



Brussels, 12-13/06/2017

Stakeholders' Workshop on Challenges & Opportunities of Coordinated Automated Road Transport (C-ART) (Final)

Rue Philippe Lebon, 1-3, 1000 Brussels – Belgium

Rationale of the Workshop

Automated driving is becoming a reality thanks to the impressive technological developments achieved in the last decade. Automated Vehicles (AVs) have the potential to substantially reduce road accidents, traffic congestion and energy use. Also, gains in productivity, comfort and a greater inclusion in mobility of users such as disabled or elderly are expected. While technology keeps on progressively improving, there is a number of political and social issues that need to be accurately addressed. Among these issues, there is security, data privacy, liability, users' acceptance. Overcoming these challenges and understanding new potential risks is crucial to enable the safe and efficient operation of AVs. Coordinated Automated Road Transport (C-ART) is presented in this context as an extension of the automated driving paradigm, in which vehicles are not only able to move without the human intervention, but also coordinated in order to maximize the overall efficiency of the transport system. C-ART is founded on highly automated and connected vehicles and connected infrastructure. As the elements of the transport system become increasingly interconnected, it is necessary to adopt a holistic approach in which the complex interactions among different players such as vehicles, drivers, infrastructures, policies, citizens, energy, economy and environment are explicitly taken into account. Including all the actors who are part of this profound change and embracing a forward-looking perspective will allow to exchange views on the feasibility of C-ART and frame potential future system configurations.

Purpose of the Workshop

This Workshop is organised as a follow-up of the 1st European Conference on Connected and Automated Driving (held in Brussels on the 3rd and 4th of April 2017) in the framework of JRC's C-ART Exploratory Research project. It is pursuing the following objectives:

- Adopting a holistic perspective towards a future C-ART system, by bringing together multiple stakeholders, taking stock of their current initiatives and framing future views.
- Fostering discussions on currently open issues related to Automated Road Transport (ART) and especially C-ART: *Technology, Liability, Data privacy, Ethics, Human-Machine Interface, etc.* and identifying the underlying needs and barriers.
- Gaining valuable insights so as to approach the *future ideal C-ART system*, recognizing the needs for action at a European level.

Target audience of the Workshop

Stakeholders from the industry, academia and public bodies involved in automated driving are invited to participate in this Workshop. Specifically: automotive companies, technology companies, telecommunication companies, insurance companies, road authorities, city authorities, research centres, universities, associations, etc.

The workshop will be web-streamed: on the 12/06/2017 at <https://webcast.ec.europa.eu/stakeholders-workshop-on-challenges-opportunities-of-automated-road-transport-12th-of-june-2017> and on the 13/06/2017 at <https://webcast.ec.europa.eu/stakeholders-workshop-on-challenges-opportunities-of-automated-road-transport-13th-of-june-2017>.

DAY 1 - 12 June 2017

TIME	TOPIC	SPEAKER	
09:00-09:30	<i>Registration and Welcome coffee</i>		
09:30-09:50	Welcome speech: JRC activities on Sustainable Transport and ART	Biagio Ciuffo and Christian Thiel (JRC)	
09:50-10:10	The r-evolution of driving: from Connected Vehicles to C-ART (JRC report)	María Alonso (JRC)	
10:10-10:50	The EU dimension of ART	Isabelle Vandoorne (MOVE), Eugenio Stoppani (GROW), Ludger Rogge (RTD), Wolfgang Hoefs (CNECT)	
10:50-11:15	<i>Break</i>		
11:15-11:30	SESSION ON TECHNOLOGY Chaired by: Christian Thiel (JRC)	The three pillars of autonomous driving	Erez Dagan (MOBILEYE)
11:30-11:45		Traffic Management Issues in C-ART	Markos Papageorgiou (TUC)
11:45-12:00		Enabling the full potential of truck platooning	Maurice Kwakkernaat (TNO)
12:00-13:30		<i>Interactive session on C-ART open issues related to TECHNOLOGY</i>	ALL
13:30-14:30	<i>Lunch break</i>		
14:30-14:45	SESSION ON DATA Chaired by: Michail Makridis (JRC)	In-vehicle data access and exchange for automotive applications	Alessandro Coda (CLEPA)
14:45-15:00		Relevance of location information for automated transport	Michael Bueltmann (HERE)
15:00-15:15		(Meta) Data as an enabler for the coordination of AVs	Edwin Fischer (DEUTSCHE TELEKOM)
15:15-15:30		The Air Traffic Management Information exchange challenge	Dennis Hart (EUROCONTROL)
15:30-17:00		<i>Interactive session on C-ART open issues related to DATA</i>	ALL
17:00-17:30	Wrap-up session with conclusions from the 2 sessions - END of 1st day	Michail Makridis (JRC)	

** Social event in the evening of the 1st day*

DAY 2 - 13 June 2017

TIME	TOPIC	SPEAKER	
08:30-08:45	<i>Welcome coffee</i>		
08:45-09:00	2nd day Welcome Message	Piotr Szymanski (JRC)	
09:00-10:00	Keynote speech: From Parking to Parks - Cities and the Self-Driving Car Disruption	Tony Seba	
10:00-10:15	SESSION ON USERS <i>Chaired by: Maria Alonso (JRC)</i>	From car ownership to shared use of cars	Fabienne Weibel (BLABLACAR)
10:15-10:30		From C-ITS to C-ART, ITS all about the C	Gert Blom (CITY OF HELMOND)
10:30-10:45		The impacts of high level automation on personal mobility	Satu Innamaa (VTT)
10:45-11:00		C-ART and traffic management: re-inventing the steering wheel	Antoine de Kort (RIJKSWATERSTAAT)
11:00-12:30		<i>Interactive session on C-ART open issues related to USERS</i>	ALL
12:30-13:30	<i>Lunch break</i>		
13:30-13:45	SESSION ON LEG., LIAB. & ETHICS <i>Chaired by: Biagio Ciuffo (JRC)</i>	The Spanish approach on connected and automated driving	Ana Blanco Bergareche (DGT)
13:45-14:00		Open issues on Legislation, Liability & Ethics	Jacques Amselem (ALLIANZ)
14:00-14:15		Automated and Connected Driving – The Strategy of the Federal Government - Opportunities and Challenges	Christhard Gelau (BMVI)
14:15-14:30		Liability and automated driving	Laurianne Krid (FIA)
14:30-16:00		<i>Interactive session on C-ART open issues rel. to LEGISLATION, LIAB. & ETHICS</i>	ALL
16:00-16:30	Wrap-up session with conclusions from 2 sessions - END of WORKSHOP	Biagio Ciuffo (JRC)	