CAD Research funding: a driver for tech competitiveness

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Dear Reader

One of the goals of CARTRE and SCOUT projects is to inform policy makers on the developments of Connected and Automated Driving – CAD in Europe.

The “Driving Future Platform” workshop on 7th March 2018 hosted by Ismail Ertug (MEP) in the European Parliament was the perfect occasion to raise awareness about the CAD activities and technologies.

The presentations and the following discussions focused on “Research Funding: Key to Autonomous Driving?” More than 120 people participated including representatives of the EU Parliament and EU Commission and other relevant stakeholders.
Clara de la Torre, Director for Transport, DG Research & Innovation in the EC highlighted the importance of developing safer and more secure applications and technologies for the EU citizens.

Investing more in research & innovation, both at National and European level, and create a fair policy and regulatory framework is essential especially when it comes to certification, data management and privacy: this is the challenge of defining in the best way the next Framework programme for R&I.

Eckhard Steiger (Bosch), Armin Gräter (ERTRAC), and Aria Etemad (EUCAR-VW) presented the latest development, achievements and future challenges of CAD.

I had the possibility to present the preliminary results of the CARTRE and SCOUT projects: the CAD common roadmaps of the automotive, telecommunication and digital sectors, the thematic groups and the international CAD activities.

The workshop was a good showcase for our SCOUT and CARTRE projects; if you missed that, do not worry we plan a second event in the Parliament presenting the projects conclusions and all interested stakeholders will be invited.

Alessandro Coda
Project name: “Coordination of Automated Road Transport Deployment for Europe” - CARTRE

Project type: CSA

Call: H2020 ART-06-2016, Coordination of activities in support of road automation

Starting date: 01.10.2016

Project duration: 24 months

Total budget: 3M€

Coordinator: ERTICO – ITS Europe

Partners: 36 partners

Project objectives:

- Establish European leadership through public-private collaboration for development and deployment of Automated Road Transport (ART)
- Support international cooperation activities in the area of road automation at global level, in particular with the US and Japan
- Support Strategic alignment of national action plans for automated driving
- Ensure that stakeholders are well informed of past, current and future ART activities through a comprehensive knowledge base on project result
- Actively support ART pilots and test beds
- Report on progress of ART projects on enablers and thematic areas
- Facilitate exchange of data, experience and knowledge for comparing and deploying results from pilots
- Foster a common evaluation framework across ART projects
- Describe possible deployment alternatives and evaluate their impacts
- Reach out to stakeholders, decision makers and wider public
- Establish annual international conferences, and workshops in Europe
Project name: “Safe and Connected Automation in Road Transport” – SCOUT

Project type: CSA

Call: H2020 MG-3.6b-2015, Safe and connected automation in road transport

Starting date: 01.07.2016

Project duration: 24 months

Total budget: 1M€

Coordinator: VDI/VDE Innovation + Technik GmbH

Partners: 12 partners

Project objectives:

Capture expectations and concerns regarding connected and automated driving (C&AD) from users, technology, infrastructure and service providers and public authorities

Explore feasible use cases for C&AD in accordance with the EU strategies for transport and digital markets, societal goals and challenges

Analyse gaps and risks for the take-up of C&AD from the domains of automotive technology, communication infrastructure and reliability, legal frameworks, standardisation, testing, safety, security and privacy

Identify sustainable business models for C&AD, also considering telecommunication, data driven services and novel mobility concepts

Create common cross-sectorial roadmaps and advise policies and regulatory frameworks with support of a stakeholders network

Communicate and discuss results with the general public

Monitor international trends to detect opportunities & threats abroad

Tie-in the results of European funded R&D projects and activities
On 8th March 2018, CARTRE organised a joint workshop together with the ERTRAC Working Group on “Connectivity and Automated Driving”.

The workshop was divided into main sessions: the morning session aimed at finalizing the CAD chapter of the new ERTRAC Strategic Research Agenda, which is the key document of the platform to advise the European Commission on the 9th Framework Programme for Research while the afternoon session was dedicated to CARTRE Project and the discussion focused on future research and innovation needs.

In the afternoon session participants contributed in deep discussions in eight different break-out sessions covering the selected topic areas, below, identifying the five priorities from a short-, medium- and long-term perspective.
1. Deployment of automated vehicles in mixed traffic for improved safety and efficient road transport.
2. Fully automated vehicles for urban use.
3. Societal benefits and user acceptance.
4. Fleet and traffic management of highly and fully automated vehicles.

5. Ensuring Safe, Secure and Resilient CAD.
6. Policies and regulation support.
7. Connectivity and Automation technologies.
8. New services for people and goods enabled by Connectivity and Automation.

The workshop was hosted at the Volvo Belgium office at Avenue du Hunderenveld in Brussels.

About 80 participants from 17 different countries joined the workshop which started by a presentation of the draft ERTRACSRA and in particular its chapter titled “Connectivity and Automation - an enabler for improved mobility”. Feedback from the participants was collected on all the sub-chapters, and was then used by ERTRAC to update the text into a final version, which will be presented at the upcoming TRA Transport Research Arena Conference in Vienna, on 16-19 April.
SCOUT project organized an expert workshop in Brussels to identify main actions for an accelerated deployment of automated and connected driving in 2030+.

Over 40 experts participated in the workshop “Building a comprehensive European roadmap for level 4/5 connected and automated driving” organized by the SCOUT project, which was held in Brussels on March 7th 2018. Besides dedicated experts, members of the consortium of SCOUT (and its sister-project, CARTRE), representatives of the involved European Technology Platforms such as EPoSS and ERTRAC, as well as officers of DG Connect and other relevant directorates of the European Commission were invited to join the workshop.

The main goal of the workshop was to highlight the hurdles regarding level 4/5 connected and automated driving in different layers, namely technical, societal, legal, economic and human factors and to develop action items, on the timeline, for an accelerated deployment of connected and automated driving in 2030+.

The project coordinators, Gereon Meyer and Carolin Zachäus, from VDI/VDE-IT, welcomed the participants and gave a brief overview of the objectives and main activities of the project, with a focus on the roadmap development process and its relation to other roadmaps, entities and projects.

The project partners introduced the already accomplished results along the roadmap development process within the project. Leandro D’Orazio (CRF) and Roberto Baldessary (NEC), referred to the analysis of user expectations and requirements, as starting point to co-create a vision of CAD in Europe in 2030+. According to the results of this analysis, level 4/5 automation would be the most preferred scenario from a users’ perspective. Devid Will (ika) and Steven Von Bargen (NXP) presented key aspects of the state of the art assessment, based on the 5-layer model developed by Prof. Eckstein (societal,
legal, economics, human factors and technical), detailing technical and legal aspects of CAD. Finally, Heiko Hahnenwald (LBF) referred to the methodological approach used for the business model evaluation of CAD. A business model structure has been defined, including the value proposition, the stakeholders or value creation partners and the monetization aspects of each business model.

External experts introduced the challenges and opportunities of the 5 layer mentioned above: Jochen Langheim (ST Microelectronics), Benjamin von Bodungen (German Graduate School of Management & Law), Suzanne Hoadley (Polis) and Stella Nikolaou (CERTH) presented the technical, legal, societal and human factors layers, respectively.

During the interactive session, the participants split up in five groups related to the 5 layers and identified the existing gaps (hurdles), followed by the development of recommendations and actions to solve those gaps on a time line and finally highlighted the links of the proposed actions to other layers. Each group was moderated by one expert in the field and supported by the SCOUT partners.

All findings were summarized by the moderators, highlighting specific actions on the time to overcome hurdles and turn the vision for CAD in 2030+ into reality, and pointing out links between the different layers of CAD, as these may offer opportunities for acceleration.

In conclusion the effective deployment of level 4/5 CAD is a very complex task, which requires a comprehensive and coordinated approach of experts in different fields (technical, legal, societal, economic and human factors). The success depends highly on the cooperation of these different fields.

The roadmap will be presented for final validation in an interactive workshop to be held in Vienna on April 20th 2018 2-4pm, as part of the “Interactive Symposium on Research & Innovation for Connected and Automated Driving”.
Public Consultations on CARTRE Thematic Areas

With the aim to progress on the strategic development of connected automated driving, the CARTRE initiative has opened a series of public consultations on the different CARTRE thematic areas. The results of the consultations will be compiled in the position papers of the thematic areas which will be released during the CAD Symposium in April and will be made available on the Connected Automated Driving website.

Experts, stakeholders and the general public are invited to contribute on the different CARTRE thematic areas available here:

https://connectedautomateddriving.eu/mediaroom/cartre-public-consultation-cad-thematic-areas/

Call for papers: Smart Systems for Clean, Safe and Shared Road Vehicles

With the aim to detect novel trends in automotive electronics and communication systems and to discuss their implications, the International Forum on Advanced Microsystems for Automotive Applications (AMAA) is currently inviting leading industrial engineers and academic scholars from all around the world to submit their proposal for papers by March-May 2018.


CAD Symposium, Wien, 19 – 20 April 2018

With the support of the European Commission and the ERTRAC European Technology Platform, the CARTRE and SCOUT initiatives are organising an Interactive Symposium on Research & Innovation for Connected and Automated Driving in Europe.

The Symposium will be held in conjunction with the TRA Conference in Vienna and will start on Thursday 19th April until Friday 20th April as a follow-up of the European Conference on Connected and Automated Driving organised last year.

REGISTER

https://www.eventbrite.com/e/interactive-symposium-on-research-innovation-for-connected-and-automated-driving-in-europe-tickets-43019024059
News and Events

Webit.Mobility Summit, Sofia, 25-27 June 2018

Under the Bulgarian Presidency, an event dedicated to transport and technology, organized jointly with the New Mobility Lab. Topics related to autonomous driving, AI in Mobility, space is the next frontier.

The Mobility Summit gathers top level experts from Europe and around the world and aims to address all the changes the transport systems are going through in today’s digital world.

Topics:
- Future of Mobility
- Contemporary Travel Experience
- Connected Vehicles
- Self-driving Vehicles
- Sustainable Transport
- Transforming Travel & Transportation.

Event Website

#EUCAD2018 campaign launched

As part of the organisation of the Interactive Symposium on Research & Innovation for Connected and Automated Driving in Europe taking place in Vienna from 19-20 April 2018, the Connected Automated Driving initiative together with the European Commission launched the digital campaign #EUCAD2018.

Interested in the development of automated road transport technologies?
Join our stakeholder community:
www.connectedautomateddriving.eu

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