



EARPA's ad-hoc input for the preliminary consultation phase for the next European Framework Programme for Research and Innovation (FP10)



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EUROPEAN AUTOMOTIVE RESEARCH PARTNERS ASSOCIATION





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The European Automotive Research Partners Association (EARPA) is an independent alliance that brings together the most prominent Research and Development (R&D) providers in the field of road transport across Europe. As of 2024, EARPA consists of 61 members, encompassing small and medium enterprises, large commercial organisations, research institutes, and universities. EARPA is committed to actively contributing to the European Research Area and future EU Research and Innovation (R&I) programmes.

According to EARPA's perspective, the road transport system should be considered in an integrated approach with related sectors. The challenges and the technological progresses in the other transport sectors, as well as the developments in the energy and industrial sectors, have a significant impact on road transport and vice versa. Moreover, it is imperative to consider the current and evolving economic, environmental, societal and geopolitical boundary conditions which characterise our time. This will ensure that the European research system invests its resources and efforts in delivering solutions that respond to actual user needs, with the ultimate aim of addressing the most pressing societal and environmental challenges and contributing to the prosperity, stability and competitiveness of the European economic area.

With these elements in mind, **EARPA's vision for the future of road mobility** is based on the necessity of a systemic approach which encompasses interfaces to rail, waterborne and airborne transport systems, to the energy sector, to the manufacturing industry, to the raw material (re-)sourcing industry, and, ultimately to society and policy makers. Such an approach must consider at its core both the specific and diverse needs of the European Union Member States, as well as ongoing developments in different regions of the world. Concerning the latter, it is of utmost importance to strengthen transatlantic cooperations, address challenges and opportunities arising from Asian markets, and engage with emerging economies with renewed interest and consciousness of the fact that no one can be left behind in the pursuit of a better and prosperous future.

Expanding on this approach and consistently with its High-Level Position Paper (2023), EARPA's vision for future road transport is underpinned by six core system features:





The transition towards this future of road mobility is challenged by a multitude of factors such as access to resources, including raw/processed materials and affordable energy, robustness of their supply chains, as well as availability of skills, know-how and effective protection of intellectual property. Moreover, challenges related to climate change and other environmental issues, global disruptive events such as the pandemic, on-going demographic changes, as well as the geopolitical tensions that have emerged in the early years of this decade, have highlighted the **"need for resilience"** among the top priorities for our society and economy.

With these considerations in mind, the next European Framework Programme for Research and Innovation (FP10) offers Europe a great opportunity to move forward towards common goals, pooling resources, efforts, and talents. With respect to road transport, EARPA herewith provides seven high-level key recommendations to serve as input for the consultations for FP10, with the aim of informing the process in its preliminary phase:

• While European transport policy needs to stay closely aligned with climate and energy policies, mobility remains a fundamental need of EU citizens. Research in FP10 should pave the way towards a future European road transport system that will be sustainable, user-focused, safe, trustworthy, accessible, and inclusive. Specifically, collaborative research shall focus on **delivering technological innovations accessible to all European citizens** and answering their needs, with a focus on passenger transport for low-income groups and Member States.





- In addition to the societal elements above, resilience and competitiveness are key elements for the European automotive and transport industry. Collaborative research shall focus on **delivering vehicles and components' technologies that rely, as little as possible, on scarce raw materials and undiversified supply chains**, boosting "designed- and made-in-Europe" solutions, capable of responding to local and global demands. Where applicable, these shall leverage a systemic approach to transport, and be suited for all kinds of road vehicles, while exploiting business-to-business and business-to-customer digitalisation opportunities as an accelerator in this endeavour.
- Beyond evolving societal and economic aspects, the environmental challenges remain a main driver in transport. Net-zero emissions and environmental factors along the full life cycle of road vehicles and infrastructures are essential to ensure the environmental sustainability of the road transport system as such. Collaborative research shall play a key role in creating major advancements in the transition to circularity, energy and resource efficiency as a means to strengthen European technological sovereignty in the road transport industry and to reduce the environmental impact of road transport.
- Revising the current European freight and logistics model is of primary importance. Despite recognising the importance of e-commerce, especially during the pandemic, it is evident that the current distribution model, allowing for a high return rate of parcels, is unsustainable in the long term. While designed for customer convenience, the incessant cycle of returns amplifies carbon emissions, congestion, and operational costs. Collaborative research shall **support the implementation of a paradigm shift in all kinds of freight transport**, emphasising sustainable practices and consumer as well as company responsibility while delivering the methods and tools for implementing a more responsible yet convenient freight and logistics model.
- The EU's ambition of moving close to zero road fatalities and serious injuries (Vision Zero) by 2050 remains a huge challenge which research can help to master. Funding support for European road safety research needs to be upgraded significantly, maintaining support for CCAM, but increasing attention on active modes, human factors and on rural roads. Research should follow the Safe System Approach, comply with the mind-set of Vision Zero that no loss of life is acceptable and consider the idea of traffic safety footprint, i.e. the concept of all organisations having a responsibility for the consequences of road crashes in their value chains.





- Lower transport volumes could ease many challenges for the European road transport system. Collaborative research can **support the delivery of methods**, **tools and approaches to decouple personal freedom and economic prosperity from transport volume, promoting responsible behaviour**, while ensuring system's resilience and responding to EU citizens' basic needs in case of disruptive events.
- Emerging technologies from other sectors can be used to further transition the road transport domain, as described above. Collaborative research can **support the fast uptake of such emerging technologies, making them suitable for large scale implementation in road mobility**, such as for digital tools, cyber security solutions and cradle-to-grave development approaches.

In addition to the contents summarised above, EARPA intends to emphasise the continuous effort of its members in educating and promoting the professional development of engineers, economists, researchers, and decision-makers of tomorrow. A joint approach of universities, research centres and industrial players in educating students and training talents is key to counteract the growing lack of skilled workforce, boost technological leadership and strengthen the competitiveness of Europe. This is a critical element that needs to be emphasised and supported by additional funding in FP10.

In addition to these high-level key recommendations, EARPA proposes to further develop the administrative implementation of the European Framework Programme for Research and Innovation accounting for the following seven administrative recommendations:

- Account for the competences of the researchers and organisations involved in the preparation and execution of the activities and boost the impact of a coherent portfolio of research and innovation projects as merit criteria in the evaluation phase, in addition to the intrinsic quality of the individual proposals.
- Improve the execution of the current European proposals' evaluation process. Specifically, excessively shortened evaluation schedules combined with the necessity of multiple parallel panels to face large numbers of submitted proposals under specific topics are seen as key elements to address. This shall be done in the interest of increasing the quality and robustness of the evaluation process.





- Maintain the sizing of the funding per project and the granularity of the programme at a level which will result in competition for the assignment of the funding while avoiding an excessive number of submitted proposals.
- Facilitate the transition from "time-based" to "performance-based" funding by a funding scheme which really simplifies reporting processes, does not result in significant additional effort in the proposal preparation phase as known from the current lump-sum concept and includes fair, flexible and non-bureaucratic approaches to evaluate performance in research projects. This should allow all involved parties to focus on research contents rather than on administrative issues.
- Further develop appropriate channels to inform national and/or regional funding bodies to consider the possibility of providing additional funding to highly ranked proposals which have not been funded by the EU, hence truly implementing enhanced synergies between national and EU funding schemes.
- Review the possibility to fund higher overhead rates, specifically when these are directly linked to the use of cost-intensive research infrastructures. This will allow R&D providers and non-profit organisations to ease the constraints of cross-financing their participation in European research actions.
- Implement a flexible and dynamic decision-making process for research and innovation priorities. In the presence of uncertainty, unforeseen technological developments, and other disruptive events, research needs may emerge faster than the development of work programmes usually takes. Therefore, a financial mechanism capable of implementing fast interventions, where needed, may be beneficial for timely reactions.

In terms of implementation tools, EARPA strongly recommends the continuation of Co-programmed Partnerships - in particular the 2Zero and CCAM Partnerships - as an excellent means to bring competences together, pool resources, develop coherency in future research and innovation priorities and effectively address key road transport challenges with ambitious yet realistic targets.

EARPA and its members look forward to continued, successful collaboration in road transport research across Europe, working closely with the European institutions and stakeholders. Embracing a system approach, both technological and non-technological solutions emerging from future EU road transport research will contribute to a systemic, sustainable evolution of the European mobility system.





Based on the contents, observations and recommendations described in this paper, EARPA proposes a budgetary increase for the next European Framework Programme for Research and Innovation (FP10) which accounts for: (i) compensating the cumulative EU-wide inflation in the period 2021-2027 (equalling to 34.5% cumulative in the period May 2020 – May 2024, as per EUROSTAT data<sup>1</sup>) and (ii) for the need of mobilising adequate resources to effectively face environmental, societal, and economic challenges of our Union until 2035.

This should result in a basis for negotiation for the next MFFP (Multi-Annual Financial Framework Programme) in the range of 160-220 billion EUR in the period 2028-2034. EARPA advocates that the lower hard limit for MFFP negotiation shall be set at 160 billion EUR in the period 2028-2034. A lower value is, realistically, a step back compared to the ambition of the Horizon Europe programme and New Green Deal, seriously undermining the ability of the European Research Area to innovate and deliver the technological progress needed to secure the position of its Member States, industries, and research partners in the future of the green economy.

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