

Workshop on AI in Automotive | Terms of Reference

Applications, Barriers and Opportunities

Webex (Online) - Friday 11 April 2025, 10:30-12:45 and 13:15-16:00

European Commission

Directorate-General for Communications Networks, Content and Technology (DG CNECT)

Directorate-General for Research and Innovation (DG RTD)

Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW)
and Directorate-General for Mobility and Transport (DG MOVE)

Digital technologies are rapidly transforming industries, including automotive, where Artificial Intelligence (AI) —particularly generative AI (GenAI)—is driving innovations improving efficiency, sustainability, and user experience. AI is enabling advancements such as autonomous vehicles, AI-Assisted software engineering, enhanced battery management, optimised routing and data-driven or predictive decision-making. However, it is important to establish a coherent regulatory environment to boost market readiness and commercialisation of AI powered connected, electric and autonomous vehicles.

Global AI competition is intense, particularly in generalist large language models, which are AI systems trained on massive amounts of text data to understand and generate human-like language, with rapid advancements in other global regions. Europe's ability to integrate AI into strategic sectors like automotive will be critical for its competitiveness and economic resilience. The [Automotive Action Plan](#) calls for the launch of a **European Connected and Autonomous Vehicle Alliance** bringing together Europe's automotive stakeholders to shape the development of next-generation vehicles, including innovative AI solutions.

The EU has a unique opportunity to lead in sector-specific AI models and applications by leveraging its industrial data—if it acts decisively and quickly. The EU's policy framework supports this ambition, with initiatives such as the AI Innovation Package and GenAI4EU driving innovation and deployment. The Commission is working with Member States, industry, and civil society to develop a **Apply AI Strategy** to boost new industrial uses of AI. Several challenges remain to achieve this goal. Fragmented ecosystems, limited access to quality data and computing, regulatory uncertainties and public concerns about privacy, job displacement, and fairness need to be addressed.

To address these challenges and seize these opportunities, the European Commission's DG CNECT, in collaboration with DGs RTD, DG GROW and DG MOVE are organising a workshop on (generative) AI in automotive. This event will gather policymakers, OEMs and leading suppliers, startups and researchers, uniting AI and automotive specialists. Insights from the workshop will contribute to shape future EU policies, particularly in research, innovation, and the implementation of AI solutions.

Time	Sessions
10:30-10:45	Introduction and overview of the Automotive Action Plan
10:45-11:00	Framing the discussion: Apply AI strategy
11:00-12:00	Session 1: Current and emerging use cases per Automotive application area: <ul style="list-style-type: none"> - AI tools for increased efficiency in automotive engineering - In-vehicle AI models - Vehicle in a V2X infrastructure
12:00-12:45	Session 2: Challenges in accessing the key factors for the development and deployment of AI in the Automotive sector Panel discussion, followed by Q&A
12:45-13:15	Lunch break
13:15-14:00	Session 3: Regulation as an enabler of innovation – AI Act, Type Approval, regulatory testbeds
14:00-14:45	Session 4: Data sharing and pooling in Automotive: Opportunities for collaboration
14:45-15:15	Session 5: AI model development – computing requirements (training phase), in-vehicle computing (inference)
15:15-15:45	Session 6: AI model deployment – connectivity requirements
15:45-16:00	Closing remarks
16:00	End of Workshop

Further background information

Automotive Action Plan

- [Action Plan to drive Innovation, sustainability and competitiveness](#)

AI strategy and policy

- [European approach to artificial intelligence | Shaping Europe's digital future](#)
- [AI Act | Shaping Europe's digital future](#)
- AI Innovation Package [Commission launches AI innovation package](#)
- [AI Factories | Shaping Europe's digital future](#)

Digital vehicle

- [Digital Vehicle Ecosystem](#)

Data access, sharing, and AI infrastructure

- European Data Strategy [European data strategy - European Commission](#)
- Common European mobility data space [Creating a common European mobility data space - European Commission](#)
- [Unlocking the potential of mobility data | Shaping Europe's digital future](#)
- [Key technologies for the digitalisation of transport | Shaping Europe's digital future](#)

Reports and documents

- Draghi Report [EU competitiveness: Looking ahead - European Commission](#)
- [Commission Recommendation \(EU\) 2024/236 of 29 November 2023 on means to address the impact of automation and digitalisation on the transport workforce](#)