

UNECE activities on Intelligent transport systems

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- Short presentation of the institution
- WP.29's work so far on automated and connected vehicles
- New structure of WP.29

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- Short presentation of the institution:
 - WP.29
 - Cooperation with various stakeholders and SDOs
 - Relevance of WP.29
 - Short overview of UNECE's activities on ITS
- WP.29's work so far on automated and connected vehicles
- New structure of WP.29

UNECE hosts the World Forum «WP.29»

- WP.29 is the World Forum for harmonization of Vehicle Harmonization
- It is operating according to the provisions of three multilateral agreements (1958, 97, 98):
- Its stakeholders are:
 - Countries, member States of the United Nations.
 - Accredited NGOs representing:
 - automotive sector,
 - suppliers
 - consumers etc.



WP.29 deals with...



Emissions of pollutants and CO₂



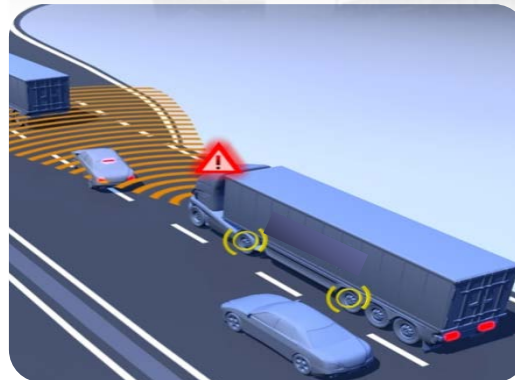
General safety



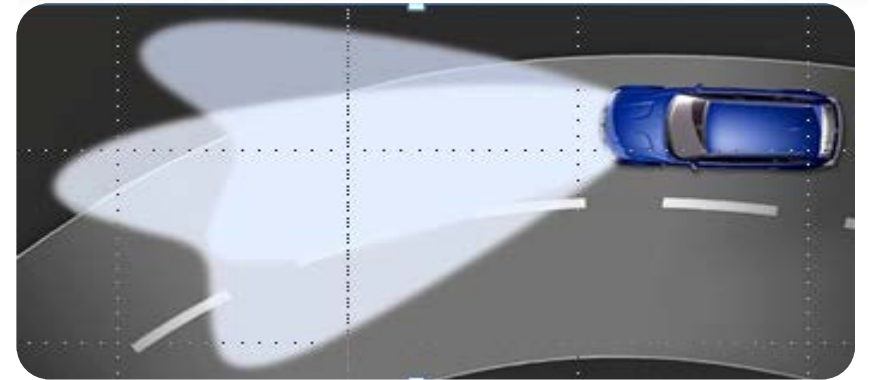
Passive safety



Noise
Tyres



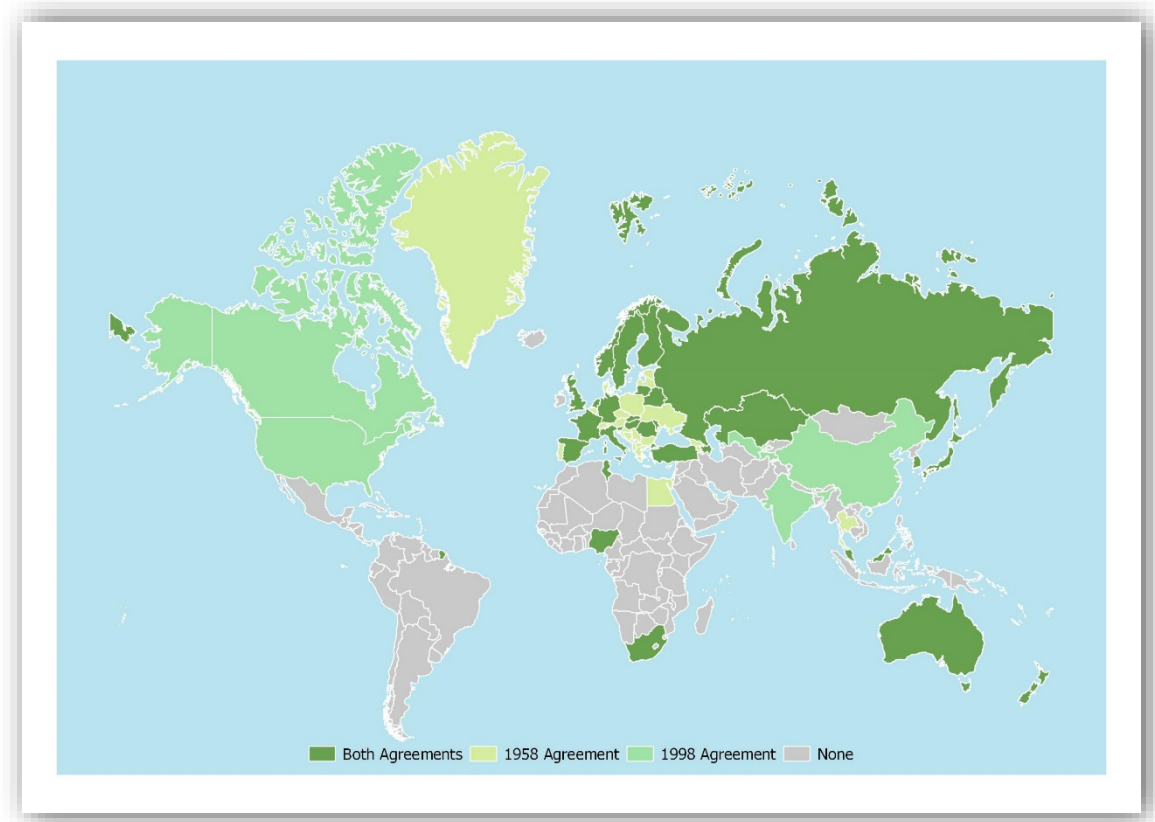
Active safety
Automation
Connectivity



Lighting and light signalling

The scope of WP.29

- WP.29 regulates the performance of «wheeled» vehicles, their sub-systems and parts,
- It has a global reach – Contracting Parties from most continents



Cooperation with various stakeholders and SDOs



- Lighting and Light Signalling sector:
 - IEC standards: IEC 60061, IEC 60809
 - Specific UN Regulations on light sources



- Tyre sector:
 - ISO, ETRTO, JTMA standards
 - Regulation on tyres
 - Regulation on tyre installation




- ICT and Telecom sector:
 - eCall
 - Cyber Security and OTA



Relevance of WP.29

Various institutions and organisation rely on WP.29 and/or commit to work at WP.29 in order to address the safety of conventional vehicles as well as assisted, automated and connected vehicles:

- G7 transport ministers
- The International Conference of Data Protection and Privacy Commissioners
- Global NCAP and other consumer interest groups



**G7 Transport Ministers' Meeting
Declaration of the Ministers**

We, the G7 Ministers of Transport and the European Commissioner for Transport, reaffirm our commitment to fostering investment in high-quality Infrastructure as a key strategy to reignite and sustain economic growth. We recognize that investment in infrastructure can shape mobility patterns, can contribute to innovation, automation, productivity improvement and digital solutions for mobility, and can trigger economic, environmental and social benefits.


At a time when national economies are recovering from an unprecedented economic crisis, we are challenged to simultaneously maintain existing infrastructure and identify funding sources for new infrastructure investments. We recognize that infrastructure is a planned, continuous and long-term investment that supports economic growth, quality of life, improved productivity and employment. We recognize the importance of private and public partnerships in the development, construction, operation and maintenance of infrastructure.

Particular attention should be given to the most beneficial projects. We acknowledge the economic impacts, promote equal access, intelligent reuse and encourage and facilitate Public Partnerships.

We also recognize that infrastructure facilitates access to services and also enriches interconnectivity. We promote equal access to services, including digital services.

We highlight the importance of infrastructure planning, building public access and stakeholder involvement.

...We, therefore, encourage the UNECE's World Forum for Harmonization of Vehicle Regulations to continue to work on the fundamental technical principles, including appropriate performance metrics and test procedures for demonstrating the effectiveness and safety of these technologies...



**G7 Transport Ministers' Meeting Declaration
Karuzawa, Nagano, Japan
September 24th, 2016**

Development and Widespread Utilization of Advanced Technology for Vehicles and Roads

We, the G7 Ministers of Transport and the European Commissioner for Transport, share the view that embedding advanced technologies for vehicles and roads into concepts for sustainable mobility will have a significant role in innovating and transforming road traffic, mobility, industry, and society at large.

We especially recognize that practical application of automated and connected vehicles as well as related ITS technologies including for buses and trucks have the potential to contribute not only to a reduction in quantity and scale of traffic accidents, but also to reduce traffic congestion, improve environmental and health conditions (in particular for vulnerable road users), and enhance road safety. We recognize that these technologies are being developed and deployed by facilitating innovative options, particularly in remote and rural areas. In our mind, we express our support for inclusive road technologies.

We will cooperate to commercialize and we share the vision of working together to develop and deploy connected vehicles.

At the last G7 meeting, we agreed to address legal and regulatory challenges.

...at the World Forum for the Harmonization of Vehicle Regulations... we commit to intensify our efforts to develop, when and where appropriate, well-designed and globally harmonized future looking regulations...

**39th International Conference of Data Protection and Privacy Commissioners
Hong Kong, 25-29 September 2017**

Resolution on Data Protection in Automated and Connected Vehicles

The 38th International Conference of Data Protection and Privacy Commissioners:

Recognizing that automated and connected vehicles may offer significant benefits for users by providing enhanced levels of usability or convenience, as well as for the general public by improving traffic efficiency and safety of vehicle drivers and their passengers, other road users and pedestrians;




Highlighting the rapid advancement of vehicle automation and connected vehicle technologies allowing the development and introduction of new and innovative products, devices or telematics services, which in many cases will include the collection and processing of personal data due to the challenges to the right to privacy when regarding the use of such data;

Noting the Declaration of the Transport at the World Forum for the Harmonization of Vehicle Regulations to the necessity to foster the development of services and products that are safe and secure for consumers' eyes;

Noting the Declaration of the meeting in Doha on the interconnectivity of the digital economy by re-examining the security in the digital economy and consumer protection;

Concerned about the need to ensure valid consent from users and pedestrians;

... that the World Forum for Harmonization of Vehicle Regulations has now included guidelines on cyber security and data protection in its consolidated resolution on the construction of vehicles (R.E.3) as Annex 6...

	Road Map for Safer Vehicles 2020 UN Regulations* for:	All New Models Produced or Imported	All Vehicles Produced or Imported
	Frontal Impact (No.94) Side Impact (No.95)	2018	2020
	Seat Belt & Anchorages (No.16 & 14)	2018	2020
	Electronic Stability Control No.140 (GTR. 8)	2018	2020
	Pedestrian Protection No.127 (GTR. 9)	2018	2020
	Motorcycle Anti-Lock Brakes No.78 (GTR.3)	2018	2020
	Autonomous Emergency Braking Systems	Highly Recommended	Highly Recommended

*For equivalent national performance requirements, with effective conformity of production

UNECE's work on ITS beyond WP.29

UNECE's work is not limited to the vehicle and its direct context.

UNECE's work on ITS also covers:

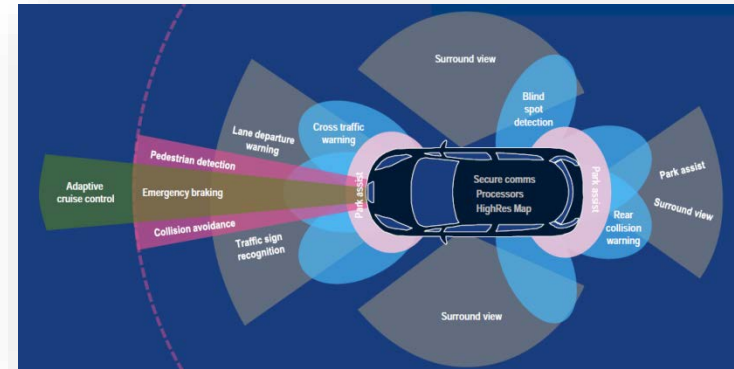
- Drivers and road safety (WP.1)
- Transport of Dangerous Goods (WP.15)
- Inland Waterways - autonomous ships (SC.3)
- Intermodal transport and logistics (WP.24)
- ...

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Automated/Autonomous and connected vehicles

- It is a priority for WP.29
- The work started in 2014
 - IWG on ITS/AD
 - GRRF
- Working Party on road traffic safety (WP.1)
 - Works together with WP.29 on the integration of the technology in traffic (legal aspects).



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 - GRVA
 - IWG on ITS/AD

GRVA

- GRVA is the Working Party on Automated/Autonomous and Connected Vehicles
 - Created in June 2018
 - First session in September 2018
 - Built on GRRF:
 - Focus on Automation and connectivity, while continuing to develop ADAS & safety systems.
 - Taking forward subgroups on:
 - AutoVeh (now called VMAD)
 - Cyber security and OTA
 - First delivery:
 - New UN Regulation on Advanced Emergency Braking Systems (AEB systems) for M1/N1



Informal Group on ITS

The Inland Transport Committee (ITC) recognises that ITS is a key area for the future of an integrated transport system.

The informal group is WP.29's "eyes and ears" on ITS issues

Has a new mandate that will be formally adopted next week:

- The group will keep the Forum updated with the broader vehicle context
- The group will handle the Working Party's outreach on ICT, Telecommunication and Infrastructure issues that are potentially impacting its work.

➔ Please join us !

Thank you

More on www.unece.org/WP.29

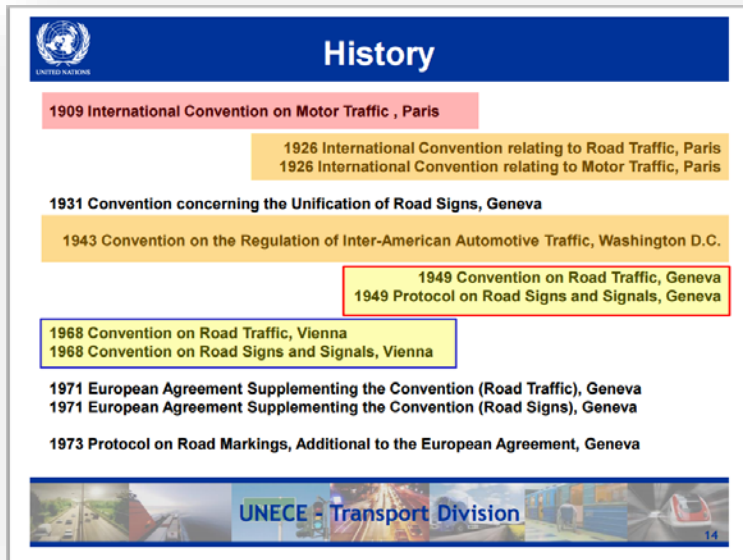
IWG on ITS/AD

- IWG on ITS/AD started its activities back in 2014
- Main deliveries:
 - Guidelines on Cybersecurity and data protection
 - Reference document with definitions of Automated Driving under WP.29 and the General Principles
 - Establishment of the TF on Cyber Security and OTA
 - Establishment of the AutoVeh Task Force
 - Brainstorming sessions
 - ...

GRRF

- Working Party on Brakes and Running Gear
 - Group created some decades ago.
 - Achievements:
 - History: Braking, ABS, ESC, Steering by Wire
 - Since 2014
 - Automatically Commanded Steering Functions
 - Removal of the 10 km/h limit in some cases
 - Lane keeping system (ACSF of category B)
 - Lane change assist (ACSF of category C)
 - Remote Control Parking (ACSF of Category A)
 - Corrective Steering Function (clarifications)
 - Emergency Steering Function

WP.1



- WP.1 was the Working Party on Road Traffic Safety
- It amended the 1968 Vienna Convention to explicitly allow in traffic systems which are in compliance with the UN Regulations and UN GTRs
- New membership: Japan and Korea.
➔ It is renamed the Global Forum for Road Traffic Safety.
- Resolution on the integration in traffic of Automated vehicles.