

Annex VI

Terms of Reference of the Informal Working Group on Artificial Intelligence (IWG on AI)

Adopted on the basis of informal document WP.29-196-24/Rev.4 and amendments agreed upon during the session

I. Background

1. An Artificial Intelligence (AI) system is often defined as a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment. Manufacturers are increasingly producing vehicles that have been developed with and include features implemented using AI. With some forms of AI, such as machine learning, the decisions and behaviors are not explicitly defined and are instead the result of learning based on large data sets. Such approaches result in systems which are less understandable without specialist techniques, posing a challenge for existing approaches to safety engineering, type approval processes, and market surveillance. As the World Forum for Harmonization of Vehicle Regulation, it is therefore important that WP.29 considers the subject of Artificial Intelligence.

2. In 2018 at its 175th session, WP.29 noted the emerging relevance of Artificial Intelligence for the automotive sector, such as its applications for infotainment, vehicle management, and the development of self-driving capability. It was noted that some of these applications might fall within the mandate of WP.29, notably Human Machine Interface (HMI) / distraction and the performance of automated vehicles².

3. Recognizing the increasing importance of the topic of Artificial Intelligence for vehicle systems, the Groupe de Rapporteurs pour les Véhicules Autonomes (GRVA) pursued the discussions on Artificial Intelligence, culminating in the proposal of a draft resolution with guidance on Artificial Intelligence in the context of road vehicles in November 2024 during the 191st session of WP.29³.

4. Noting the increasing penetration of various methods of Artificial Intelligence in wheeled vehicles and recalling specifically the use of machine learning tools to support the development and testing of vehicle software before deployment, WP.29 continued discussions of the draft resolution with guidance on Artificial Intelligence in the context of road vehicles, including the convening of a workshop in June 2024. These discussions resulted in the adoption of an amended guidance document, 'Considerations on Artificial Intelligence in the Context of Road Vehicles', at the 193rd session of WP.29 in June 2024⁴. Given the evolving nature of the use of AI in road vehicles, for example the increasing use of generative AI, this guidance document was intended as a living document which would keep pace with such developments. During these discussions, contracting parties also deliberated on the need to establish a dedicated informal working group on the AI topic.

5. In March 2025 at its 195th session, WP.29 decided to establish a new Informal Working Group on AI under its auspices and requested the interested representatives to prepare its draft Terms of Reference for consideration at the June 2025 session of WP.29. It was noted that the leadership of the group should reflect the global representation of WP.29⁵. The informal document WP.29-195-20 serves as a basis for the development of the Terms of Reference.

² Informal document WP.29-175-21, ECE/TRANS/WP.29/1139

³ Informal document WP.29-191-06

⁴ ECE/TRANS/WP.29/1182

⁵ ECE/TRANS/WP.29/1184 (para. 20)

II. Terms of Reference

6. The AI Informal Working Group shall:
 - (a) Compile information on developments of artificial intelligence in road vehicles and create a list of use cases regarding the use of artificial intelligence in regulated automotive safety systems.
 - (b) Perform a literature review addressing existing available standards, research, best practice and horizontal (e.g. regional or national) regulations relating to the use of artificial intelligence, taking applicability to automotive safety applications into account, with the aim of supporting task (c).
 - (c) In parallel to task (a) and on the basis of task (b), define the target AI systems and develop a guidance document for the use and operationalization of artificial intelligence in these regulated automotive safety systems. The group should agree on best practice and appropriate processes for AI used in regulated automotive safety systems, on the basis of risk, including systems performing automated functions such as driver assistance systems and automated driving systems. When developing guidance, consideration shall be given to the needs of manufacturers, suppliers, authorities for approval or certification and technical services.
 - (d) Report back to WP.29 by June 2026 with the initial outputs from tasks (b) and (c) and a recommendation for the appropriate form of publication of this guidance, such that it can be referenced by manufacturers, suppliers, authorities for approval or certification and technical services, as well as authorities performing market surveillance in consideration of approved or certified applications for vehicles developed using artificial intelligence. This guidance should not prejudice the needs of contracting parties to take additional regulatory steps under the umbrella of WP.29.
 - (e) Upon completion of task (d), the group may consider the need for further continuation of work in this area and, if necessary, make a recommendation to WP.29 for an extension of its mandate.

III. Rules of Procedure

7. Following the Rules of Procedure of WP.29 Chapter 1, Rule 1, the IWG is open to all experts from any country or organization of WP.29 and its subsidiary bodies.
8. The Co-Chairs may invite experts (at their discretion) including non-participants of WP.29, to provide technical expertise and guidance.
9. The Co-Chairs, United Kingdom of Great Britain and Northern Ireland, United States of America and Japan, and three Co-Secretaries from IEEE, SAE international and CITA will manage the IWG. Consultancy services as per the relevant ECE rules and regulations would be provided by the GRVA secretariat, if needed.
10. The working language of the IWG will be English.
11. All documents and/or proposals shall be submitted to the Co-Secretaries of the Group in a suitable electronic format, preferably in line with the UNECE guidelines, in advance of the meetings. The Group may refuse to discuss any item or proposal which has not been circulated five working days in advance of scheduled meetings. This does not preclude the submission of informal documents with shorter deadlines.
12. The anticipated format of the meetings includes online meetings (some in-person meetings will be organized if resources permit).
13. An agenda and related documents will be circulated to all members of the informal working group via the UNECE Wiki in advance of all scheduled meetings.

14. The work process and program will be developed by consensus. Where consensus cannot be reached, the Co-Chairs of the informal working group shall present the different points of view to WP.29. The Co-Chairs may seek guidance from WP.29 as appropriate.
 15. The Co-Secretaries shall prepare minutes or a summary of each meeting.
 16. The Co-Chairs of the Informal Working Group will report on recent, current and anticipated activities during each WP.29 session.
 17. All documents shall be distributed in digital format. The UNECE website shall be used for this purpose.
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