

GoE on LIAV - WP.1/GE.3

The line-by-line review of 1949- and 1968 conventions on Road Traffic

The task from GE.3 – A line-by-line review – from GE.3 informal meeting June 27 and July 4

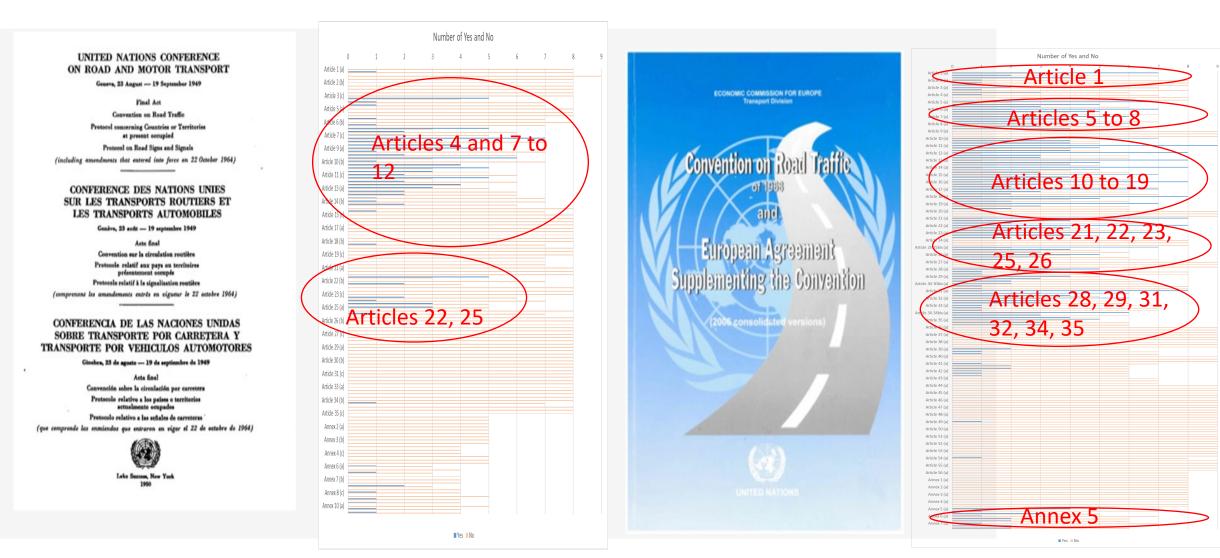
47. The expert from France, GE.3 Vice-Chair, presented (on behalf of the GE.3 bureau) Presentation 6, with a set of three questions aimed to support the collective assessment of any gaps in the conventions and resolutions under the auspices of WP.1. She explained that the questions were based on the input received from the two subgroups Co-Chairs, OICA/CLEPA, University of South Carolina, Poland, Japan, German. She also offered a modus operandi for the way forward including the organization of informal (virtual) meetings in English only. The Group of Experts endorsed the proposal with the three questions reading:

- (a) Is this provision ambiguous as it applies to ADS (if yes, is the provision not comprehensive of ADS? Is anything missing?)
- (b) Does this provision compromise road user safety when it applies to ADS?
- (c) Does this provision prevent the use of ADS in international road traffic (including cross border operations)? (If yes, what are the barriers/obstacles in this provision)?

Report of the Group of Experts on drafting a new legal instrument on the use of automated vehicles in traffic on its seventh session – December 4 2023

https://unece.org/sites/default/files/2024-01/ECE-TRANS-WP.1-GE.3-2023-4e.pdf

Earlier presented results of the survey – answers to 1949 and 1968 Conventions, (a), (b) and (c)



Main issues identified in the survey

- 1. How is the requirement for a driver met in vehicles with an ADS engaged?
 - Who is the driver?
 - Who is responsible for the dynamic and non-dynamic driving task (DDT and non-DDT)?
- 2. Do rules of the road, which are set as driver requirements, need to be complied with by vehicles controlled by an ADS?
- Common understanding of technical requirements in the Conventions where it is not clear how a vehicle controlled by an ADS is compliant
- 4. The nature of the Resolutions (non-binding and high level) the risk of differences in interpretation and implementation

Informal working meetings

Two meetings held by videoconference to discuss issues 1 and 2:

27 June - attended by experts from 12 contracting parties from 4 continents as well as industry and academia – **focus on requirement for a driver**

4 July – attended by experts from 11 contracting parties from 4 continents as well as industry – focus on rules set as driver/user requirements

The implications for AV deployment in international traffic were also discussed.

Summary of June/July discussions (1)

Requirement for a driver

- There was broad consensus that the requirement for a driver under both Conventions means that the driver must be a legal person.
- However, some interpret that the driver has to be a natural person (a human)
 while others consider it can be a company.
- Countries with the two interpretations have developed solutions for complying with the requirement for a driver under domestic legislation, to enable AV deployment.
- Some pointed out that a human designated as driver does not necessarily hold the responsibility for the DDT when an automated driving system is engaged.

Summary of June/July discussions (2)

Performance of the dynamic driving task (DDT)

- There was broad support for the concept that a human can delegate the DDT to a (automated driving) system capable of performing it without the need for a human as a fallback for ensuring road safety (as per the 2018 Resolution) – whether legally the human remains the driver or not.
- There was also broad support for ensuring that there is clarity on roles and responsibilities when an ADS is performing the DDT; both relating to the behaviour of the vehicle on the road and wider driver responsibilities (e.g. vehicle loading and roadworthiness).
- Some countries have created legislation to clarify who is the driver, and roles and responsibilities – including transferring responsibilities from a human driver to a company responsible for the performance of the ADS.

Summary of June/July discussions (3)

Traffic rules set as driver/road user requirements

- There was broad agreement that automated vehicle use should be subject to the same rules as conventional vehicles, including compliance with rules set as driver requirements.
- Some traffic rules are written as broad principles which require judgement of individual situations or interpretation on how they apply to automated vehicles. And some rules may need to be interpreted flexibly at least in unusual circumstances (e.g., road obtructions, extreme weather) it was noted that these issues are explored in the <u>Guidelines and recommendations for Automated Driving System safety requirements, assessments and test methods to inform regulatory development</u> adopted by WP.29.
- An ADS should at least operate consistently with the rules relating to the DDT; how compliance with other rules (such as roadworthiness) should be achieved is less clear and may change as technology evolves.

Informal plenary meeting on 27-29 August

- Purpose of the meeting: this informal hybrid session was arranged to progress the work of GE.3 between formal, in person, sessions and thus facilitate the participation of a wider range of countries.
- The participants reviewed the summary of the informal working meetings presented by the UK and Sweden and provided further thoughts to inform the analysis of the legal instruments, which are presented in the subsequent slides

Summary of discussions on 27-29 August (1)

Requirements for the Driver

The experts agree that the requirement for a driver under both Conventions means that the driver must be a legal person, noting that the definition of a legal person may differ in different CPs.

- Some reported that in their Country, the *current* interpretation of the term "driver" in the Road Traffic Conventions is that it is a natural person. This interpretation may evolve depending on developments at GE.3
- Some reported that, in the context of ADS in traffic, the term driver relates to performance of the DDT by the ADS. This interpretation considers that the term driver includes the ADS (or the company that developed the ADS.

Summary of discussions on 27-29 August (2)

Human roles when the ADS performs the DDT

WP.1 addressed the case when the ADS* performs the DDT*.

- Some experts mentioned the value of clarifying roles while the ADS is performing the DDT; amongst
 others, concerning functions other than performing the DDT (e.g. vehicle loading and roadworthiness).
- Some experts mentioned that the functions/roles/obligations] may vary depending e.g. on ownership models, use cases and technological developments.]
- Some experts pointed at the difference between "who is responsible for accidents" and "who has the obligation to prevent accidents while driving".

*: GE.3 to discuss whether they want to refer to the definitions included in the 2018 WP.1 Resolution/Vienna Convention/WP.29 guidance document

Summary of discussions on 27-29 August (3)

Traffic rules set as driver/road user requirements - draft

The experts agree that [the use of vehicles with] the ADS is expected [to adhere] to traffic rules applicable in the country/area of operation.

- [Some <u>traffic rules</u> may require judgement of individual situations or flexible interpretation e.g. in unusual situations. Hence discussions could be held to check whether they apply *mutatis mutandis* to the ADS.
- Other rules are not related to the ADS performing the DDT e.g. concerning roadworthiness. GE.3 may wish to discuss whether they apply *mutatis mutandis* to the ADS.

Issues not yet discussed – possible next steps in review:

- 3. Common understanding of technical requirements in the Conventions where it is not clear how a vehicle controlled by an ADS is compliant: Article 6 of the 1949 Convention and Article 5 of the 1968 Convention
 - Review compatibility with ADS Regs?
- 4. The nature of the Resolutions (non-binding and high level) the risk of differences in interpretation and implementation
 - Lessons learnt about nature and level of detail of legal instrument?