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Convention on Road Traffic (1968)-Automated driving:

Amendment proposal to Article 34 in the 1968 Convention on Road Traffic

Proposal for an enabling package of amendments to the 1968 Convention on Road Traffic to allow domestic legislation to support the use of automated vehicles

Submitted by United Kingdom of Great Britain and Northern Ireland*

This document proposes the inclusion of a new Article 34bis to enable the use of automated vehicles as well as change to Article 48 to reduce the risk of divergence between the 1949 and 1968 Conventions on Road Traffic.

* **This work is not a statement of UK Government Policy.**

I. Introduction

1. While the UK government considers that the 1949 and 1968 Conventions support the use of any type of automated vehicles it also recognises that other contracting parties may have a different view. It is important that we create a level playing field that supports the safe deployment of automated vehicles, without forcing a specific interpretation of the Convention.
2. A successful amendment for automated vehicles should either provide freedoms to legislate domestically where countries see fit or consider each provision of the conventions and how they may apply or may not apply to the use of automated vehicles, and then determine how they may need to be amended or supplemented to provide the desired legal clarity.
3. In resolving issues experienced by some contracting parties, it is important that new problems not created for those contracting parties who are not experiencing those issues, regardless of whether they are contracting parties to the 1968 Convention, 1949 Convention, or both.
4. This simple package of amendments to the 1968 Convention would:
 - (a) enable those domestic freedoms, with domestic legislation able to support the safe deployment of AVs through the creation of new rules, or specific exemptions, to cover the situations where the automated driving system of an automated vehicle is active and exercising dynamic control; and
 - (b) reduce the risk of divergence between the understanding of the 1949 and 1968 Conventions.
5. In enabling those domestic freedoms, it is important that the road safety and road traffic flow objectives of the conventions are respected. This enabling package of amendments should not be seen as giving contracting parties a free hand to do whatever they want. Those freedoms are specifically linked to the safe deployment of automated vehicles, and any new rules or exemptions should aim to deliver the functional traffic and safety outcomes of the provisions of the 1968 Convention; in effect, contracting parties should respect the spirit of the law, if not the letter of the law. It is desirable, to support consistency of approach, that contracting parties make use of the recently agreed Resolution on the deployment of highly and fully automated vehicles, and any other relevant Resolutions. It is, however, recognised that these Resolutions are not legally binding.
6. The value of this amendment package goes beyond resolving domestic issues to enable the safe deployment of automated vehicles. It also provides an opportunity to gather knowledge and experience of how automated vehicle technology will work in the real world, and understand what rules and regulations are needed to support the safe deployment of automated vehicles. In this regard, the enabling elements of this package should be seen as time limited and could be removed once new binding legal instruments are available to support the introduction of uniform rules for safely deploying automated vehicles.
7. In addition to the explanatory memorandum set of amendments, an annotated version of the list has been provided that explains the rationale for the inclusion.

II. Explanatory memorandum

8. The development of automated vehicle technologies is currently at a nascent stage, and there are interpretative differences between contracting parties as to what the 1968 Convention on Road Traffic allows. Therefore, in this early phase it is preferable that the legal issues related to regulating situations where the automated driving system of an automated vehicle is active, and thus exercising dynamic control, should be left to domestic legislation. In this way, contracting parties will be able to create new traffic regulation that takes consideration of their infrastructural, cultural, legal, and economic factors. of every contracting party.

9. Any domestic legislation regarding automated vehicles, road traffic flow, and road traffic safety should continue to respect the functional outcomes envisaged by the provisions of the 1968 Convention. Contracting parties should, while recognising the non-binding status of Resolutions, consider any relevant Resolution issued by the Global Forum for Road Traffic Safety.

10. The evidence gained from real world use can thus support a second phase of international legislative reform, when there is more clarity and certainty on what the technology is capable of. A more general amendment of the convention, or even a new legally binding instrument that sits alongside or replaces the 1968 Convention, may be developed with the aim of more harmonisation between the contracting parties. In this case, the new Article 34bis, can be abrogated if deemed necessary.

11. In addition, this package of amendment seeks to reduce the risk of the inclusion of explicit provisions within the 1968 Convention being perceived as implicit prohibitions within the 1949 Convention on Road Traffic. This change would apply to all provisions, not just those applying to automated vehicles.

III. The enabling amendment package

12. A new Article 34bis is introduced, reading as follows:

Article 34bis.

Domestic legislation may set out the rules and exemptions, including those relating to the driver, when the automated driving system of an automated vehicle is active. These rules and exemptions shall conform in substance to the principles of this Convention.

The following definitions apply:

- **“Automated vehicle” refers to a vehicle equipped with an automated driving system which operates for some, or all, of the journey.**
- **“Automated driving system” refers to a vehicle system that uses both hardware and software to safely exercise dynamic control of an automated vehicle on a sustained basis.**
- **“Dynamic control” refers to carrying out all the real-time operational and tactical functions required to move a vehicle. This includes controlling the vehicle’s lateral and longitudinal motion, monitoring the road environment, responding to events in the road traffic environment, and planning and signalling for manoeuvres.**

13. An amended Article 48 is introduced, reading as follows:

Article 48

Upon its entry into force, this Convention shall terminate and replace, in relations between the Contracting Parties, the International Convention relative to Motor Traffic and the International Convention relative to Road Traffic, both signed at Paris on 24 April 1926, the Convention on the Regulation of Inter -American Automotive Traffic, opened for signature at Washington on 15 December 1943, and the Convention on Road Traffic, opened for

signature at Geneva on 19 September 1949. **Nothing in this Convention shall prejudice or prejudice [the interpretation of] any other Convention listed here.**

IV. Annotated amendments

14. Text in **bold** represents an amendment to the existing text of the 1968 Convention. Deleted text is not included for the sake of clarity. Annotations are provided in square brackets with a ‘Note’ prefix, as follows [Note: example text], or with a ‘Question’ prefix, as follows [Question: example text?].

15. A new Article 34bis is introduced, reading as follows:

Article 34bis.

Domestic legislation may set out the rules and exemptions, including those relating to the driver, when the automated driving system of an automated vehicle is active.

[Note 1: This is the key enabling feature and focuses on the outcome of having an automated vehicle being safely deployed in road traffic. It reflects the fact that new rules will be needed, and that some contracting parties may wish to provide domestic exemptions from Article 8.1 or more. But it does not require countries to look beyond Article 8.1 should they not feel the need to do so. Importantly, this wording does not impose a particular interpretation of the 1968 Convention with respect to automated vehicles.] [Note 2: While it may be preferable to stay at an even higher level and exclude the clause about a driver, it is recognised that other countries may need something more explicit. Either option would leave it entirely up to domestic legislation to explain if a driver, operator, user-in-charge, or a new entity such as the Australian ‘Automated Driving System Entity’, etc, is needed or not, and then define what requirements are placed on that person or entity, and/or on the ADS]

These rules and exemptions shall conform in substance to the principles of this Convention.

[Note 3: This adapts wording from Article 3 of the 1968 Convention to make it clear that this amendment does not provide absolute freedom, rather that contracting parties, if creating new rules or exemptions, should consider all aspects of the Convention, not just Chapter 2, and ensure that such new legislation delivers the functional outcomes sought by the provisions of the Conventions with respect to road traffic and road safety. The technical annexes provide one such example beyond Chapter 2, where it would be important to secure the same outcomes if not necessarily the same outputs].

The following definitions apply:

- **“Automated vehicle” refers to a vehicle equipped with an automated driving system which operates for some, or all, of the journey.**

[Note 4: This definition is adapted from the definitions of highly and fully automated vehicles, but would include conditional automation as well. It is clear that there is no agreed consensus on whether the Conventions allow for

(a) non-automated vehicles, and assisted vehicles only

(b) non-automated vehicles, assisted vehicles and conditionally automated (c (c (c vehicles only; or

(c) non-automated vehicles, assisted vehicles, and conditionally automated vehicles as well as highly and fully automated vehicles

16. It would, therefore, be valuable to be as clear as we can be so as to avoid debates on the future about what this amendment actually provides for. On that basis, the definition is agnostic as to what type of automated vehicle is covered].

- **“Automated driving system” refers to a vehicle system that uses both hardware and software to safely exercise dynamic control of an automated vehicle on a sustained basis.**

[Note 5: included for clarity over what an ADS is. This definition would cover all automated vehicles, rather than just highly and fully automated, and is adapted from the recent automated vehicle Resolution, with the inclusion of the word “safely” to help encourage road traffic safety].

- **“Dynamic control” refers to carrying out all the real-time operational and tactical functions required to move a vehicle. This includes controlling the vehicle’s lateral and longitudinal motion, monitoring the road environment, responding to events in the road traffic environment, and planning and signalling for manoeuvres.**

[Note 6: using the term dynamic control from the automated vehicle Resolution to ensure alignment.]

[Note 7 the term operational domain / operational design domain has not be included as it does not add any additional meaning to the amendment. The inclusion of the term could also constrain WP29 unnecessarily.]

17. An amended Article 48 is introduced, reading as follows:

Article 48

Upon its entry into force, this Convention shall terminate and replace, in relations between the Contracting Parties, the International Convention relative to Motor Traffic and the International Convention relative to Road Traffic, both signed at Paris on 24 April 1926, the Convention on the Regulation of Inter -American Automotive Traffic, opened for signature at Washington on 15 December 1943, and the Convention on Road Traffic, opened for signature at Geneva on 19 September 1949. **Nothing in this Convention shall prejudge or prejudice [the interpretation of] any other Convention listed here.**

[Note 8: This amendment would give comfort to the Geneva only parties that an explicit change to Vienna would not represent an implicit change to Geneva – this could thus help reduce divergence between the two conventions. This amendment would cover all the provisions of the 1968 Convention, not just automated vehicles. The phrase ‘the interpretation of’ could improve the clarity of the amendment].
