DIGITALEUROPE

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Embracing the future of mobility: a strategy for autonomous driving in the EU

Executive summary

Advanced driver-assistance systems (ADAS) and autonomous vehicles (AVs) hold immense potential to deliver a wide range of societal benefits to Europe. Chief amongst these is improved road safety, reduced congestion and emissions, and enhanced mobility for people with disabilities. In addition, autonomous driving and ADAS represent key future technologies that will underpin the global competitiveness of Europe's automotive sector, unlocking new jobs and important markets.[1]

DIGITALEUROPE welcomes the recognition of these technologies in the EU's Industrial Action Plan for the Automotive Sector.[2] Nevertheless, substantial barriers are to be overcome if the EU wants European citizens and cities to benefit this innovation at scale.

To that end, it is crucial that policymakers take regulatory simplification and coherence across Member States seriously to ensure faster deployment and commercial viability. The following points must be pursued:

▸▸ Develop a **renewed Strategy on Automated Mobility** to identify legislative barriers and propose concrete, actionable solutions to enable (easier) deployment of AVs and ADAS across the EU.

▸▸ Introduce **harmonised rules for public road testing and deployment**.

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[1] https://commission.europa.eu/document/download/ec1409c1-d4b448828bdd3519f86bbb92_en?filename=The%20future%20of%20European%20competitiveness_%20In-depth%20analysis%20and%20recommendations_0.pdf.

[2] https://transport.ec.europa.eu/document/download/89b3143e-09b6-4ae6-a826-932b90ed0816_en?filename=Communication%20-%20Action%20Plan.pdf.

▶▶ Establish **unlimited series approvals** for automated parking systems in 2025, followed by all the use cases regulated under Regulation (EU) 2022/2236 by 2026.

▶▶ Set up an **expert taskforce to assess and streamline EU technology regulations** affecting AVs and ADAS technologies.

▶▶ Allow a broad range of stakeholders and expertise to help shape the **European Connected and Autonomous Alliance**.

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Creating a holistic strategy for AVs and ADAS

The European Commission's Automotive Action Plan rightly aims to improve the regulatory framework and support single market integration for autonomous driving technologies. This aligns with industry's call for a **renewed Strategy on Automated Mobility** – one that clearly identifies legislative barriers and proposes concrete, actionable solutions to enable deployment across the EU. To deliver, the Commission must prioritise the following:

- ▶▶ Remove permitting barriers and harmonise pre-deployment testing;

- ▶▶ Accelerate EU type-approval of AVs and ADAS technologies;

- ▶▶ Create an EU-wide single market for AVs and ADAS; and

- ▶▶ Streamline and modernise the legislative framework.

Whilst the Commission's 2018 Communication[3] on automated mobility was a valuable early step, it has since been outpaced by technological and regulatory developments. It can no longer serve as guiding document today. The Commission must not achieve its own 2026 target for harmonised rules on public road testing and deployment. This milestone is critical to ensure Europe can match the pace of global innovation and begin delivering the benefits of AVs and ADAS to its citizens.

Pre-deployment testing

Today, AV operators and vehicle manufacturers must navigate a patchwork of complex permitting processes to test on public roads. And without sufficient testing on public roads, it is impossible to demonstrate the safety case for commercial deployment. This hinders the development and adoption of these technologies on a large scale.

Currently, permits are issued nationally – and in some cases even regionally. The industry therefore calls for harmonised procedures for pre-deployment testing across the EU. A streamlined, EU-wide framework would facilitate research, development and type-approval whilst ensuring high safety standards.

To this end, the Commission should explore mechanisms for mutual recognition of testing permits between Member States, [4] or consider proposing new legislation to establish fully harmonised European testing authorisations.

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[3] COM(2018) 283.

[4] For example, see: https://sede.dgt.gob.es/es/vehiculos/tramites-para-empresas/vehiculos-de-conduccion-automatizada/pruebas-o-ensayos-de-investigacion/.

This recommendation is echoed in both the Draghi Report[5] and the Automotive Action Plan.

The objective must be to enable AVs and ADAS-equipped vehicles to operate seamlessly across borders within the EU, rather than being limited to a few countries. This would enable the development of important use cases, particularly in the logistics sector.

The EU Industrial Action Plan's reference to updated rules supporting pre-deployment testing on public roads provides a timely opportunity. It should be used to revisit ongoing work in the Motor Vehicle Working Group and simplify current discussions on pre-deployment, in line with the current principles.

Scaling AVs and ADAS type-approval in the EU

Currently, autonomous vehicles can only be type-approved under the small series category, which limits the maximum to 1,500 vehicles that can get type approval per model per year. This constraint stems from Regulations (EU) 2022/2236 and 2018/858, which define the harmonised technical requirements across Europe.

The European Commission has already missed the July 2024 target it set in Regulation (EU) 2022/2236 to enable unlimited series approvals. It is now imperative that the Commission delivers on its commitments under the Automotive Action Plan: unlimited series approvals for automated parking systems in 2025, followed by all the use cases regulated under Regulation (EU) 2022/2236 by 2026.

Furthermore, the type-approval of ADAS technologies depends exclusively on the United Nations Economic Commission for Europe's (UNECE) Driver Control Assistance Systems (DCAS) framework, in an attempt to regulate a technology not yet on European roads. In the UNECE's Task Force dedicated to ADAS, which sets type-approval rules for all of Europe, a group of Member States (the United Kingdom, the Netherlands, Norway and Sweden) are blocking further discussions on urban deployment of ADAS until additional data is made available to them.[6] Yet, the use of ADAS in urban environments is currently prohibited, with the exception of testing.

The current DCAS phase 2 allows a very limited use of ADAS technologies – such as system-initiated manoeuvres – and restricted to highway use. Phase 3 (L1-L2 continuous driver assistance), which would enable urban deployment, remains prohibited without any looming change, because of the aforementioned stalemate. This impasse denies European cities the safety-

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[5] See Mario Draghi, *The Future of European Competitiveness, Part B: In-depth analysis and recommendations*.

[6] https://wiki.unece.org/download/attachments/271090114/ADAS-37-06%20%28NL%2CNO%2C%20SE%2C%20UK%29%20Evidence%20Request%20for%20DCAS%20safety.docx?api=v2.

enhancing technologies that cities in the US and Canada already benefit from every day.

To remain competitive, uphold safety standards and bolster innovation, the EU must take a more active role in shaping and accelerating its type-approval processes.

Creating a single market for AVs and ADAS

The Draghi report states that '(…) road transport suffers from fragmentation. Across the EU, traffic rules and basic vehicle standards diverge widely, and so does the regulatory framework for innovative mobility. This limits the capacity to roll out new mobility solutions, such as automated vehicles, and new mobility services (with some Member States unilaterally applying outright bans).'

This fragmentation affects everything from inconsistent road signage – even at the municipal level – to bans on hands-free driving, which ADAS technologies can enable under strict conditions. These inconsistencies undermine the development of a single market for AVs and ADAS, stifling innovation and scalability.

Permitting of AV passenger services

One key area in need of harmonisation at EU level is the permitting of AVs passenger services. This would facilitate the deployment of AVs services without placing an unnecessary administrative burden on businesses and avoiding fragmentation across the single market.

To address this, the Commission should work towards **mutual recognition of AV passenger service licenses**. This would ensure that AV services can benefit from scalability and operate cross-borders, without barriers.

DIGITALEUROPE encourages the Commission to assign resources – such as a dedicated task force – to exploring scaling passenger services across the EU. This would be paramount to unlock the potential of AVs in the EU single market.

A streamlined legislative framework for AVs

The automotive industry is undergoing a profound transformation driven by Artificial Intelligence (AI). From automated driving capabilities to predictive maintenance systems, AI-powered technologies are reshaping the way vehicles are designed, developed, operated and maintained. AI enables the development of higher levels of automation with vehicles capable of navigating complex environments with minimal human intervention. This is nothing less than promising to revolutionise personal mobility, public transportation and logistics.

Vehicle manufacturers and suppliers are at the forefront of incorporating these AI technologies into vehicles, pushing the boundaries of innovation and safety in the automotive sector. OEMs are investing heavily in R&D to integrate AI into their products, ensuring that new vehicles meet the highest standards of safety, efficiency and user experience.

However, the EU risks discouraging innovation and investments by overregulating and pre-emptively regulating all aspects of nascent technologies like AVs and ADAS technologies before there is even a market. Currently, overlapping legislation creates uncertainty and regulatory burdens that can be costly to comply with. For example, rules on repair and maintenance of ADAS technologies already impose obligations – even though there is very limited use of ADAS, and under strict conditions.

In line with President Von der Leyen's political guidelines and the current Automotive Action Plan, the Commission should strive to make business easier in the autonomous mobility sector, by **simplifying legislation, centralising requirements and cutting red tape**.[7]

In this regard, we welcome the legislative pause given to upcoming proposals such as access to in-vehicle data, functions and resources that would create an obstacle to the development and deployments of AVs and ADAS, especially when the EU Data Act is still to be fully implemented.

Expert Taskforce on Streamlining AV Regulation

Simplification has been a core principle of the current European Commission, and it should be extended to autonomous mobility, sitting at the heart of complex and conflicting regulations.

To address regulatory complexity, the European Commission should establish an expert taskforce to assess and streamline EU technology regulations affecting AVs and ADAS technologies. This taskforce should include both public and private sector representatives, and be directed to identify duplication of requirements and produce a set of interservice recommendations on regulatory simplification measures. This would spur the competitiveness of the EU's autonomous mobility industry.

European Connected and Autonomous Alliance

The European Connected and Autonomous Vehicle Alliance, as currently proposed in the Action Plan, suggests that only European companies can participate. This carves out expertise and contributions from non-EU companies.

International actors should be allowed to participate in the ecosystem, where appropriate, as this will significantly help EU innovation to flourish. Additionally,

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[7] Political Guidelines 2024-2029.

we recommend avoiding any overlap with the valuable work already being done by established groups, such as the CCAM Partnership.

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