

CLEPA comments on the European Commission's White Paper on Artificial Intelligence – A European approach to excellence and trust

CLEPA represents the European automotive supplier industry. An average passenger car is made of around 30,000 parts, making up approximately 75% of the vehicle's total value. Suppliers provide all type of vehicle parts and components, including powertrain, chassis and frame, brakes, lighting, interior, electronics, and software.

Automotive suppliers play a central role in the development of connected and automated vehicles. Artificial Intelligence (AI) applications are becoming more and more common in vehicles: automated driving is the most well-known example, but a broad range of other applications are also concerned, such as a number of vehicle safety functions, comfort functions, advanced driver-assistance systems (ADAS) warnings, connectivity systems, infotainment systems, etc.

1) General comments

- CLEPA welcomes the White Paper on AI, and believes that an appropriate legislative framework can boost the development and uptake of AI in the EU, by providing market participants more legal certainty, and by ensuring consumer trust in AI products.
- We support the high-risk vs non high-risk approach proposed, with mandatory ex-ante requirements for high-risk applications.
- We agree that certain transport-related applications should be considered high-risk, however we urge the Commission to make clear that some transport-related applications may not be high-risk (e.g. infotainment, comfort functions, ADAS warnings...). This should be made clear in the upcoming legislative framework, and these applications exempted from the ex-ante requirements.
- CLEPA supports setting up horizontal fundamental principles on AI to increase trust in the technology and guarantee the necessary level playing field between market players. Nevertheless, automotive suppliers would prefer a sector-based or product-based approach for the upcoming regulatory framework and its compliance mechanism. The automotive sector is very specific (details further down) and should not be covered by a one-size-fits-all cross-sectoral legislation which would not be adapted to the way automotive products are developed, produced, tested, and put on the market.

- We recommend that the Commission be more specific in its definition of “artificial intelligence.” How AI is defined will have important consequences on the scope of the upcoming legislative framework. Therefore, the Commission should ensure proper consultation of both experts and economic actors. Similarly, the Commission should consider differentiating between different types of artificial intelligence, for example: machine learning and deep learning. This is especially relevant for technologies used in ADAS and automated driving. Each type of technology presents different kinds of risks, and this should be taken into account when designing the legislative framework.
- We stress the importance of not hindering innovation unnecessarily. Requirements should always remain proportionate to the possible risks and leave room for testing/experimenting. In addition, a balance must be achieved to ensure that the goals of this new initiative do not jeopardise the global R&D’s contribution to safer and cleaner vehicles. We support technically justified requirements, which do not discriminate AI developed in non-EU countries.

2) Automotive-specific

- The automotive sector is already subject to strict ex-ante conformity controls (type approval). We believe that AI-related requirements for our sector should be included into that existing framework, rather than as a new set of requirements controlled separately. It is of paramount importance that certification, testing, and market surveillance are not duplicated. Aside from the implications in terms of additional costs and administrative burden, it would create a risk of inconsistencies arising between the requirements under type approval and those under the new AI framework, as both would cover safety and AI applications in automotive are deeply integrated in the vehicles’ systems.
- In addition, the new requirements that will be introduced should take into account the development cycle length of automotive products. Vehicles with automated functions that will be on the roads in the next few years are being trained and it is important manufacturers have a suitable timeframe to comply with the requirements.
- For those vehicle types that fall out of scope of the EU type approval framework (e.g. last mile delivery, off-road vehicles, etc.), the AI framework should apply. This ensures sufficient level of performance/redundancy and transparency in the development of non-road vehicles whilst excluding them from unsuitable passive safety requirements.
- Workstreams should be coordinated to avoid duplication and/or conflicting requirements. Discussions on automated driving are already ongoing at the UNECE, the UN body which develops many of the vehicle technical standards that apply in the EU. In addition, the recently revised General Safety Regulation (GSR) also made mandatory a number of safety measures, which may rely on AI: the delegated and implementing acts that will set the technical requirements for these measures are currently being drafted. The EU legislative framework on AI and the UNECE requirements for Automated Driving Systems (ADS) should be aligned, with future UNECE requirements to be considered valid AI-related requirements, rather than adding another regulatory layer.

3) Liability

- From the perspective of the automotive sector, the current EU legislation on security, liability, and responsibility is effective and does not need to be fundamentally changed for artificial intelligence. The Product Liability Directive (PLD), in particular, already provides a sound legal basis to address consumer protection and may therefore serve as a foundation for discussions and evaluations with respect to effective consumer protection and compensation for AI products.
- Therefore, we believe that any revision of the current EU legislation should be assessed carefully. The review should focus on whether and to what extent AI applications and their specificities are addressed by the current liability framework.
- We support clarification of the term “product” as used in the PLD so as to allow for product liability claims if any relevant automotive product or service has not complied with or neglected safety standards and other state-of-the-art requirements and, in doing so, did not comply with justified safety expectations of the public/end users, and as a result damage has been caused.
- CLEPA believes that every market participant whose product is making use of AI technology has to ensure that the technology is reliable, comprehensible, secure, and safe – to the extent that it can be reasonably expected from the market participant’s product (justified safety expectations, see above).
- We would welcome more legal certainty from the Commission on how liability in case of damage is to be determined in the context of AI applications, which may act as a “black box” and whose decisions made by machine learning algorithms cannot necessarily be explained. A common understanding would avoid different interpretations in each Member State and, thus, a national fragmentation of the internal market.

4) Mandatory requirements

- Before the Commission proposes a legislative framework, CLEPA recommends a case study on its application to automotive (e.g. for automated driving), to ensure that any requirements proposed are technically feasible.

a. Data sets

- Any requirements on data sets that will be imposed by the upcoming legislative framework should take into account the development cycle length of automotive products, which includes time for testing and certification. Vehicles with automated functions that will be on the roads in the next few years are already being trained now.
- Among state-of-the-art technologies is the use of pre-trained models, where it is not always possible to refer to all the data the system has been trained with. The criteria suggested by the White Paper might make the use of pre-trained models impossible.

- With regards to the requirement of keeping records and data, CLEPA stresses that this would require significant effort to catalogue, store, and maintain (e.g. fully historicise all data and models). In application areas that operate on low margins, AI applications might become economically not feasible.
- Coverage of data sets, and their quality, can be critical for the safety of high-risk applications and should be assessed by demonstrating compliance with safety requirements under vehicle type approval or other established automotive standards.
- While coverage, and more generally quality of data, is important, it should not be a mandatory requirement. With certain techniques, such as semi-supervised learning, it is possible to train good systems even on datasets that are not of the highest quality, which is especially useful when the highest-quality datasets might not be available, or be prohibitive or unsustainable in terms of time, costs, and safety. Furthermore, there is currently no widely agreed upon tool that exists to define and assess the quality of a dataset.
- It is typical that deep learning algorithms are developed using three datasets for: training, validation, and testing. Models are fitted using the training dataset, while the validation dataset is used during the training process to verify the quality of the current fitting. The testing dataset is used to verify the performance of trained models after training has finished. All three datasets are carefully constructed to suit their purpose. There should only be specific obligations on manufacturers to ensure AI systems are tested on data sets that are sufficiently broad, the data that is used in the training and validation phases should be dependent upon the manufacturer.
- We would like further clarification on the requirements outlined in the White Paper, regarding in particular the non-discrimination and privacy requirement, and how these should be taken into account in the context of automated driving applications.
- Regarding cybersecurity provisions for data sets, CLEPA believes there is no necessity at the moment for cybersecurity certification schemes for automotive AI products over and above the applicable type approval regulatory requirements. CLEPA is nevertheless ready and available to contribute via the relevant channels at both the European Commission and ENISA, the Agency for Network and Information Security (e.g. in the Stakeholder Cybersecurity Certification Group), in carefully assessing if any additional cybersecurity schemes may address further risks associated with the intended use of AI products in the automotive sector. In fact, it is of utmost importance to cater for the specificities of the automotive sector, which cannot be covered adequately by generic or IT product legislation. Moreover, it is essential to ensure alignment of the cybersecurity principles and methodologies in EU legislative acts, UN regulations and international standards such as ISO.

b. Information provision

- With regards to the obligation to inform consumers/users that they are interacting with an AI, automotive suppliers should have the duty to inform their direct customers (vehicle manufacturers, or other suppliers for tier 2-3 suppliers), but the responsibility for informing the end consumer should rest on vehicle manufacturers.

c. Robustness and accuracy

- The requirements proposed by the Commission in the White Paper are relevant for products that are not already subject to strict performance assessments. Automotive products already undergo type approval, and the requirements should be checked under this existing framework (as per our remarks above).
- Robustness would need a clearer definition, with strict limits, so as not to impose technically unfeasible requirements (e.g. against adversarial attacks).

d. Human oversight

- We agree that AI systems must remain under the principle of human oversight, but the specific context of automated driving should be taken into account. It is not possible to oversee every single decision taken by an automated car, due to most decisions being taken in real time. The human oversight should therefore be conceived as an ex-ante verification of the logic of the decision-making for automated and fully automated vehicles.
- One possibility of human oversight mentioned in the white paper is imposing operational constraints on the system, for example by imposing rules on the behaviour of a fully automated vehicle in the design phase. The guidelines on the exemption procedure for the EU approval of automated vehicles, developed by the Commission and Member States in 2019, give five main rules to the behaviour of an automated vehicle: “the vehicle shall be able to keep a safe distance with other vehicles in front, exhibit caution in occluded areas, leave time and space for others in lateral manoeuvres, be cautious with right-of-ways, and if an accident can be safely avoided without causing another it shall be avoided.” CLEPA suggests addressing the issue of human oversight by defining formal rules in order to assess the behaviour of automated vehicles during the conformity assessment phase. This should be done by establishing a transparent, technology-neutral, and performance-based evaluation of the decision-making of automated vehicles, following the key principles already defined in the 2019 guidelines.
- Human oversight requirements should also not unduly restrict machine learning applications.

e. Biometric identification systems

- We would like some clarification on what would be considered biometric identification (e.g. facial recognition). Some safety-related automotive applications, such as driver awareness/drowsiness monitoring or external sensors, may scan human faces but should not be considered facial recognition as they do not pose risks for fundamental rights as described in the White Paper.
- Clarification would also be useful as to the meaning of “public spaces.” Personal cars are usually not considered to be a public space, but the definition becomes blurrier for company cars, carpooling vehicles, taxis, or robo-taxis.

5) Voluntary labelling scheme for low-risk AI

- While a voluntary labelling scheme could, in principle, be a useful addition for low-risk applications, CLEPA considers it difficult to support such a scheme without knowing how it would be implemented practically. AI applications are often incorporated into other products. Will the label apply for AI algorithms? for products? for companies? How will KPIs be defined? We urge the Commission to provide more clarity on how such a scheme would work.
- Before any type of voluntary labelling scheme can be introduced, transparent rules and metrics based on international standards would have to be agreed upon. National schemes should be avoided in any case.

About CLEPA

CLEPA, the European Association of Automotive Suppliers, represents over 3,000 companies supplying state-of-the-art components and innovative technologies for safe, smart, and sustainable mobility. CLEPA brings together over 120 global suppliers of car parts, systems, and modules and more than 20 national trade associations and European sector associations. CLEPA is the voice of the EU automotive supplier industry linking the sector to policy makers.

- The automotive sector accounts for 30% of R&D in the EU, making it the number one investor.
- European automotive suppliers invest over 25 billion euros yearly in research and development.
- Automotive suppliers register over 9,000 new patents each year.
- Automotive suppliers in Europe generate five million direct and indirect jobs.