

News*letter*

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Editorial

Dear Readers,

I'm happy to present the second newsletter of the Vehicle and Road Automation (VRA) support action. The project successfully completed its first period of activity, continuing to raise interest among European and international stakeholders as interface between different research and stakeholder's communities.

More than 30 Associated Partners (research centres, public authorities, car manufactures and cities) expressed their willing to participate to the VRA activities. VRA has created bridges with several on-going European projects (such as Companion, iGame, Autonet 2030, CityMobil2) in order to foster cooperation between the EC funded projects, national and international activities on the topic of vehicle and road automation.

In the past months several initiatives have been organised to support this collaboration at European level. With respect to the iMobility Forum, meetings in Geneva (December 2014) and Bruxelles (April 2015) have been held to discuss needs and actions related to road automation on several topics such as connectivity, legal issues, digital infrastructure, standardisation and certification. I invite you to have a look at the short report provided in this newsletter and on the VRA website library (<http://vra-net.eu/library/>) for more details!

VRA was very active also at international level, supporting the trilateral EU-US-Japan Automation in Road Transport Working Group; the last meeting in La Rochelle, in conjunction with the CityMobil2 workshop on socio-economic impact of road transport automation, gave the opportunity to the participants to share information on the different regional activities. Common initiatives were identified in several cooperation areas such as evaluation of benefits, roadworthiness testing and digital Infrastructure.

Looking forward, VRA will actively participate in the 22nd ITS World Congress presenting several Special Interest Sessions on Automation. To receive all the updates you can subscribe to the VRA mailing list on the VRA website homepage: <http://vra-net.eu/>

In this issue of the Newsletter, a short description of the VRA achievements of the past months will be presented followed by an overview of the international activities and of the current activities several on-going projects on Automation



Enjoy your reading!

Myriam Coulon-Cantuer
European Commission –
DG CONNECT – UNIT H5
VRA Project Officer



This project has received funding from the European Union's Seventh Framework Programme.

VRA Achievements

VRA, Support Action for Vehicle and Road Automation, successfully organised the first Periodic Review at the beginning of November 2015 after 15 months of activity.

During the first period of activity, a total of 26 networking, concertation and coordination meetings have been organised (18 European meeting and 8 international ones) actively contributing to the exchange of information with international partners, in particular USA and Japan.



VRA Website Library
Deliverable

The public deliverables released during this first period are available in the [VRA Website Library](#). They include a detailed report on the networking activities and deployment needs focusing on deployment paths for Vehicle and Road Automation, regulatory needs and finally standardisation and certification needs and recommendations.

VRA Networking Activities

During the **VRA – Automation Working Group Workshop in Lausanne (EPFL)** (December 2014), organised with the support of the VRA project, the main points discussed were:

- The harmonization and complementarity of inputs from sub-working groups and contribution from European Projects
- The actions needed to support the international cooperation in preparation of the EU-US-Japan Working Group on Automation in Road Transport
- The current work on regulatory issues and the next steps
- The activities planned in 2015



VRA – iMF
Automation WG
Lausanne, Dec. 2014

More details on this event are available on the [VRA Website Event](#). A very interesting overview of the recommendation addressed to the European Commission to support the preparation of the call for proposal 2016-17 has been presented by Joakim Svensson. The sub-working Group Leaders of the Connectivity, Roadworthiness Testing and Regulatory needs illustrated the activities of their

groups. More information on this meeting are available in the Newsletter section on the iMobility Forum Automation Working Group.

In Lausanne, VRA contributed to the preparation of the CityMobil2 Reference Group meeting. Several presentations on the current status of the deployment of vehicle and road automation systems were provided to the participants. Maxime Flament gave a presentation to illustrate the activity of VRA and other partners (VOLVO and TNO) illustrated the current European Projects.

VRA participated to the trilateral **EU-US-Japan Working Group on Automation in Road Transport (ART WG)** held in Washington in January 2015.

This meeting (see pag.7 for more details) focused on the topic of Digital Infrastructure, the needs of a Harmonized Evaluation Framework for Automated Vehicle Operations and the organisation of the contribution for the ITS World Congress in Bordeaux.

Several VRA partners participated to the CityMobil2 - **Workshop - Socio-economic impact of road transport automation** held in La Rochelle, France (30-31/04/2015) (for more details see pag.8) and VRA coordinated the participation of international organisations (US DOT and ITS-JAPAN).



CityMobil2 Workshop
La Rochelle,
March 2015

VRA organised the **EU-US-Japan Working Group on Automation in Road Transport (ART WG)** held in Rochelle in April 2015.

The ART WG (see pag.7 for more details) continued the discussion developed during the meeting in January, focusing on the Evaluation Framework considering the preliminary results of the CityMobil2 Workshop.



All the information on the previous meeting and Workshop are available on the [VRA Website Library](#).

VRA Website Library



Above: International delegations meet the press during the meeting in La Rochelle (31/03/2015)

New Associated Partners

Several Associated Partners have recently joined VRA in the last months:



EARPA, European Automotive Research Partners Association is involved in task forces whose work is related to the VRA objectives: TF Safety and TF Electronics and Communication Systems.



IBSR, Institut Belge pour la Sécurité Routière advises the federal minister in charge of road safety and mobility on ITS and will benefit from VRA initiative discussing issues and potential solutions.



Renault, leads several research activities with the automotive industry on autonomous driving for passenger cars and light commercial vehicles



Julius-Maximilians Universität Würzburg, Research centre Robot-Law focuses its research activities on the technological demands within the field of automated systems to assess the development from the legal point of view.



Transport for London is working on scenarios for automation in London, including strategies for deployment with a view to pilot.



AustriTech is a private company (100% owned subsidiary of the Federal Ministry for Transport, Innovation and Technology) whose mission is to maximize the societal benefits of new transport technologies.

All the VRA associated partners are listed on the [VRA website Partners](#) page.

Automation at the ITS World Congress in Bordeaux

VRA supported and coordinated the preparation of several initiatives at the ITS World Congress (Bordeaux, France – 5-9/10/2015), including:

SIS 2233 - National road authorities' strategies to support the development towards automation

SIS 2193 - Field operational tests for automated driving: a new paradigm?

SIS 2829 - The eu-us-jpn tri-lateral working group: activities on automation in road transport

SIS 2618 - Towards a holistic & integrated approach for automation: automated transport systems

SIS 2331 - Innovation in wireless communication: a foundation for cooperative and automated systems

SIS 1482 - Human factors in automated driving: transition of control and shared responsibilities

SIS 2233 - Automated vehicle integration and applications into governance

SIS 2924 - Deployment of vehicle-roadway automation for public transportation applications

In addition a Stakeholder Workshop on Liability issues of automated vehicles and an executive session on the regulatory progress for Automated Road Transport will be organised.

Information on additional activities and events at the congress will be published on the [VRA website News](#) page.

The final program and additional details on the Special Interest Session are available on the Congress official website: www.itsworldcongress.com



ITS World Congress

Bordeaux, France

5 to 9 October

2015



VRA Website Events



ITS World Congress
official website

Future Relevant Event

01/07/2015: iMobility Forum Working Group meeting
21-23/07/2015: TRB-AUVSI Automated Vehicle Symposium, Ann Arbor, MI
24/07/2015: Trilateral Automation Working Group (Ann Arbor, MI)
Sept 2015: Automation WG meeting (Brussels)
05-09/10/2015: ITS World Congress Bordeaux (Bordeaux, France)

09/10/2015: International Task Force on Vehicle and Highway Automation (ITFVHA), France
20-21/10/2015: iMobility Forum plenary (Brussels)
21-23/10/2015: SIP-ADUS workshop (Tokyo, Japan)
Dec 2015: Automation WG meeting

All the relevant Events are updated on the [VRA website Events](#) page.

WEBINAR

VRA in the latest month promoted several Webinar on topics related to automation, ranging from Human Factors to Connectivity, with a special focus on the current European Project.

VRA Webinar – 4: “Human Factors In Vehicle Automation: Activities In The European Project Adaptive”

The general objective of this Webinar was to present a quick overview of the on-going and planned Human Factors related activities in the European project Adaptive following the research carried out in the European projects interactive and HAVEit.

The main aim in this part of Adaptive is to investigate how driver's intentions and actions should be taken into account in the design of vehicles with different levels of automation. A range of experiments will be conducted in different experimental environment and on-road when/if possible.



VRA Webinar:
Human Factors in
Vehicle Automation

In Adaptive, Human Factors related functional requirements will be produced: they should describe on a general level how, when and where information, warnings, interventions as well as general support should be implemented in continuous driving situations as well as in event-based support situations, depending on the aim of the function. Intended and unintended situations and transitions (both system and driver initiated) should be taken into account.

A focus in this Webinar was on driver state assessment.

VRA Webinar 5 – “From Advanced Active Safety Systems to Automated Systems: From interactive to Adaptive and beyond”



VRA Webinar From
Advanced Active
Safety Systems to
Automated Systems

The Webinar focuses on the evolution in recent years from driver assistance systems to automated driving ones. This evolution is based mainly on two large scale EU integrated projects: interactive and Adaptive. Research activities, challenges and deployment issues are presented. The Webinar describes the project interactive, its objectives, main outcomes and lessons learned and it will provide an overview of the objectives and vision of automated driving functions that will be developed in Adaptive. Finally an introduction to a new and holistic approach for automation is given based on the concept of Automated Transport Systems.

VRA Webinar 6 – Cooperative Automation: Activities in the European Project i-GAME

The general objective of this Webinar was to present a quick overview of the on-going and planned activities in the field of communication (V2X) in the European project i-GAME.

The main aim in this part of i-GAME is to develop interaction protocols and message sets in the context of cooperative automation. Next to the development activities in i-GAME, an international challenge will be organized in 2016 (GCDC: Grand Cooperative Driving Challenge). Teams from all over Europe, and also from other continents, will be invited to participate.



VRA Webinar: iGame

In i-GAME, the developed interaction protocols and message sets will be delivered to the participating teams and will be part of the challenge by means of two scenarios, one highway and one urban scenario.

In this Webinar the project was shortly introduced as well as the challenge (including scenarios) and of course a basic introduction to the interaction protocols and message sets.

11th ITS EUROPEAN CONGRESS
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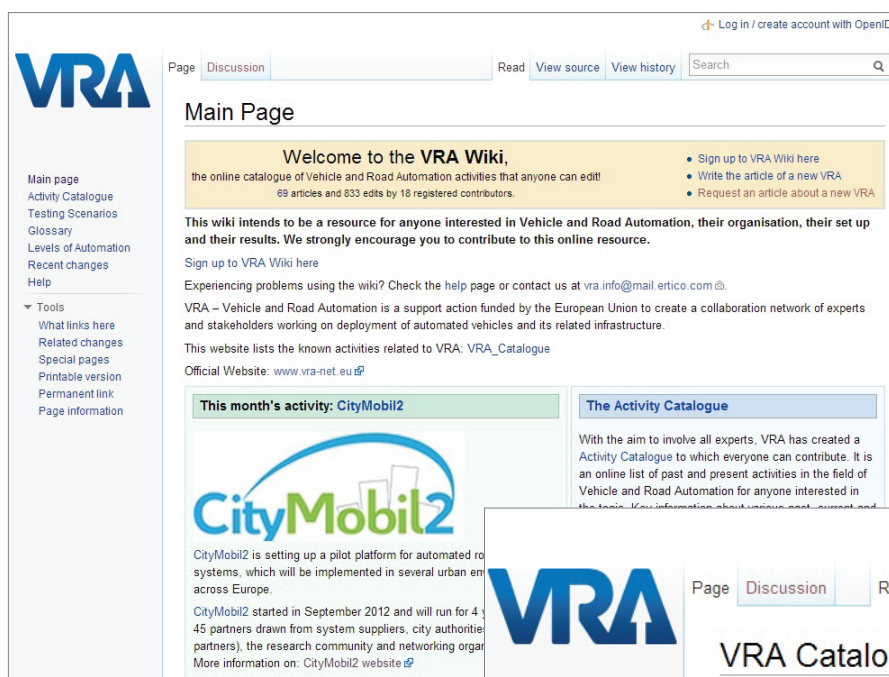
The **VRA Wiki** offers a catalogue of all national, European and international activities concerning vehicle and road automation providing in-depth information and contact details in order to keep the stakeholders informed of the past, current and future initiatives and experiences.

During the last period of activity, the content of the VRA Wiki have been enriched and integrated thanks to the contribution of several partners. Building the catalogue in the form of a Wiki makes it a collaborative effort, easily accessible by the FOT community, and ensures it is possible to gather a large number of information considering that the aim is to deliver a catalogue of the vehicle and road automation worldwide that is as complete as possible. Further it ensures that the catalogue is dynamic and can be constantly updated when information become available (as opposed to a static offline deliverable that becomes rapidly outdated). A community of

people, who feels the need to not only write articles, but also correct, and in many cases argue, constantly enhancing the quality and completeness of articles, is clearly the main lever of the concept behind the success of Wikis such as Wikipedia.

Members of the community should feel the need to have free access to information from the community, and feel the responsibility for the quality of this information. This is what the VRA team wants to achieve for the Wiki in the VRA project.

Different sections (Testing Scenarios, Glossary, Level of Automation, etc...) are currently available for organising the articles of the Wiki and others are planned to be integrated in the coming months.



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Main Page

Welcome to the **VRA Wiki**,
the online catalogue of Vehicle and Road Automation activities that anyone can edit!
69 articles and 833 edits by 18 registered contributors.

- Sign up to VRA Wiki here
- Write the article of a new VRA
- Request an article about a new VRA

This wiki intends to be a resource for anyone interested in Vehicle and Road Automation, their organisation, their set up and their results. We strongly encourage you to contribute to this online resource.

Sign up to VRA Wiki here

Experiencing problems using the wiki? Check the [help page](#) or contact us at vra.info@mail.ertico.com.

VRA – Vehicle and Road Automation is a support action funded by the European Union to create a collaboration network of experts and stakeholders working on deployment of automated vehicles and its related infrastructure.

This website lists the known activities related to VRA: [VRA_Catalogue](#)

Official Website: www.vra-net.eu

This month's activity: **CityMobil2**

The Activity Catalogue

With the aim to involve all experts, VRA has created a Activity Catalogue to which everyone can contribute. It is an online list of past and present activities in the field of Vehicle and Road Automation for anyone interested in this topic. For information about various past, current and

CityMobil2 is setting up a pilot platform for automated road systems, which will be implemented in several urban environments across Europe.


CityMobil2 started in September 2012 and will run for 4 years. It involves 45 partners drawn from system suppliers, city authorities, the research community and networking organisations. More information on: [CityMobil2 website](#)

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VRA Catalogue

(Redirected from [VRA:Community portal](#))

The catalogue is organised in the following categories:

- Category: [Project](#), [Study](#), [Company Activity](#), [Group](#), [Support Action](#)
- Location: [Europe](#), [US](#), [JPN](#)
- Lead: [EC](#), [MLIT](#), [US DoT](#), [Other](#)
- Years of activity:

Projects 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

in years 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

The VRA catalogue is a repository of known activities related to VRA - Vehicle and Road Automation around the world. This list is by no means an exhaustive list but helps the community experts to understand the current state of the art in the domain.

Europe

- HAVEit
- SARTRE
- interactiVe
- SMART 2010/0064
- iMF AWG
- CityMobil2
- VRA

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VRA Wiki



The Automation WG is part of the iMobility Forum, which was established to foster the deployment of intelligent mobility in

Europe by organising a wide range of activities including stakeholder networking, deployment support, awareness raising and dissemination of results.

In particular, the iMobility Forum is acting as a public/private network for understanding the current state of the art in automation in road transport.

The Automation WG members explore and promote the potential of highly automated vehicles and applications for intelligent and sustainable mobility: they provide a clear direction for the challenges of the future identifying the main research topics in the field of automation in transport.

The activity of the Automation WG (launched in 2011) is now planned around different Working Groups corresponding to 6 relevant research topics: Digital Infrastructure, Human Factors, Evaluation of Benefits, Connectivity, Roadworthiness Testing, and Decision and Control Algorithms.

The WG is currently chaired by Bastiaan Krosse (TNO) and Joakim Svensson (VOLVO).

The near term objective is to provide a White Paper on the topic of Vehicle Automation having as its main objective to highlight the current needs and challenges referring to the different areas of collaboration and to report about the international activities, in particular USA and JAPAN.

During the latest meeting in Brussels (28/04/2015) the following topics have been discussed:

- Objectives and structure of the White Paper on automation in road transport
- Relevant inputs and contributions from previous activities have been planned.

The following relevant activities are planned:

June 2015: preliminary version of the White Paper

July 2015: iMobility Forum Working Group meeting in conjunction with the COMPANION project Workshop to share the Standardization initiatives in the EU FP7 Call 10 Projects

September 2015: Preparation of the initiatives for the ITS World Congress in Bordeaux

October 2015: Support of the initiatives on Automation at the ITS World Congress and dissemination of the current results

Nov./Dec. 2015: Finalisation of the White Paper and dissemination of the results

Digital Infrastructure

The subgroup Digital Infrastructure coordinates the efforts to identify static and/or dynamic digital representation of the physical world with which the automated vehicle will interact in order to operate.

The term Digital Infrastructure refers to a static and dynamic digital representation of the physical world with which the automated vehicle will interact to operate.

Connectivity

The subgroup Connectivity focuses on identification of additional requirement on C-ITS and discussion on the requirements that automation poses on V2X communication technologies.

Human Factor

The subgroup Human Factors focuses its activity on issues such as addressing transition between modes, controllability, driver monitoring and stimulating engagement, interactions with other road-users, etc. The studies of this sub-working group include several levels of automation.

International Cooperation Activities

Tri-Lateral US-EU-JP Automation in Road Transportation Working Group

The Tri-Lateral US-EU-JP Automation in Road Transportation Working Group, consisting of representatives of the European Commission Directorate-General for Communication Networks, Content and Technology, Smart Cities and Sustainability (DG-CONNECT), the United States Department of Transportation (USDOT) and the Road Bureau of Ministry of Land, Infrastructure, Transport and Tourism (MLIT).

The mission of the ART WG is to:

1. Exchange regional information so that all parties stay up to date with one another's research programs and policy developments
2. Address vehicle and road transport automation issues that apply to the public authorities in relation to all stakeholders
3. Develop and disseminate proceedings or reports that advance understanding of the impact, policy, and operational issues of increasingly automated vehicles
4. Monitor needs for harmonization and standardization in order to support international developments and deployment.

The working group is focused on connected automation as a mean of achieving maximum benefits in safety, mobility and environmental impacts.

During the Trilateral ART WG held in Washington, **January 2015**, the following points have been discussed:

- Regional updates from the different regions (USA, Japan and Europe)
- The status of the activity on Digital Infrastructure, considering the points of discussion mentioned in the previous meeting in Tokyo and a presentation of the updated draft USDOT White Paper.
- A preliminary draft of the evaluation framework for Automated Vehicle Operations
- The Connected/Automated Vehicle Research Roadmap for the American Association of State Highway and Transportation Officials undertaken with the objective of identifying and prioritizing CV/AV research needs.

In **March 2015** the trilateral ART WG was held after the CityMobil2 Workshop "Socio-economic impact of road transport automation" to involve the international audience in the different discussion groups.

In the meeting, during the discussion on the Evaluation Framework, the possibility of harmonisation between the activities has been foreseen. USDOT has started a project "Estimation of Benefits for Automated Vehicle Systems", aiming to provide USDOT with a framework which encompasses a wide range of socio-economic impacts. In particular it has the objective to estimate the potential safety, mobility, energy and environmental benefits with the main objectives to identify metrics, develop a framework for quantifying the impacts, provide a high order assessment of the state of the knowledge and incorporate current research by other parties.

In addition, a survey "Digital Geospatial Infrastructure for Cooperative and Automated Vehicles" elaborated by US DOT has been discussed and it will be circulate in May 2015.

The activity of the Trilateral Working will continue on the following areas of cooperation:

Connectivity (V2V / V2I / I2V):

to identify additional requirements on C-ITS

Digital infrastructure:

to identify the role of digital maps for automation

Human factors:

to identify solutions for driver and other road user interactions

Roadworthiness Testing:

to define the necessary or appropriate tests required to allow the safe and reliable operation of automated vehicles on public roads

Benefits and evaluation:

Establish a unified list of potential direct and indirect socioeconomic impacts and share efforts to attempt quantifying them

Reliability and Cybersecurity:

to clarify the reliability concerns and make recommendations.



ITS World Congress
Bordeaux, France
5 to 9 October
2015

**Preliminary programme
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#ITSWC15

City Mobil 2

Reference Group Activities

The first reference group meeting was organised jointly with the VRA project (Vehicle & Road Automation) the 1st of December 2015 in Lausanne. The purpose of the group was to provide a forum for discussion and knowledge sharing among the key stakeholders for deploying automated passenger transport systems, particularly city transport authorities, public transport authorities and operators and system suppliers.

Attendees were able to learn about the activities of the CityMobil2 and VRA projects as well as the plans of cities to set up test beds for automated vehicles.

The second meeting was held in La Rochelle (France) at the end of March in conjunction with the CityMobil2 Workshop on "The Socio-economic impact of Road Transport Automation".

La Rochelle Demonstration

La Rochelle started its large scale demonstration on 17 December 2014. The automated vehicles provided by Robosoft operated on an initial short segment linking the Aquarium with the Tourist office.



La Rochelle demonstration:
the CityMobil2 vehicle



The vehicle, carrying up to 8 passengers, served passengers free of charge from Monday to Saturday. An additional segment has been added on 26 January 2015 along with

3 new vehicles. Both segments have been then joined to create the full demonstration route during the third phase of the demo from mid-February to late April 2015 with 6 Robosoft vehicles.

Lausanne Demonstration

The second large-scale demonstration of an automated road passenger transport system was inaugurated on 16 April 2015 at the EPFL campus in Lausanne (Switzerland) in the presence of the presidents of France (François Hollande) and Switzerland (Simonetta Sommaruga).



Lausanne demonstration inauguration: François Hollande and Simonetta Sommaruga (©Alain Herzog - EPFL)



VRA – IMF Automation WG
Lausanne, Dec. 2014

Additional information on the current activities are available on the [CityMobil2 website](http://www.citymobil2.com)



City Mobil 2 website





Adaptive

The project **AdaptiVe**, launched in 2014, aims to develop various automated driving functions for daily traffic by dynamically adapting the level of automation to situation and driver status. Further, the project addresses legal issues that might impact successful market introduction.

Currently some preliminary Deliverables of the project have been released. In particular, the project has completed the classification of automated driving and parking functionalities, as well as a glossary of automated driving functions. All the information are provided in D2.1 System Classification and Glossary (Public) available on the [adaptive website](#)

The deliverable provides a systematic approach for an unambiguous classification of automated driving and parking functionalities, thus completing and exceeding existing functional definitions. It offers also a shared glossary defines terms in the field of highly and fully automated driving functions.

Relevant Events

AdaptiVe project coordinator Aria Etemad spoke in the session focusing on the topic of “Connectivity and automation” during the 5th Conference on Intelligent Transport Systems organised in Brussels by the European commission on 24 April 2015. The theme of the 2015 conference was “A Digital Strategy for Mobility: from capacity to connectivity”.

The first AdaptiVe general assembly was held at the beginning of May 2015. During the meeting and the partners presented to the audience an overview over work progress in the fields of legal issues, human factors and evaluation focusing on the three application oriented sub-project developing functions for close-distance, urban and highway scenarios.

AdaptiVe, taken into account the issues the challenges related to legal aspects on automation, organised a workshop on the topic which will be held in Paris, FR on September 17th, 2015.

The information here reported are available on the [Adaptive website](#)



Adaptive official website

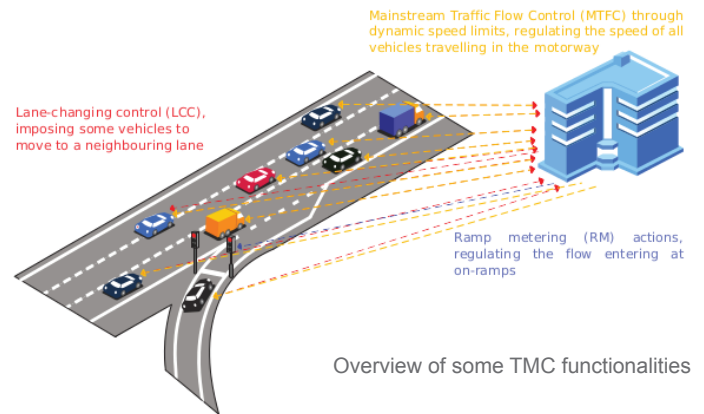
Below: First Adaptive general assembly (from Adaptive official website)



Traffic congestion on metropolitan motorways is a serious threat for the economic and social life of modern societies, as well as for the environment, which calls for efficient countermeasures. Some conventional traffic management measures currently applied have proved efficient but face limitations. During the last decade, there has been an enormous effort to develop a variety of Vehicle Automation and Communication Systems (VACS) that are expected to revolutionise the features and capabilities of individual vehicles within the next decades. VACS are typically developed to benefit the individual vehicle, without a clear view or understanding for the implications, potential advantages and disadvantages they may have for the resulting, accordingly modified traffic characteristics. Thus, the gradual introduction of VACS brings along the necessity and continuously growing opportunities for accordingly adapted or utterly new traffic management actions and strategies.

TRAMAN21 (Traffic Management for the 21st Century - www.traman21.tuc.gr) is an ERC (European Research Council) Advanced Investigator Grant hosted by the Technical University of Crete. The main objective of TRAMAN21 is the development of fundamental concepts and tools that will pave the way towards a new era of future motorway traffic management research and practice, which is indispensable in order to accompany, complement and exploit the evolving deployment of VACS.

Existing or envisaged VACS options have been identified and preliminarily assessed based on suitable information sources. An extensive review (<http://www.traman21.tuc.gr/reports>) has



Overview of some TMC functionalities

established the set of VACS features, which are most relevant from a motorway traffic management perspective.

TRAMAN21 develops specific options for a sensible upgrade of the traffic conditions, particularly at the network's weak points, i.e. at bottlenecks and incident locations. Appropriate models and modelling approaches, at the microscopic and macroscopic levels, have been adopted and developed. They allow for a proper reflection of the evolving vehicle features and capabilities. A generic hierarchical control structure applicable under all different VACS scenarios, as well as detailed control strategies, for selected VACS scenarios are currently under development.



Traman21 official website

TRAMAN21 work also includes a field demonstration of a local control system, using conventional means (VSL signs) that mimic individual speed commands under VACS. Such a field test is planned to be conducted at the M80 motorway in Melbourne, Australia.

Companion



COMPANION plans to develop a framework of co-operative mobility technologies to enable supervised vehicle platooning of heavy-duty vehicles. The framework uses decision-making mechanisms and accounts for both historical and real-time information.

COMPANION has already defined the user, technical and business requirements. In order to define future legislation, a deliverable called "Current state of EU legislation" was released on the website.

A first prototype of the integrated system resulted in a first version of the architecture and interfaces. Two main components compose this architecture, the off-board and the on-board system. While the off-board system calculates and optimises the routes for scheduling platooning, the on-board system handles the platooning itself. The first prototype uses ETSI ITS-G5 standards as a basis. For the on-board HMI



Companion Vehicles

interviews with drivers have already been carried out in order to implement a comprehensive, user friendly interface that maximizes user acceptance.

COMPANION will encourage synergies with other European projects with focus in the platooning use case, among others with the i-Game project.



Companion official website

AutoNet 2030

During 2014, the AutoNet2030 project



has completed its use case descriptions and specifications. The project specifications cover the project-internal architecture for vehicle automation, as well as the specification of external interfaces and messages for cooperative automated driving. These specifications of proposed wireless interfaces and new messages are described in the public D3.2 document, which has been published on the project website.

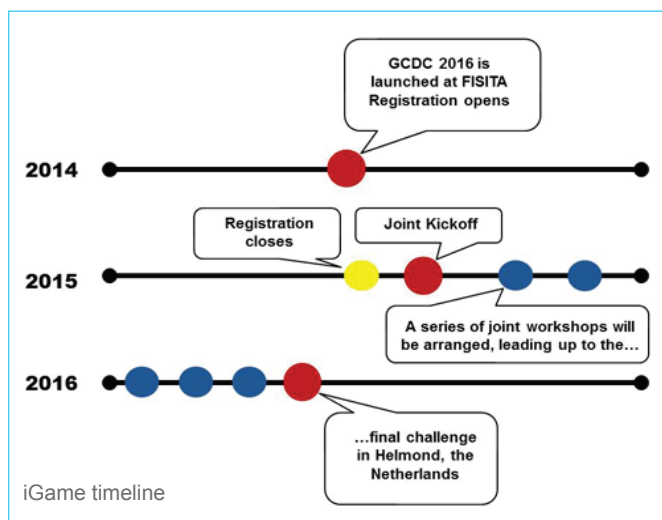
The AutoNet2030 consortium is actively collaborating with the AdaptIVe and iGame projects on the definition of extended Cooperative Awareness Message (CAM), which will have the capability of informing the planned vehicle maneuvers to nearby other vehicles. The resulting joint extended-CAM proposal shall be presented at the 2015 ETSI ITS Workshop (<http://www.etsi.org/news-events/events/865-2015-03-etsi-its-workshop>), and subsequently promoted for standardization at ETSI ITS. Other parts of the AutoNet2030 specification shall also be actively promoted for standardization, under applicable ongoing work items.

During 2015, the partners plan to complete the AutoNet2030 project implementations, to be ready for drive testing in 2016. The demonstrated use cases shall include cooperative 'convoy-driving' on highways, which is an advanced version of cooperative adaptive cruise control (C-ACC), as well as lane change coordination between automated vehicles and manually driven cooperative vehicles.

i-Game



The aim of i-GAME is to speed up real-life implementation and interoperability of wireless communication based automated driving. i-GAME uses a two-way parallel approach to design and setup interoperable automated driving systems, by developing a functional architecture and demonstrating it in a multi-vendor challenge.



The project successfully completed the review of the first period in December 2014. In March 2015 i-Game participated to the Automotive Week was held at the Automotive Campus in Helmond, The Netherlands (more information available on automotiveweek.nl)



In March 2015, i-Game participated to the ETSI ITS Plugtest on ITS Cooperative Mobility Services held in Helmond the Netherlands with the goals of supporting rapid ITS deployment and validating the ETSI ITS Release 1 standards. The focus was on Co-operative Mobile Systems standards from ETSI, CEN and ISO. Several tests were held to check the interoperability of ITS equipment from all key vendors.

In Sept 2015 i-GAME will organise the first GCDC workshop with the teams at TU/e premises in Eindhoven, the Netherlands. This two day event will combine general informational sessions related to GCDC organization and participation with technical sessions. This to give the teams a basic idea for the set-up needed to equip vehicles, get communications online, all in the context of the different GCDC scenarios: what are the rules, limitations, technologies and requirements to successfully prepare and participate in the GCDC2016. This workshop will be the kick-off event for the teams to start the preparation phase to the upcoming GCDC in 2016.



Grand Cooperative Driving Challenge - GCDC 2016 logo

Promotion of research on vehicle and road automation

VRA promotes the research on vehicle and road automation activities in Europe and beyond using a series of tools:

- **VRA wiki** aggregates information and catalogues existing research or deployment activities. The catalogue lists more than 40 projects with abstract, contact point, website, sponsor, budget/funding and outcome.
- **VRA website** contains comprehensive information about all VRA activities i.e. AWG, trilateral, concertations and events.
- **VRA Twitter** (@vra_info) updates you on vehicle automation news around the world.
- Webinars on vehicle and road automation open to volunteers.



VRA website

Everyone interested in VRA activities can register via vra.info@mail.ertico.com or use the RSS feeds for VRA news and events.

Why YOU should join as Associated Partner

- To get updated on all the latest developments in the area of Vehicle and Road Automation in Europe and around the globe.
- To share your knowledge, opinions, issues on a regular basis with a global network of experts and stakeholders.
- To shape policy by participating in series of discussions groups that will shape the future of vehicle and road automation in Europe.
- To promote vehicle and road by taking part in the spreading of excellence and the dissemination of knowledge worldwide.

Facts & Figures

Project acronym: VRA

Project name: Support Action for Vehicle and Road Automation Network

Project type: Coordination and Support Action (CSA)

Programme: 7th EU Framework Programme

Coordinator: ERTICO – ITS Europe

Start date: 1 July 2013

End date: 31 December 2016

Budget: € 1.685 mio.

EU funding: € 1.319 mio.

VRA Partners



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