

Common Understanding on Major Horizontal Issues and Legal Obstacles

Excerpts from the relevant sections of the ToR:

II. Working items to be covered (details see Annex 1)

5. Identify the main horizontal issues and legal obstacles to automated driving technologies and, where possible and appropriate, those not within the remit of WP.29.

OICA comments are displayed using the colour „magenta“ throughout the document

III. Timeline

- (c) Identify the main horizontal issues and legal obstacles to wider uptake/implementation of ADT

June 2015	Submission of outline
March 2016	Submission of preliminary draft
November 2016	Submission of conclusions

V. Annex

Working item 5. Main horizontal issues

- (a) Identify the main horizontal issues (e.g. liability) and legal obstacles (e.g. traffic rules) to automated driving technologies including, where possible, those not within the remit of WP.29;
- (b) Clarify the tasks to be completed within WP.29 and, where appropriate, those to be addressed in other fora and legal/instruments.

Assumed Major Horizontal Issues

1. Traffic Rules

- Consistency with the Vienna and Geneva Conventions

2. Security

- Data protection
- Privacy protection
- Ensuring of safety
- IoT et al.

3. Liability

- Product liability

4. Others

- Licensing system
- Insurance
- Education, etc.

How the Horizontal Issues Are Addressed by Which Parties

Horizontal Issues	Items	Remit of WP.29	Measurement	Main parties addressing the issue
Traffic Rules	Those within the scope of the Vienna Convention	Yes	Guidance to GRRF(ACSF)	GRRF , WP.29 WP.1
	Those outside of the scope of the Vienna Convention	Yes/No	Guidance to related GRs based on WP.1	WP.1, WP.29
Security	Data protection Cyber security	Yes	Security guidelines on cybersecurity and data protection developed according to the ToR	ITS/AD
	Privacy protection	Yes No		
	Ensuring of safety Active and passive safety	Yes	Data Storage System for ACSF (DSSA), EDR	ACSF (GRRF)
	IoT et al.	Yes /No	TBD Vehicles are not IoT's	TBD
Liability	Product liability	No	TBD	TBD
Others	Licensing system	No	TBD	WP.1
	Insurance	No	TBD	TBD
	Education	No	TBD	TBD

TBD: The appropriate measurement or party is unknown

Guidance to GRRF with automated driving technologies taken into account (agreed in June 2015)

- UN Regulation No. 79 (steering) limits ACSF to speeds no greater than 10 km/h.
 - ACSF-IG is considering a requirement to cancel the speed limit.
- Guidelines for using ACSF safety in a high speed range
 1. **Driver assistance system**
 - Conventional driving assistance that can be overridden anytime
 2. **Partially automated system**
 - Automated control commanded by the driver
 - The system shall be used on roads with multiple lanes on either side where pedestrians, bicycles and oncoming vehicles are separated;
 - Requirements for ACSF that addresses lane keeping and lane changes shall be defined;
 - ~~The driver shall monitor the environment at all times.~~
The driver shall be ready, able and willing to control (takeover) the vehicle (Vienna Convention requires the ability to control) -> see WP.29 166-21 the guidance shall be “dynamic”
 - The vehicle’s monitoring of the driver shall also be considered.
 - The driver shall be able to override or terminate the system operation any time.
 3. **Fully automated driving system**
 - Currently outside of the scope of discussion

Further Amendment of the Vienna Convention Towards the Fully Automated Driving

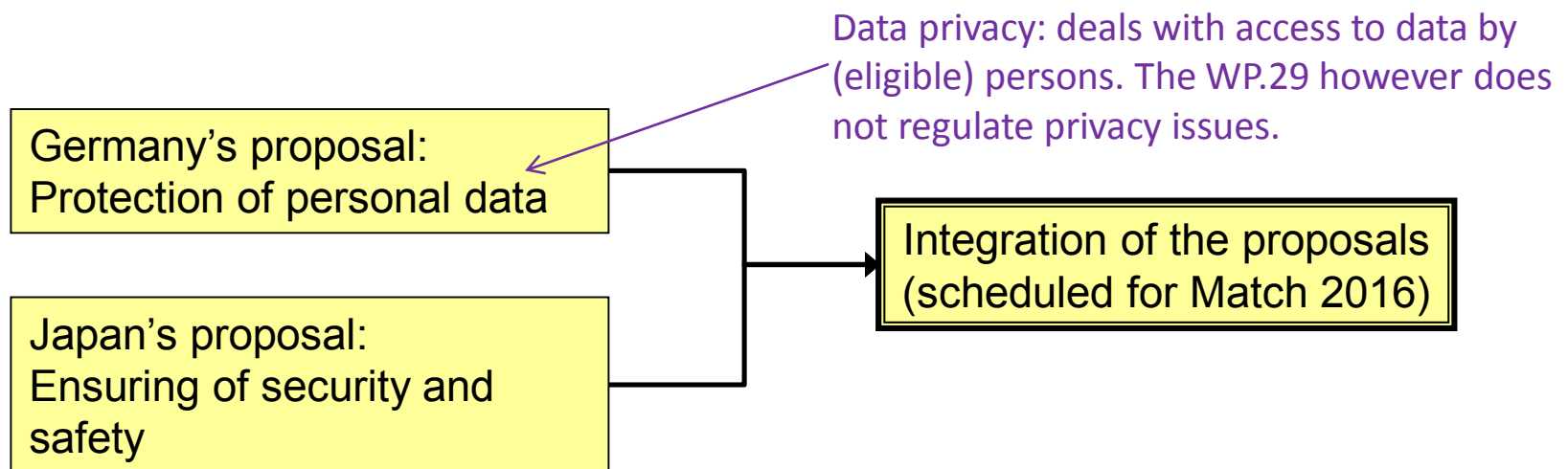
- An informal group exclusively for discussing this issue was established (November 2015).
 - Prepare a proposal aiming at the definition of the driver , its new role within the deployment. Submitted to WP.1 by Belgium and Sweden ref. WP.1/2015/8.
 - Identify the main horizontal and cross field issues, legal and technical overlapping competences related to Autonomous driving advancements.
 - Determine discussion items for establishment of internationally harmonized regulations on AD enabling drivers to benefit from a higher degree of automation of the driving task.
 - Align the 1949 –and 1968 .Vienna Conventions as far as the interaction between driver and automated/ autonomous driving task .

Work Sharing and Cooperation Between WP.1 and WP.29

SAE level		How to address
0	No Automation (manual driving)	NA (in compliance with the current regulation)
1	Driver Assistance	NA (in compliance with the current regulation)
2	Partial Automation	Mostly WP.29 will discuss each related standard (including guidelines) based on the assumption that the driver monitors the surroundings and is responsible for driving, and will share information on ACSF with WP.1 as necessary.
3	Conditional Automation	Mostly WP.1 will address issues such as the permissible range of sub-tasks for drivers. To support this discussion, WP.29 will share technical information for each applicable use case, etc.
4	High Automation	Since it is in the domain of almost fully automated driving and therefore the driver is not held responsible, it is likely that these levels cannot be addressed in the scope of the current Vienna and Geneva Conventions. Accordingly, WP.29 will start discussions after the results of WP.1's discussions are made available.
5	Full Automation	

Guidelines on Security

- The existing arrangement in the EU will be further developed:
 - **eSecurity** (cyber security) the protection (**technical means**) against unauthorized access from outside
 - **eSafety** (active & passive safety) protection against failures (e.g. system failures, redundancy in the system, **event data recorders data storage systems** for failure tracking in case of an accident **while in automated mode (tbd what automation level)**, etc.
- Latest discussions (November 2015)



Summary of Horizontal Issues

WP.29 will identify issues related to automated driving that are outside of the scope of its discussions and work together with outside parties.

1. Traffic Rules

- Items within the scope of the current Vienna Convention that can be discussed by WP.29:
 - Guidance to GRRF (ACSF)
- Items outside of the scope of the current Vienna Convention:
 - Proposal for further amendment of the Vienna Convention towards the fully automated driving
 - To be discussed in cooperation with WP.1

~~2. Security~~ Cyber security (and technical data protection)

- Guidelines to be developed according to the ToR

3. Liability

- Further discussion to be held to identify problems
- Work with outside parties such as law experts (civil law), insurance industry, etc., as necessary

4. Others

- Information from each CP to be shared