Connected and Automated Driving

Contribution of the European Commission

Nino Zambara
Unit H2: Smart Mobility and Living
DG Communication Networks, Content and Technology
European Commission

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- Policy initiatives

  - Transport

  - Research

  - Industry

  - Digital

- Conclusion and outlook

Connected & Automated Driving, CAD

Why European Commission interest:

- Contributing to different policy objectives:
  - Safety
  - Sustainability
  - Efficiency
  - Innovation and industry development
- Clear cross-border dimension
- Clear global markets dimension

European Commission

Digital Single Market

Climate Action and Energy

Boosting Jobs, Growth and Investment

Digital

Research

Transport

Industry

Roundtable on CAD

R & I: STRIA / Horizon 2020

C-ITS Platform Phase II

GEAR 2030 WG CAD

Common objective:
Accelerated deployment of Connected and Automated Driving

Member States

Stakeholders

Public co-funding

- Common responsibility
- Shared leadership

Private investments

The C-ITS Deployment Platform

- Set up end 2014

- Platform including national authorities, relevant C-ITS stakeholders and the Commission

- Provide policy recommendations for the development of a roadmap and a deployment strategy for C-ITS in the EU

- Identify potential solutions to some cross-cutting issues

The C-ITS Platform - Final report

- List of Day 1 services
  - societal benefits
- List of Day 1,5 services
  - mature but no specifications / standards available yet
- Security and certification
  - common C-ITS trust model and certificate
  - based on a Public Key Infrastructure (PKI)
- Communication
  - ETSI ITS-G5 or cellular systems alone cannot provide full range of necessary services for C-ITS ➜ hybrid communication needed

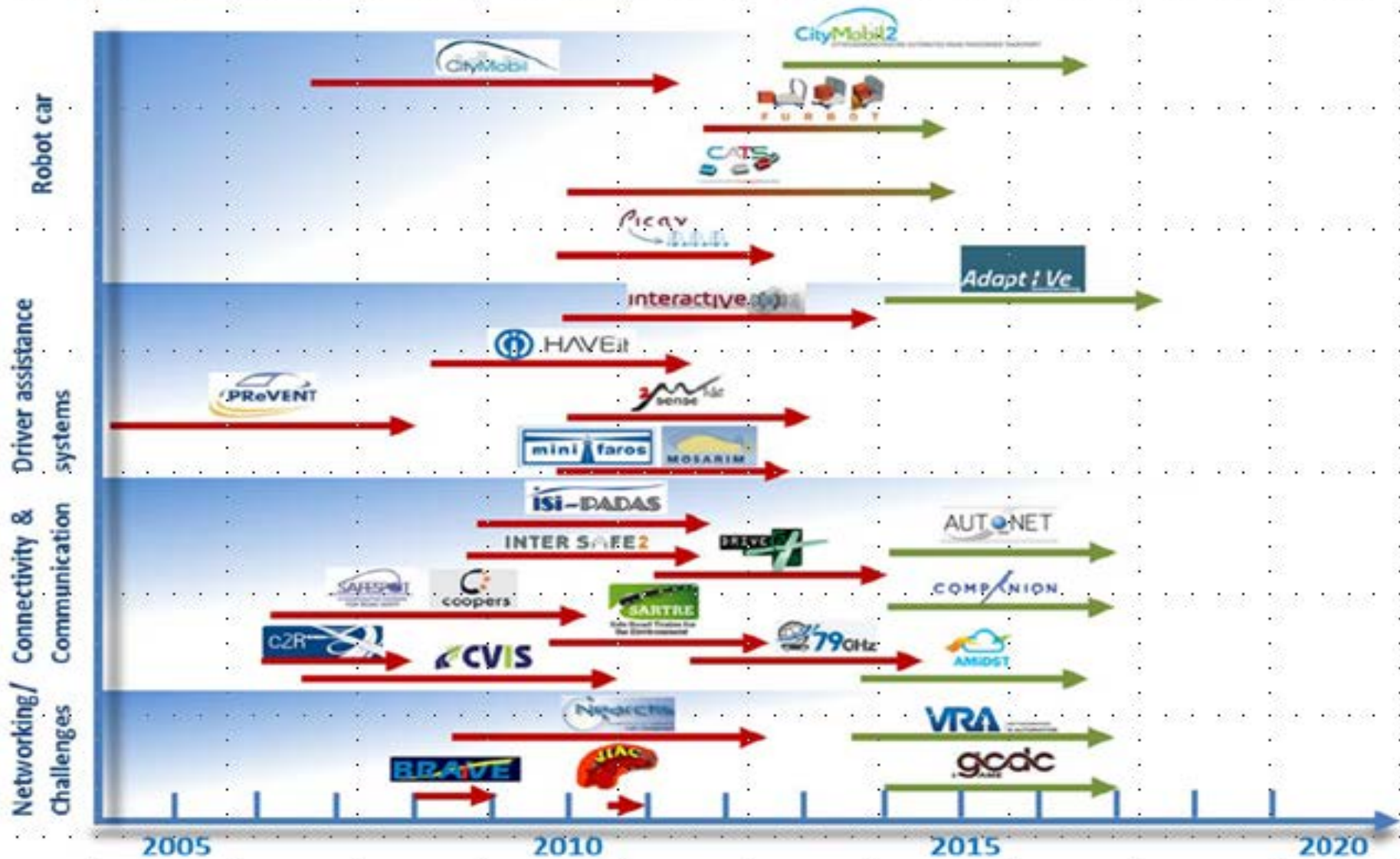https://ec.europa.eu/transport/sites/transport/files/themes/its/doc/c-its-platform-final-report-january-2016.pdf

Continuation of the work on C-ITS

- Master Plan for the Deployment of C-ITS, based on recommendations of platform (2016)

- C-ITS Platform to accompany deployment process.
  Focus on links between connectivity and automation, in particular in relation to infrastructure and road safety

- Funding of deployment projects under CEF

Connected and automated driving

2004   First co-operative applications: "Prevent" and "Cover"

2006   3 large integrated projects developping building blocks for cooperative systems "Safespot", "CVIS" and "COOPERS"

2008   Automated driving integrated project: HAVE-IT

- More than 30 projects
- Funding of more than 350 M€
- Continued support through funding under H2020

Automated Road Transport: topics and budget – *Total EU contribution: EUR 114 Mio*

Topic	Title	Action type	Stages	Budget (EUR Mio)	
				2016	2017
ART-02	Automation pilots for passenger cars	IA	2	48	
ART-04	Safety and end-user acceptance aspects of road automation in the transition period	RIA	2		
ART-05	Road infrastructure to support the transition to automation and the coexistence of conventional and automated vehicles on the same network	RIA	2	13	
ART-06	Coordination of activities in support of road automation	CSA	1	3	
ART-01	ICT infrastructure to enable the transition towards road transport automation	IA	2		
ART-03	Multi-Brand platooning in real traffic conditions	IA	2		50
ART-07	Full-scale demonstration of urban road transport automation	IA	2		

CSA = Coordination and Support Action
IA = Innovation Action; **RIA** = Research and Innovation Action

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Strategic Transport R&I Agenda

Energy Union Integrated Research, Innovation and Competitiveness Strategy (EURICS)

Three main elements:

- Strategic Energy Technology Plan (SET-Plan)
- Strategic Transport R&I Agenda (STRIA)
- Technology and Innovation Leadership (TILI)

Objectives:

Defining research agendas for different areas with experts and stakeholders

High Level Group on Automotive Industry 'GEAR 2030'

- Competitiveness of EU automotive industry
- Focus on three areas of work:
  - The adaptation of the value chain to new global challenges
  - The automated and connected vehicles
  - Trade, international harmonisation and global competitiveness

High Level Group on Automotive Industry 'GEAR 2030'

One working group on CAD with 2 project teams:

- o Regulatory aspects
- o Financing
- o (Later on: projet team on liability foreseen)

Digital Single Market

- **Improving access to digital goods and services**

  Requires better access to online goods and services, both for people and for businesses.

- **An environment where digital networks and services can prosper**

  Creating conditions for advanced infrastructures, proper regulatory conditions for investment in digital networks, and level playing field between market players.

- **Digital as a driver for growth**

  Maximise the growth potential of the European Digital Economy and of its society, so that every European can enjoy its full benefit

Roundtable on Connected & Automated Driving

- Initiated by Commissioner Oettinger, responsible for Digital Economy and Digital Society

- Cross-sectorial dialogue between automotive and telecommunication / IT industry to

- Join forces on fast and coordinated deployment of future-proof communication systems and develop a corresponding digital regulatory and policy framework

Objectives

- To strengthen Europe's leading position in connected and automated transport;

- To accelerate roll-out of increasing levels of automation on Europe's roads by
  - performing a pan-European, large-scale project on connected and automated driving that will pave the way for wider deployment
  - aligning the roadmaps across the sectors

Round Table of 30 September 2016

- Presentation of European telecom and automotive Alliance for the pre-deployment project

- Up to 2017Q1: detailed project description

- Further alignment of roadmaps addressed

- Early 2017: start of the project

Conclusion and outlook

- Step up of EC research and policy efforts

- Need for policy / regulatory framework for CAD, e.g. via:

  - Building the Data Economy (formerly: free flow of data initiative)

  - 5G Action Plan + standardisation

Thank you for your attention