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.

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.
<table>
<thead>
<tr>
<th>Horizontal Issues</th>
<th>Items</th>
<th>Remit of WP.29</th>
<th>Measurement</th>
<th>Main parties addressing the issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Rules</td>
<td>Those within the scope of the Vienna Convention</td>
<td>Yes</td>
<td>Guidance to GRRF(ACSF)</td>
<td>GRRF, WP29</td>
</tr>
<tr>
<td></td>
<td>Those outside of the scope of the Vienna Convention</td>
<td>Yes/No</td>
<td>Guidance to related GRs based on WP.1</td>
<td>WP.1, WP.29</td>
</tr>
<tr>
<td>Security</td>
<td>Data protection</td>
<td>Yes</td>
<td>Security guidelines developed according to the ToR</td>
<td>ITS/AD</td>
</tr>
<tr>
<td></td>
<td>Privacy protection</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ensuring of safety</td>
<td>Yes</td>
<td>Data Storage System for ACSF (DSSA), EDR</td>
<td>ACSF (GRRF)</td>
</tr>
<tr>
<td></td>
<td>IoT et al.</td>
<td>Yes/No</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Liability</td>
<td>Product liability</td>
<td>No</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Others</td>
<td>Licensing system</td>
<td>No</td>
<td>TBD</td>
<td>WP.1</td>
</tr>
<tr>
<td></td>
<td>Insurance</td>
<td>No</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>No</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

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 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

<table>
<thead>
<tr>
<th>SAE level</th>
<th>How to address</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No Automation (manual driving)</td>
</tr>
<tr>
<td></td>
<td>NA (in compliance with the current regulation)</td>
</tr>
<tr>
<td>1</td>
<td>Driver Assistance</td>
</tr>
<tr>
<td></td>
<td>NA (in compliance with the current regulation)</td>
</tr>
<tr>
<td>2</td>
<td>Partial Automation</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>3</td>
<td>Conditional Automation</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>4</td>
<td>High Automation</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>5</td>
<td>Full Automation</td>
</tr>
</tbody>
</table>
Guidelines on Security

- The existing arrangement in the EU will be further developed:
  - eSecurity: the protection against unauthorized access from outside
  - eSafety: protection against failures (e.g. system failures, redundancy in the system, event data recorders for failure tracking in case of an accident, etc.)

- Latest discussions (November 2015)

  Germany’s proposal: Protection of personal data

  Japan’s proposal: Ensuring of security and safety

Integration of the proposals (scheduled for Match 2016)
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
   • 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