

Comodal  
coaching

## 2. Navigate to destination



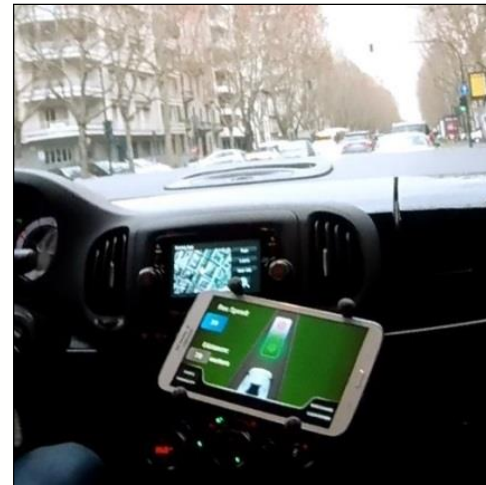
Start

Navigation



drive

## 3. Pass green light



Monitoring and Control

## 4. Safely tackle roundabouts



roundabout advisor

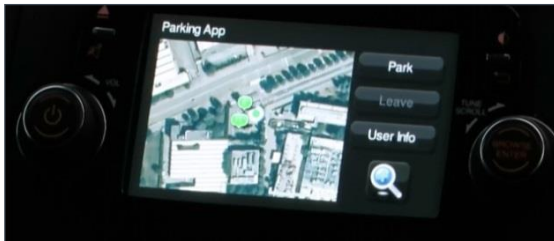
## 5. Check driving behaviour



drive

Driving Behaviour Game

## 6. Park at destination



Eco Friendly Parking



Stop

## 7. Check collaborative competition



Snake  
and  
Ladders  
game

# Acknowledgements



Intel Mobile Communications



PROVINCIA AUTONOMA  
DI TRENTO