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Economic Commission for Europe

Inland Transport Committee

Global Forum for Road Traffic Safety

**Group of Experts on drafting a new legal instrument
on the use of automated vehicles in traffic**

Third session

Geneva, 16 May 2022

Item 4 of the provisional agenda

Substantive activities

**Initial thoughts on “road safety challenges
posed by the use of automated vehicles in traffic that an
international legal instrument could adequately address”**

Submitted by Professor Bryant Walker Smith

The text below was prepared by Professor Bryant Walter Smith, expert invited by the Chair of the Group of Experts on drafting a new legal instrument on the use of automated vehicles in traffic (LIAV) also called WP.1/GE.3.

I. Context for WP.1/GE.3's current effort

1. Thank you for inviting me to contribute my thoughts to GE.3's current effort to "[c]onduct an assessment of road safety challenges posed by the use of automated vehicles in traffic that an international legal instrument could adequately address, which could later be used in an analysis of how the 1949 and 1968 Conventions on Road Traffic can be complemented."¹
2. That effort is in service to the mandate from the Inland Transport Commission that GE.3 "draft a new legal instrument" that "complement[s] the 1949 and 1968 Conventions on Road Traffic," that includes "a set of legal provisions for the safe deployment of automated vehicles in international traffic," and that "specifically aims to ensure road safety, in particular the safety of vulnerable road users."²
3. The 1949 and 1968 Conventions in turn reflect the desire of their contracting parties to, respectively, "promot[e] the development and safety of international road traffic by establishing certain uniform rules"³ and "facilitate international road traffic and ... increase road safety through the adoption of uniform traffic rules."⁴
4. My thoughts, especially parts three and four, are primarily directed at item 1(a) of GE.3's Programme of Work. However, part two also implicates item 1(b) of the program of work.

II. Role of an "international legal instrument"

5. The term "*legal instrument*" is ambiguous: It could be understood narrowly to include only instruments that *legally bind* sovereign states⁵ or broadly to also include instruments that have a legally recognized form but are *not* legally binding on states.
6. As a matter of international law, treaties legally bind the states that are party to them. Multilateral treaties such as the 1949 and 1968 Conventions on Road Traffic are agreements among many states, and they can in theory or in practice have a regional or global reach. They may be especially useful for, inter alia, establishing or entrenching foundational principles that could be at risk of current or future derogation,⁶ addressing collective-action problems in which states that take certain actions could be disadvantaged vis-à-vis states that do not,⁷ enabling justifiable reliance by public and private actors,⁸ creating and empowering international administrative frameworks and institutions,⁹ and managing various domestic dynamics.
7. A new treaty replaces all or part of a prior treaty only with the consent of every party to that prior treaty. States that are party to both the 1949 and the 1968 Conventions on Road Traffic therefore remain legally bound by the 1949 Convention vis-à-vis states that are party to only the 1949 Convention.¹⁰ Similarly, a new treaty could not directly alter its parties' obligations under the 1949 or 1968 Conventions toward states that are not party to the new treaty.

¹ GE.3-02-01/Rev.2.

² ECE/TRANS/2021/6 annex III.

³ 1949 Convention chapeau.

⁴ 1968 Convention chapeau.

⁵ References in this paper to "states" are to the sovereign states (*roughly* countries) that are the primary subjects of international law. This usage can be confusing in some countries with federal systems.

⁶ E.g., International Covenant on Civil and Political Rights.

⁷ E.g., Framework Convention on Climate Change.

⁸ E.g., 1949 and 1968 Conventions on Road Traffic (international driving permits); Declaration on the Construction of Main International Traffic Arteries.

⁹ E.g., Charter of the United Nations (establishing, inter alia, ECOSOC); 1997 Agreement Concerning the Adoption of Uniform Conditions for Periodical Technical inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections.

¹⁰ See Bryant Walker Smith, *New Technologies and Old Treaties* (2020).

8. A key question for a legally binding instrument concerns the mechanisms by which it remains current. As is commonly observed, the 1968 Convention on Road Traffic is much easier to amend than the 1949 Convention on Road Traffic. Other multilateral treaties rely even more on international administrative processes to elaborate and implement the broad frameworks of their original treaty texts.¹¹

9. Many other international instruments are not legally binding.¹² These include WP.1 resolutions, the 2030 Agenda for Sustainable Development (containing the Sustainable Development Goals), and other declarations. They too can in theory or in practice be regional or global. These instruments may be especially appropriate when legal commitments are not necessary (because states will behave the same regardless of whether they commit legally) or not practical (because states will not commit legally).

10. The most appropriate international instrument for a given road safety challenge may be binding or nonbinding and may be regional or global.

11. A new treaty or treaty amendment that legally binds its parties may be desirable for some forms of international cooperation. As noted below, these might include the reciprocal recognition of certain foreign administrative or judicial determinations and the treatment of personally identifiable or business-proprietary information.

12. A legally binding instrument may or may not be desirable for other forms of international cooperation, including efforts to standardize or harmonize domestic policy.

13. States might achieve domestic policy consistency through a legally binding instrument that speaks to governments and, indirectly, to the private actors they regulate. The 1949 and 1968 Road Traffic Conventions, which in part specify rules of the road for states to apply to individual motorists, illustrate the use of treaties for this purpose.¹³ This binding approach might be useful for states in a closely integrated region, for states in which certain treaties are directly effective as domestic law, and for states that have a practice of otherwise incorporating international rules in their domestic law.

14. States might also achieve domestic policy consistency through a nonbinding instrument, including one that is related to a new or existing binding instrument.¹⁴ A nonbinding instrument might endorse domestic rules and policy frameworks that states might then adopt internally. This approach might be preferable if the expectation that states undertake new binding international legal commitments would not promote or might even hinder domestic adoption of the underlying substantive rules.¹⁵

15. The analysis that follows identifies safety challenges based on whether they might ultimately be best addressed by *international legal commitments by states* or by *domestic legal consistency among states*. This analysis does not consider whether these challenges might be best addressed by global cooperation or by regional cooperation based on patterns of shared traffic.

III. Safety challenges that might warrant *international legal commitments by states*

16. A company based in or operating from one state might provide automated driving services (including mapping, remote monitoring and assistance, remote driving, and incident response) for vehicles operating in another state.

¹¹ E.g., 1958 Agreement on the Adoption of Harmonized Technical United Nations Regulations and the 1998 Agreement.

¹² See generally Dinah L. Shelton, *Soft Law in Handbook of International Law* (2008) (critiquing but still using the ambiguous term “soft law”).

¹³ During the drafting of the 1949 Convention, one delegation understandably sought assurance that a state would not commit an internationally wrongful act every time an individual motorist contravened one of these traffic rules. See Bryant Walker Smith, *Automated Vehicles Are Probably Legal* (2014).

¹⁴ E.g., 1998 Agreement on UN Global Technical Regulations.

¹⁵ The potential utility of binding commitments is discussed *supra* in paragraph 6.

17. An individual physically present in one state might play a role in the provision of automated driving services for vehicles in another state.
18. An individual physically present in one state might personally own, dispatch, or otherwise direct an automated vehicle in another state.
19. An automated vehicle or automated driving system developed for one market might be resold or disposed of in another market.
20. To assess the performance of or investigate an incident involving an automated vehicle, automated driving system, or company providing automated driving services, a safety authority in one state might need to access safety-related data from another state. These data might include personally identifiable or business-proprietary information.
21. The state in which an automated vehicle is operating might impose operational requirements that the state in which the automated vehicle is based does not. These might include registration, licensing, training, inspection, and insurance requirements for an automated vehicle, an automated driving system, an individual using the automated driving system, a company providing automated driving services, and an individual playing a role in the provision of those services.
22. A vehicle that is approved and registered in one state might be operated in another state with a retrofitted or modified automated driving system that is not approved or registered in the first state, in the second state, or in any state.
23. States may create differing rules about the legal status of an automated vehicle or automated driving system that has or has not been remotely updated.
24. A law enforcement officer, first responder, or other authority in one state might need to quickly, reliably, and credibly:
 - (a) ascertain whether a vehicle operating in that state is under automated operation,
 - (b) identify and contact the company facilitating the automated operation of that vehicle,
 - (c) establish to this company that the law enforcement officer, first responder, or other authority is legitimate and authorized to act,
 - (d) access information from this company about or from the vehicle, and
 - (e) issue instructions to this company, including to stop the vehicle, that have the force of law.
25. A public or private actor may attempt to access an automated vehicle or automated driving system for a purpose that is unlawful under domestic or international law.
26. A law enforcement agency in one state may need to issue, track, and enforce a citation issued to an entity responsible for an automated vehicle that is based in another state.
27. The effective notification and management of planned and unplanned roadway events (including maintenance activities, vehicle restrictions, detours, and ongoing incidents) might require common or compatible data platforms and formats among states.
28. The effective integration of an automated driving system with a vehicle-to-vehicle or vehicle-to-infrastructure communication system might require common or compatible communication protocols and spectrum allocations among states (as well as sufficient coverage).
29. There may be uncertainty about how to interpret, apply, and implement existing international legal obligations under, inter alia, the 1949 and 1968 Conventions on Road Traffic in the context of automated driving. (Questions have included whether the conventions or particular provisions thereof apply to automated driving and who or what counts as the “driver” of an automated vehicle under these conventions.) While a new instrument cannot directly change these treaties, it might elaborate on them in a way that helps achieve greater clarity.

IV. Safety challenges that might warrant *domestic legal consistency* among states

30. States might reach differing conclusions about who or what “drives” an automated vehicle under their domestic laws, including those related to vehicle safety, vehicle operation, and vehicle insurance as well as civil, administrative, and criminal liability.

31. A state might (*and in my view probably should not*) create new domestic rules for how pedestrians, bicyclists, and other road users are expected to interact with automated vehicles. These rules might be unfamiliar to road users from another state.

32. A state might (*and in my view probably should not*) create new domestic rules and responsibilities for individual users of automated vehicles (such as inspecting the vehicles, ensuring compliance with certain operational rules, and managing crashes). These rules might be unfamiliar to automated vehicle users from another state.

33. States might create differing rules about the behavior expected of an automated vehicle or automated driving company with respect to:

(a) individuals who play a role in automated driving, whether in the vehicle or remotely, by monitoring, assisting, or potentially taking over the dynamic driving task,

(b) passengers (including those with special needs and children), non-passenger users, and remote users,

(c) other road users, including vulnerable road users, transit operators, motorists, and road workers, and

(d) first responders, including police officers, firefighters, rescuers, and tow operators.

34. States might take different approaches to interpreting, revising, and applying existing rules of the road in the context of automated driving.

35. States might create differing rules about whether owners of automated vehicles and automated driving systems can repair or modify them and about whether developers of automated vehicles and automated driving systems can restrict these modifications.

36. A company providing automated driving services might cease operations or stop supporting an early version of an automated vehicle or automated driving system.

37. States might create differing rules about data generated, shared, stored, and used by an automated vehicle, automated driving system, or automated driving company, particularly with respect to crashes and other incidents, including incidents observed by but not directly involving the automated vehicle or automated driving system.

38. States might create different rules about safety-related information (including information related to other road users) that is or must be reported by or about an automated vehicle, automated driving system, or automated driving company.