



**ECTRI POSITION PAPER
ON THE
RESEARCH AND INNOVATION
FRAMEWORK PROGRAMME 9
(FP9)
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The European Conference of Transport Research Institutes (ECTRI) is an international non-profit association that was officially founded in April 2003. It is the first attempt to unite the forces of the foremost multimodal transport research centres across Europe and to thereby promote the excellence of European transport research.

Today, it includes 27 major transport research institutes or universities from 20 European countries. Together, they account for more than 4,000 European scientific and research staff in the field of transport. ECTRI as the leading European research association for sustainable and multimodal mobility is committed to provide the scientifically based competence, knowledge and advice to move towards a green, safe, efficient, and inclusive transport for people and goods.

European Conference of Transport Research Institutes | ECTRI aisbl

Rue du Trône 98 | 1050 BRUSSELS | Belgium

Tel: + 32 (0)2 500 56 87/88 | Fax: + 32 (0)2 500 56 89

Number: 831 370 370

Website: www.ectri.org

Contact: Caroline Alméras, Secretary-General

E-mail: caroline.almeras@ectri.org

The need for transport research

Transport has traditionally been considered as a crucial contributor to the EU vision “to promote economic and social progress for their peoples, taking into account the principle of sustainable development” [Preamble of the Treaty of the EU]. Accordingly, the EU has fostered significant competencies in the transport sector, and it was felt that the deployment of these competencies, in cooperation with Member States, should be supported by rigorous research, as the best possible basis to attain first-class transport systems aligned with the social, environmental and economic objectives of the EU. Its transport policy and behavioural research for sustainable mobility are at the heart of Europe’s economy and peoples’ well-being. Addressing peoples’ needs in terms of mobility and accessibility along with promoting the desired changes in behaviour towards low carbon modes will ensure economic and social progress.

The **transport research and innovation communities have delivered substantial results**. The global transport conversation is deeply influenced by key Europe-born concepts and technologies, such as sustainable mobility, multimodality, shared mobility, e-mobility or integrated networks for people and goods. There is wide consensus within the global research community around the key societal challenges ahead concerning the environmental impacts of transport, climate change mitigation and adaptation, energy efficiency, and social equity and cohesion.

The EU stakeholders’ and decision makers’ attention has increasingly turned towards the implementation of research results and the market attainment of innovations in transport and other sectors. Beyond the involvement of the industry, successfully attained in FP7 and H2020, the successful completion of the research-to-markets deployment cycle requires two additional conditions: **sound research and innovation chain providing a long-term perspective, and consistent transport policies**, providing innovators and entrepreneurship with a favourable framework to access markets. Both conditions should be at the core of FP9.

The Lamy-High-Level-Group-Report rightly stresses these needs. Furthermore, it recalls that successful policies should be **integrated**, and should go **across traditional borders, disciplines and sectors**. Transport can substantially contribute to improved development planning in energy and other relevant fields such that future transport reflects an interactive ecosystem for sustainable mobility for all. This will allow synergies with structural funds and rationalize resources for these pressing challenges. It becomes urgent to move beyond the usual comfort zone in transport research, and to face up to the broader challenges the EU and the world are facing. The Lamy report proposes to establish FP9 around a number of transdisciplinary missions, and transport could be a valuable contributor to many of them. Transport can substantially contribute to coping with the challenges ahead, such as mitigation and adaptation to climate change, the attainment of more sustainable and resilient cities and regions, or the improvement of living conditions and quality of life for all.

ECTRI’s Vision on FP9

ECTRI asks for a **well-funded research and innovation programme** as the correlation between investments into research and economic growth is evident. This has been considered e.g. by the European Council in 2002 to set the objective to raise overall R&D investment to 3% of GDP by 2010. This goal has not been reached so far. The Lamy-High-Level-Group-Report recommends a “seven-year budget of at least €120 billion in current prices”. ECTRI suggests following this recommendation. A well-funded framework programme will promise a significant European added value and cater to a prosperous and sustainable Europe as stated in the Declaration of Rome (2017). Appropriately funded research and innovation can also help to mitigate oversubscription which will lead to an increase in attractiveness of the programme and a considerable increase in efficiency for applicants.

We ask for an **evolutionary development** that continues and builds on the success of Horizon 2020. We suggest gradually improving the well proven framework conditions, well-balanced three-pillar structure, instruments (JTI, cPPPs etc.) and rules of participation.

We see **transnational and multidisciplinary collaboration in research and innovation** projects as a core asset of the current and upcoming framework programme. It fosters international and interdisciplinary networks of excellent research and innovation across Europe. It also facilitates cross-sector activities and bridges between research, higher education, industry, innovation and stakeholders. Hence, we are asking to keep collaborative research and innovation projects throughout the framework programme and maintain their attractiveness despite parts of the programme being segregated in instruments such as JTIs and cPPPs with more complex thresholds of participation.

The key strength of European research and innovation projects manifests in multi-stakeholder projects. We ask to continue the effort of H2020 to be attractive for **industry participation** as we see this sector to be crucial for the success and the relevance of European projects. Even though private sector participation has been decreasing in numbers in some sectors it is evident that key instruments show a dominance of this sector. This is particularly tangible e.g. in JTIs like Shift²Rail which has been designed by an industrial stakeholder association and is manifested with eight founding members coming from the private sector. We underline the importance of a well-balanced participation from all sectors and a fair balance in governance in these instruments.

H2020 is very focussed on innovation and streamlined its instruments, such as JTI and cPPP, towards this goal. Currently, we see that the increased efforts towards innovation show a clear impact in terms of favouring high-TRL research in the framework programme. In terms of achieving long term innovation goals we ask for a **good balance between all research and innovation stages** in the next framework programme to provide a good basis for tomorrow's innovation by preparing the necessary research for that today.

Excellence needs to be the key criterion to assess project proposals. We recognise the necessity to assess impact for projects as well. Impact is particularly relevant for high-TRL research and innovation. We ask for a sensible way to support low-TRL research, that allows preparing fundamental results that can be picked up and developed into mid and higher-TRL in later stages, omitting the need to state high-impact and to be compared with high-TRL projects.

ECTRI welcomes the idea of the **European Innovation Council (EIC)** to address the crucial innovation process from research into commercialised and accepted products and services bridging the "valley of death". The EIC can also help to mitigate the undesirable effects of focussing on impact throughout the framework programme by instead offering a dedicated funding schema addressing high-TRL, high-impact pre-commercial research and innovation and prioritising impact as key evaluation criterion.

We appreciate the efforts to simplify the rules for participation. We suggest introducing **lump sum funding** for smaller projects to relieve the administrative burden on both sides while maintaining the well proven schemes (such as RIA, IA, CSA) for larger projects. Lump sums funding can increase the quality of deliverables since payments are coupled to qualitative threshold. We cannot recommend other funding mechanisms, such as loan based funding, for research and innovation projects as those would prohibit participation for large clusters of beneficiaries, e.g. non-profit organisations and public research organisations. Those mechanisms can be useful in pre-commercial activities as envisioned by the EIC.

Recently, the European Defence Agency has introduced a Preparatory Action on Defence Research (PADR) as a forerunner for general defence research. We strongly suggest keeping **defence research** separated from FP9. Defence research by nature is of a different scope and requires different mechanisms e.g. in rules of participation, openness and IPR. Hence, this should be segregated from civil research in a separate programme with its own funding.

Mission for an integrated, low carbon and socially inclusive mobility for all

We see benefits of accelerating the research and innovation cycle through the use of focused **missions** in key areas. Missions should focus on solving pressing challenges, increasing the competitiveness of the industry on a global scale and improving the liveability of citizens. Missions should be wide in scope, integrate and harmonize current instruments (JTI, cPPP, KIC) and ensure that the whole research and innovation cycle is covered; from low TRL to high TRL including policy implementation.

Given the importance of the transport sector in achieving the United Nations Sustainable Development Goals (SDG) as well as the ambitious commitments of the Paris Climate Agreement, in the light of the significance of the transport sector in realising the Energy Union, Digital Single Market and the Jobs, Growth and Investment agenda of the Commission, and the importance of the transport sector for the citizens of Europe, an ambitious **Mission for an integrated, low carbon and socially inclusive mobility for all** is called upon.

Transport is expected to continue to grow across Europe while already today being a major contributor to Europe's emission of greenhouse gases. Air pollution generated by the transport sector is a threat to public health and on European roads there are still more than 25,000 fatalities annually. Citizens spend gigantic amount of time in transport, and this is worsened with increased congestion. The transport system of today is **unclean, unsafe and inefficient**. At the same time, transport and mobility is a large economic sector in Europe, e.g. the European automotive industry provides jobs for 8 million people.

A European mission to create the future multi-modal transport system for all should be a "Vision of Zero" and include **visions of zero emissions of greenhouse gas and air pollution, zero accidents and zero use of unproductive time in transport**. It is a mission for a clean, safe and efficient mobility system for all, solving current pressing challenges, developing a new industry and service sector, and improving the health and the living of citizens.