Collaborative Driving as TEAMs

IT for Automotive – BITKOM Trendkongress

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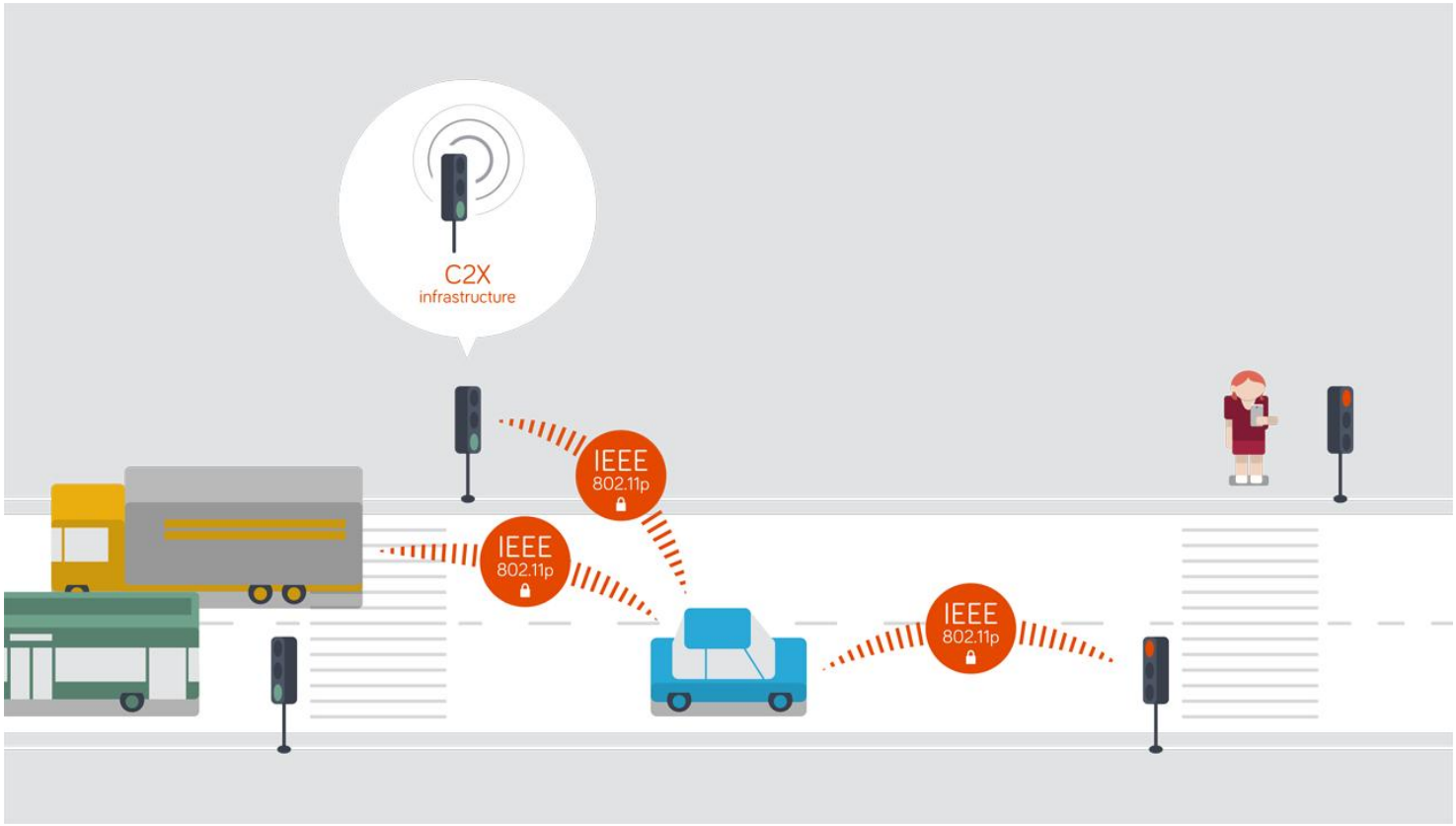
This project is co-funded
by the European Union

Motivation

Tomorrow's Elastic Adaptive Mobility

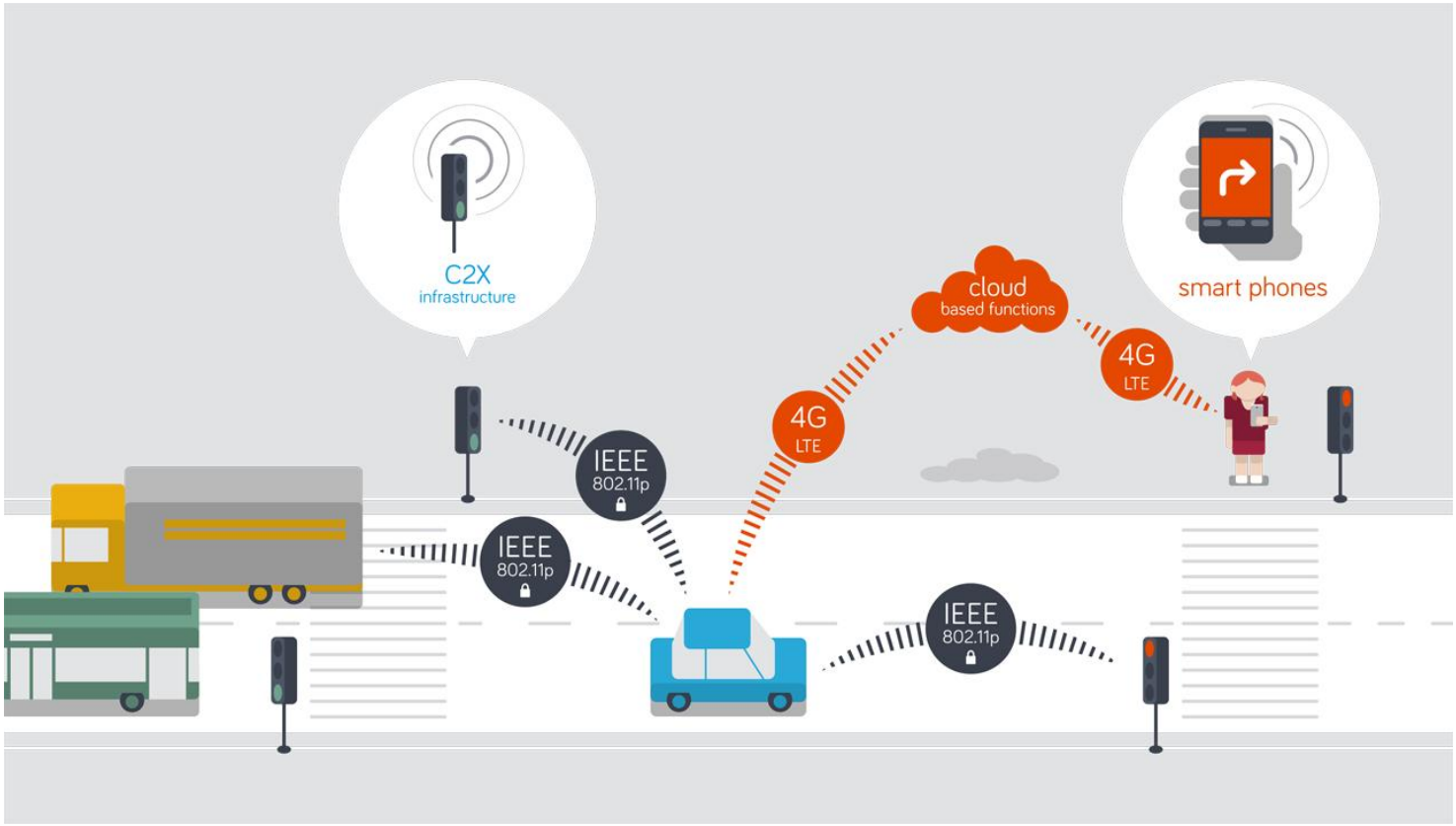
Vehicles and infrastructure can communicate already...



Motivation

Tomorrow's Elastic Adaptive Mobility

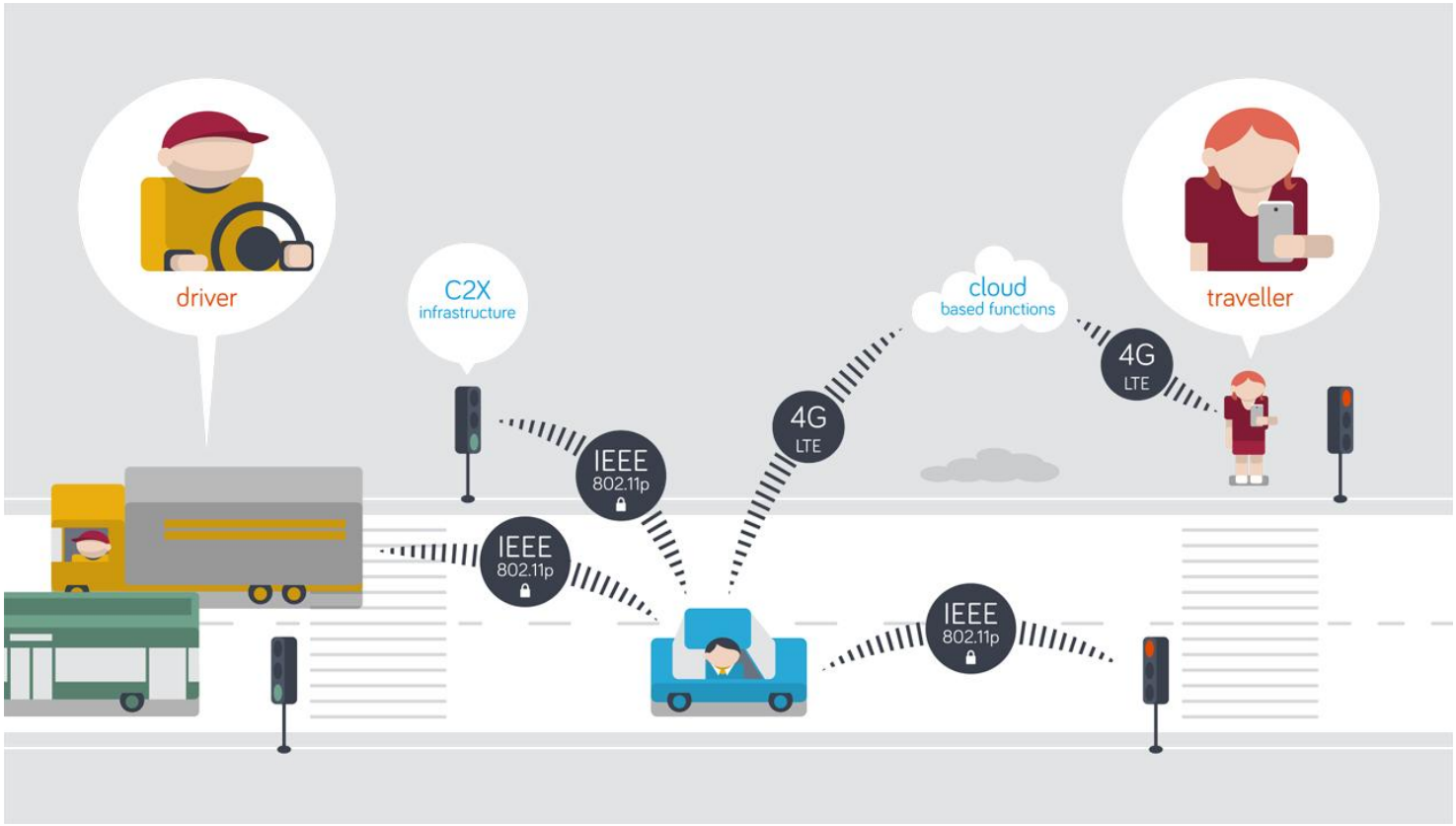
Smart phones and cloud services will be connected, too.



Motivation

Tomorrow's Elastic Adaptive Mobility

Next: Collaboration integrates and balances all stakeholder needs.



Vision

Tomorrow's Elastic Adaptive Mobility

Achieving always optimal mobility conditions.

Targeting

- Users: Encouraging collaborative behaviour of travellers and drivers.
- Infrastructure: Making infrastructures adapt pro-actively and in real-time based on user needs.
- Communication technologies: Combining automotive communication systems with cloud technologies.

Approach

Tomorrow's Elastic Adaptive Mobility

Four paradigms define the research concept.

(1) Elastic mobility
means a shift from a reactive traffic management to an permanent adaptive and collaborative traffic management.

(2) Window of interaction
refers to the real time needs of human decision making process between 5 seconds and 5 minutes.

(3) Participation
considers the needs and behaviours of road users in the technical systems of intelligent transport solutions.

(4) Collaboration
extends the cooperative concept of vehicle-2-x systems by integrating the user into a highly interactive and participatory network.

Innovations

Tomorrow's Elastic Adaptive Mobility

Building 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

Infrastructure stakeholders' involvement

Tomorrow's Elastic Adaptive Mobility

Including major municipalities from the beginning.

Germany – Berlin

Co-modality test in the large scale public transport system and urban traffic management applications

Italy – Turin and Trento province

Verification of the TEAM service continuity for the travellers and drivers community

Sweden – Gothenburg

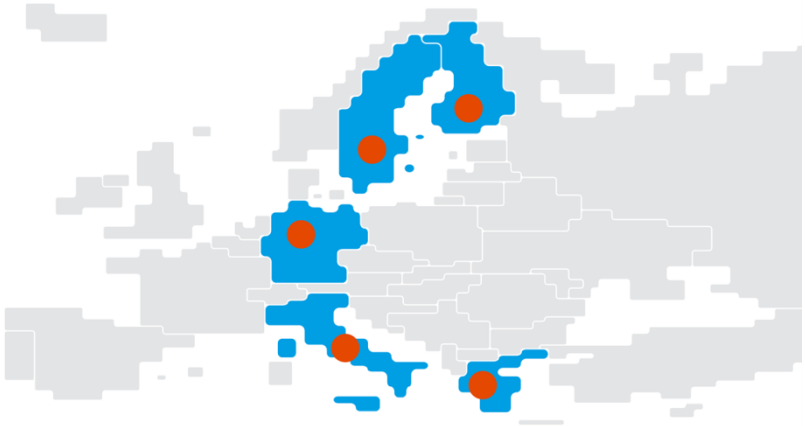
Trials of interurban applications and vehicle to vehicle communication

Greece – Athens and Trikala

Test and demonstration of all FLEX applications

Finland – Tampere and Helsinki

Integration of DIALOGUE applications into real world infrastructure data



Consortium

Tomorrow's Elastic Adaptive Mobility

Automotive

BMW GROUP Research and Technology

CRF CENTRO RICERCHE FIAT

VOLVO

ICT

COSMOTE our world is you

DELPHI

intel

here

intel Intel Mobile Communications

TELECOM ITALIA

RE:Lab

NXP

NEC

Infra-structure

TORINO Tecnologie Telematiche Trasporti Traffico

infotrip

RAMBØLL

swarco SWARCO MIZAR S.p.A.

e-trikala

swarco SWARCO TRAFFIC SYSTEMS GMBH

Research

Fraunhofer FOKUS

CREATE-NET

AIT AUSTRIAN INSTITUTE OF TECHNOLOGY

berlin

ICCS

[disi: arti:] Daimler Center for Automotive Information Technology Innovations

Fraunhofer IAO

ellos

VTT

NATIONAL UNIVERSITY OF IRELAND MAYNOOTH

Other

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Team facts

Tomorrow's Elastic Adaptive Mobility

Duration: 48 months
November 2012 – October 2016

Total budget: 17.1 m€

EU funding: 11.1 m€

Coordinator: Fraunhofer FOKUS, Dr. Ilja Radusch

Consortium: 27 partners
7 support partners

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