



Update: EU Member States and beyond

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**With inputs from
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Overview

- EU Members States
 - NL + EU Presidency
 - UK
 - Sweden
 - (Germany)
- EC initiatives on regulatory
 - GEAR2030
 - STRIA
 - C-ITS Platform
 - Oettinger RoundTable

EU Member States update: The Netherlands and EU presidency

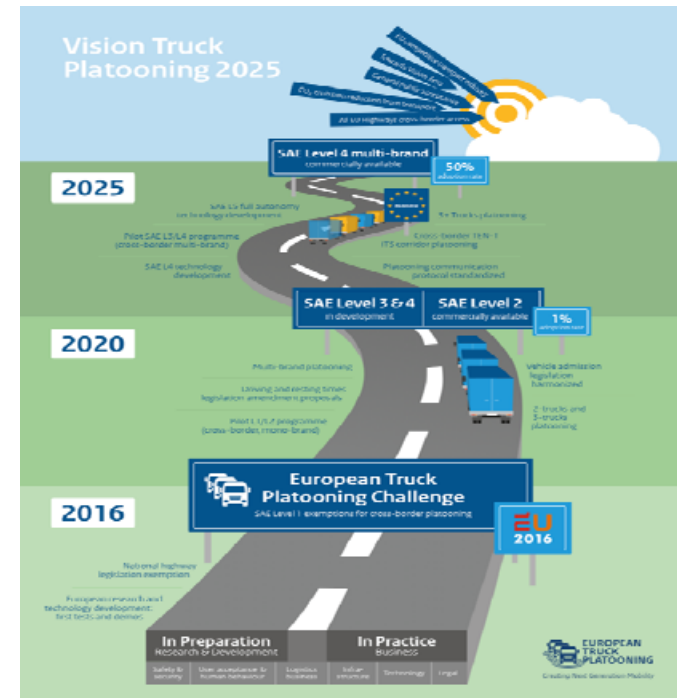
- NL is very ambitious to take a leading position in smart and intelligent mobility
 - “Learning by doing” is a guiding principle.
 - Framework enabling testing of AV on public roads since July 2015
 - Launched the EU Truck Platooning Challenge in 2015
 - Organised Informal meeting of the Transport Council
- NL has put smart mobility and connected and automated driving high on the European political agenda

Report on Dutch EU presidency

- Highlights in the context of Connected / Cooperative Automation during Dutch Presidency
 - Truck Platooning Challenge and conference (6-7 Apr)
 - Demonstration of Self-Driving Vehicles to 28 EU MS ministers (14 Apr)
 - Informal transport council of EU Ministers of Transport (14 Apr)
 - Declaration of Amsterdam
<http://english.eu2016.nl/latest/news/2016/04/14/eu-ministers-to-try-out-self-driving-cars-in-amsterdam>



Participants to the declaration of Amsterdam



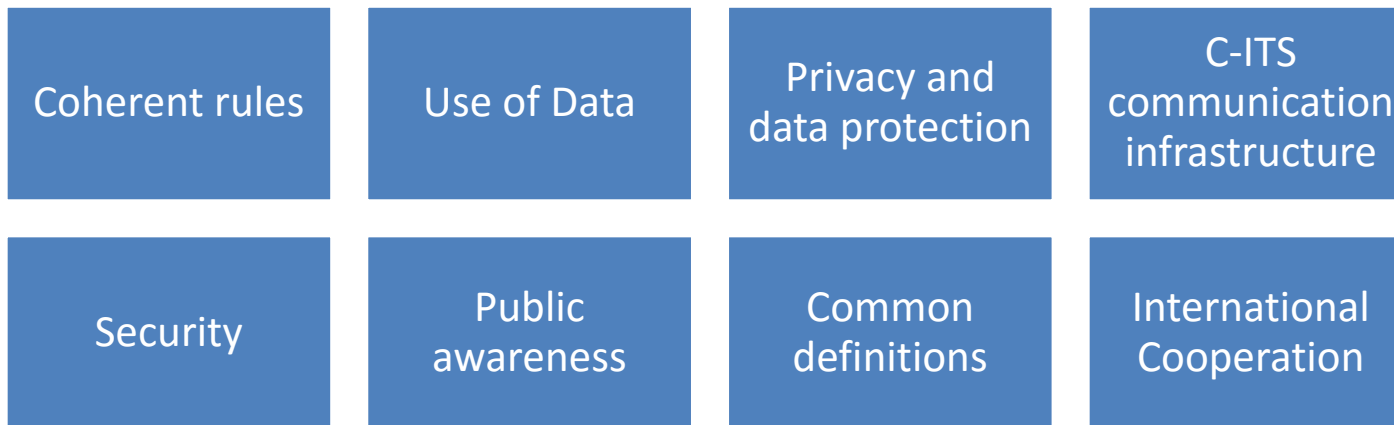
Inputs: TNO

Declaration of Amsterdam on

“Cooperation in the field of connected and automated driving”

First political message on introduction of Connected and Automated Vehicles in EU:

- highlights the need for a shared European strategy on connected and automated driving
- lists all actions to be carried out by the Member States, European Commission and Industry

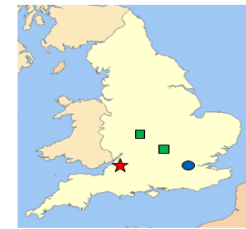


EU Member States Updates: United Kingdom



- Regulatory position DfT: Pathways to driverless cars
 - February 2015 – Regulatory review
 - July 2015 – Code of Practice
 - Amend domestic regulations by summer 2017 (Vehicle maintenance, Highway Code, Testing without a driver, safety standards required)
 - Amend international regulations by end of 2018 (Type approval, ISO standards, etc)
- Centre for Connected and Automated Vehicles CCAV
 - Three projects awarded in 2015 (£19m funding)
 - Eight new projects (£20m) to develop the next generation of autonomous vehicles
 - Further Government funding (£100m + matched industry funds)
- UK Connected Corridor A2/M2

£19m Government funding
(Total investment £35m+)



● **GATEway**
- Greenwich



■ **UK Autodrive**
- MK/Coventry



★ **Venturer**
- Bristol



Inputs: UK DfT / TRL

EU Member States Updates: Sweden - Drive Sweden – Status Q2 2016

- Drive Sweden now fully operational
 - Initial focus on enabling cloud technology
- New legislation for trials proposed – all clear as long as the manufacturer takes the responsibility.
- Scania and Volvo – proud ETPC participants
- Drive Me on track: pilots will begin in 2017
 - Autoliv and Chalmers joined
 - 100-car pilot on the ring roads (mainly highway)
 - Valet parking with City of Gothenburg
- Self-Driving Vehicle (SDV) pilots with 5G in Stockholm



EU Member States Updates: Germany - A9 Digital Motorway Test Bed

- Fully digitalised real condition test environment for tests of new technologies
 - V2X, Sensors, Data sharing, HD maps, RT information, Vehicle Positioning
- Use cases
 - e.g. Road works warning (RWW), Wrong way driving, Road ice forecast, Parking guidance and information for HGV, New Gen of Emergency phones, Intelligent bridges, Service stations of the future



Inputs: BAST

EU Member States Updates:

Germany - Pegasus

- Focus on Highway Chauffeur (Level 4 automation)
- Find effective processes and methods to validate automated vehicles: How can the quality and (functional) safety of the automated driving function be tested and verified?
- Audi, BMW, Daimler, Opel, VW, Bosch, CONTI, +9 others & 12 sub
- Jan 2016 – Jun 2019 (42 months)
- Budget: 34,5m€ (16,3m€ Funding) funded by the Federal Ministry for Economic Affairs and Energy

EC (Policy) initiatives related to connected and automated driving

- GEAR2030 (DG GROW)
- STRIA (DG RTD)
- C-ITS Platform (DG MOVE)
- Oettinger RoundTable (DG CONNECT)
- *5GPPP*
- *AIOTI*
- *BigData*

GEAR 2030 - High Level Group

Objective

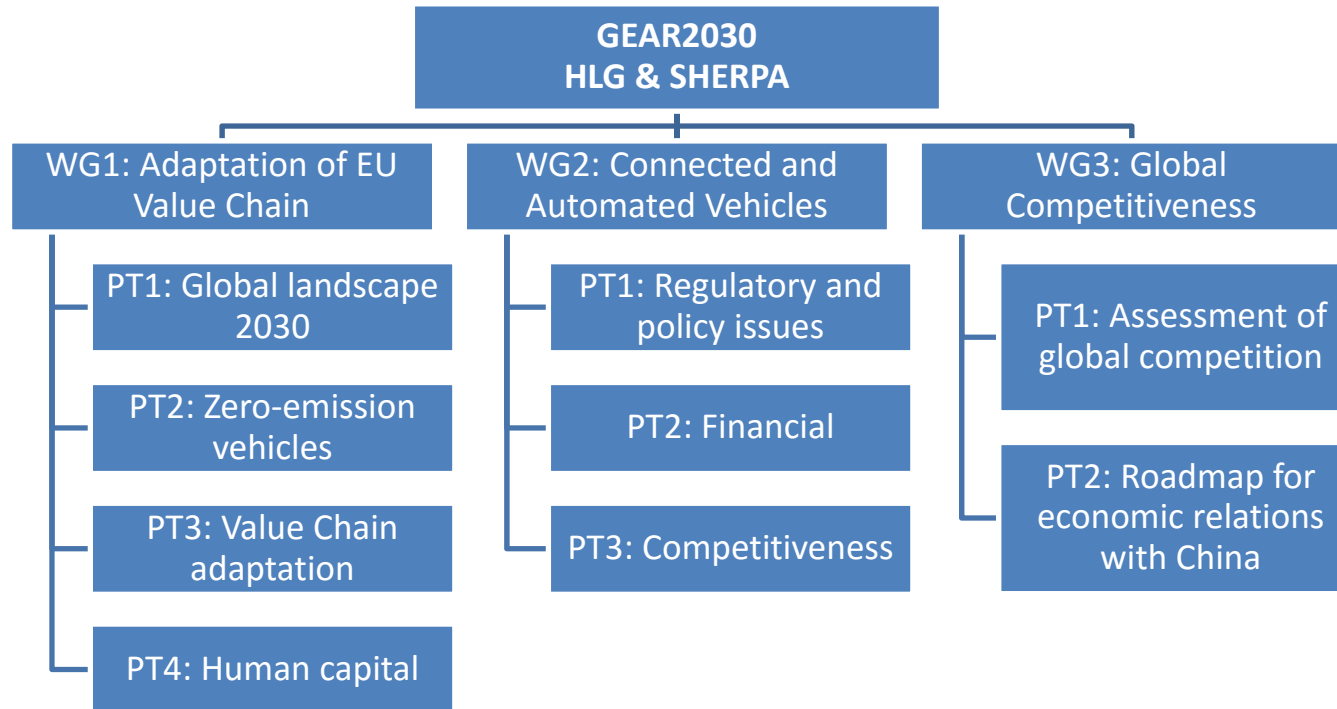
- To support the EU automotive industry to strengthen its competitiveness and to address the new challenges in the next 10 years

Composition of the HLG (25 members): Member States, Industry, Consumers, Trade Unions, Environmental protection, Road safety, ITS

Task of High Level Group

- Formulate a set of medium and long-term recommendations and action plans (time horizon 2030) for the following areas:
 - Adaptation of EU automotive value chain
 - Highly automated and connected vehicles
 - Global competitiveness

GEAR2030



GEAR 2030 – Working Group on "highly automated and connected vehicles"

Will develop an action plan for the roll-out of automated and connected vehicles:

- A shared vision of connected and automated vehicles by 2030
- A list of actions covering:
 - Review of the existing legal and policy framework for highly automated and connected driving (PT1)
 - Coordinated approach for financing R&I and large scale tests (PT2)

Strategic Transport R&I Agenda - STRIA

The STRIA initiative will support the development and deployment of transport low-carbon technology solutions (part of the Energy Union)
STRIA will develop roadmaps to define research and innovation options for 7 technical areas (selected on the basis of their potential impact on the transformation of the EU transport system)

Relevant technical areas:

1. Electromobility
2. Alternative fuels
3. Vehicle design & manufacturing
- 4. Connected and automated transport**
5. Transport infrastructure
6. Network and traffic management systems
7. Smart transport and mobility services (incl. urban)

Strategic Transport R&I Agenda - STRIA

Objectives for **Connected and automated transport** :

- Identify potential contributions of "connected and automated transport" to the achievement of the EU climate and energy, competitiveness goals
- Develop an integrated long term transport R&I strategy on connected and automated transport
- Define policy options supporting research, innovation and wide market uptake

C-ITS Platform

Platform for the deployment of cooperative and intelligent transport systems – C-ITS

Report January 2016:

- Important milestone on the way towards the digitisation of transport
- Interesting conclusions in the areas of:
 - Security
 - Data protection
 - Hybrid communication
 - Spectrum
 - Access to in-vehicle data
 - International cooperation

http://ec.europa.eu/transport/themes/its/c-its_en.htm

C-ITS platform (Phase II)

- Continuation of WGs with still open issues for Day 1, e.g. Security, Privacy, Data Protection, Privacy, Compliance Assessment, Interoperability
- A Master Plan for the deployment of interoperable C-ITS in the EU
- C-ITS in Urban areas and Public Transport
- C-ITS and logistics
- Establish links with automation, especially aspects related to physical infrastructure, digital infrastructure, traffic management and road safety

Next Plenary: 25 April 2016

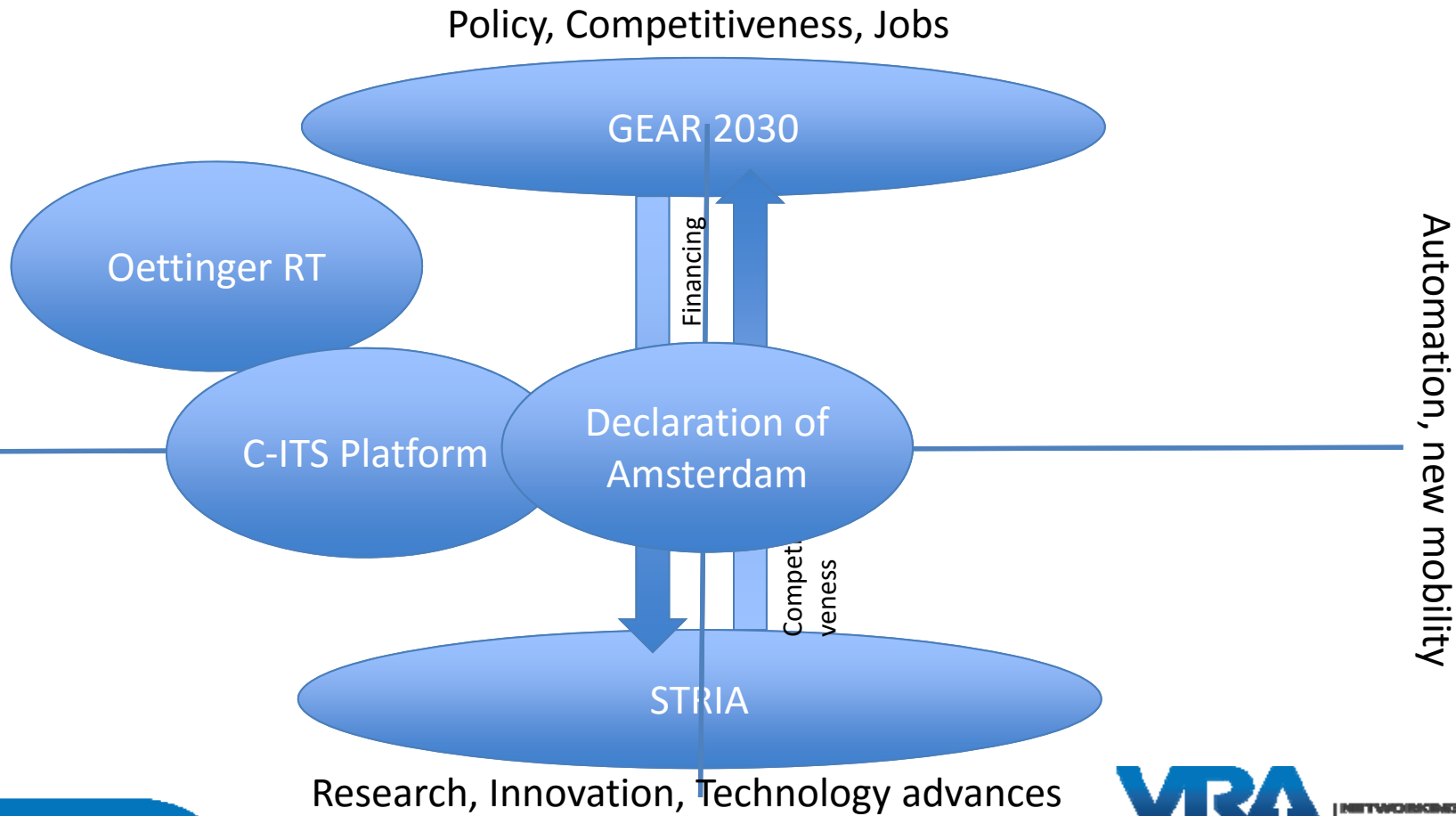
Oettinger Roundtable on connected & automated driving

Commission launched a dialogue between automotive and telecommunication / IT industry to work on **fast and secure communication** systems to support automated driving

Objectives:

- to discuss digital aspects of connected & automated driving, such as network coverage, standards, interoperability, cyber-security, etc.
- to align the roadmaps of automotive and telecommunication industries,
- come up with a proposal for a pan-European, large-scale project that will provide enabling connectivity

Connectivity, Data, Cloud Infrastructure



Beyond EU

- US: NHTSA on “Guidelines for Safe Deployment and Operation of Automated Vehicle Safety Technologies”; Expected mid-2016; Strong discussions ongoing
- Japan: policy proposal for AV testing released by NPA in April 2016; no permission needed as long as it complies with road rules; under consultation until May 7; Tokyo Olympics as a roadshow
- Trilateral cooperation on specific topics: Impact Assessment, Digital Infrastructure, Human Factors, Roadworthiness testing, Accessible Transport, ...
- Twinning to be announced
- UNECE, ISO, SAE

Conclusions

- For the first time, a political message was published on deployment of C&AV
- Many Member States are actively supporting its industry to promote research and tests of C&AV
- All EC DGs are contributing C&AV starting from their own competence
- Complete coherent picture is hard to see at the moment

Thank you for your attention...

Any questions?

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ERTICO – ITS EUROPE