

EUCAR position on Horizon 2020

Executive Summary

EUCAR welcomes the European Commission's proposal for a regulation establishing Horizon 2020 – the Framework Programme for Research & Innovation. We also welcome the proposals for a Council regulation implementing the specific programme Horizon 2020 and for a regulation laying down the rules for participation and dissemination.

This paper presents the position on Horizon 2020 of the European Council for Automotive R&D (EUCAR), representing the 14 major European automotive manufacturers. It addresses the general concept of Horizon 2020 as well as specific sections and articles of the Commission's proposal. This paper complements the 12th March EUCAR paper on administrative aspects of the proposal for the rules for participation and dissemination of Horizon 2020. Our main recommendations are as follows:

- The proposed budget for Horizon 2020 of €80bn should be at least maintained, as this figure is the minimum necessary to ensure a continuation and enhancement of EU R&I following on from the Seventh Framework Programme.
- It is essential that the legislative package for Horizon 2020 be completed not later than mid 2013, to enable timely commencement of the programme and in particular the R&I work programmes and calls relating to its first active year, 2014.
- The broad lines of activities described in Annex II of the proposal for a Council decision implementing the specific programme Horizon 2020 are considered to be well balanced and it is unnecessary to make changes to the descriptions in this Annex. In the Societal Challenges pillar this applies in particular to the programme on Smart, Green and Integrated Transport as well as the programmes for energy and climate. In the Industrial Leadership pillar it refers to ICT, advanced materials and advanced manufacturing and processing.
- The Horizon 2020 programmes as described in the legislation must enable a number of essential initiatives for automotive R&I in Horizon 2020. These include advanced powertrains for increased efficiency, ICT for mobility, ICT as an enabling technology for manufacturing, integrated safety, advanced materials and manufacturing as well as heavy duty vehicles and green corridors.
- A European Green Vehicles Initiative acting as a Public-Private Partnership, focusing on efficiency of the vehicle including electrification, is an essential element of these initiatives.
- To reflect the economic and social importance of the automotive sector in bringing cleaner, safer, smarter transport and a more competitive European industry, EUCAR calls for budget contributions totalling €5bn, to support the above automotive R&I initiatives in Horizon 2020.

About EUCAR

EUCAR is the European Council for Automotive R&D from the major European passenger car and commercial vehicle manufacturers. EUCAR facilitates and coordinates pre-competitive research and development projects and its members participate in a wide range of collaborative European R&D programmes. The European automobile manufacturers are the largest private investors in R&D in Europe with over €26 billion investment per annum, or 5% of turnover. EUCAR members are BMW, DAF, Daimler, Fiat, Ford of Europe, GM/Opel, Jaguar Land Rover, Porsche, PSA Peugeot Citroën, Renault, Scania, Volkswagen, Volvo Cars and Volvo Group. EUCAR is closely connected to ACEA, the European Automobile Manufacturers Association.

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General provisions

EUCAR welcomes the proposed budget for Horizon 2020. The budget of €80bn is the minimum necessary to ensure a continuation and enhancement of the Seventh Framework Programme.

As a priority, it should be ensured that the legislative package for Horizon 2020 is completed as early as possible, and not later than mid 2013, to enable timely commencement of the programme and in particular the R&I work programmes and calls relating to its first active year, 2014.

The annex to this paper includes comments on specific articles in the legislative texts. In particular, we recommend amendments to the text of Annex I of the proposal for a regulation establishing Horizon 2020 referring to transport, to highlight in an appropriate manner the social and economic importance of the transport and automotive sector. In addition, we include a number of importance reflections on the proposals relating to dissemination, reiterating the need for appropriate protection for intellectual property in the context of EU co-funded R&I projects.

Opportunities presented by Horizon 2020

EUCAR supports the proposed broad structure of Horizon 2020, in which the three pillars of excellent science, industrial leadership and societal challenges are mutually reinforcing. The new focus on societal challenges is an important enhancement, ensuring that resources are directed towards important priorities. The industrial leadership pillar is important to support industry in becoming more competitive, bringing growth and jobs, as well as enabling industry to contribute to the societal challenges.

The challenges within the societal challenge pillar, in particular those related to transport, energy and climate/raw materials, are the essential platforms for automotive R&I as part of the mobility and transport challenge. Within industrial leadership, the programmes for ICT, advanced materials and advanced manufacturing and processing are also key for mobility and transport and automotive R&I. The proposed budget allocations for these programmes should be at least maintained, in order to enable the essential support for automotive R&I.

It is essential that the three pillars and their constituent initiatives and programmes described above are managed in such a way that synergies between them can be fully exploited. These initiatives and programmes should have clear linkages to ensure the opportunities can be taken. In this context, it will be necessary to define the function and operation of cross-cutting actions, ensuring these are fit for the purpose of creating and supporting such synergies

Content of Horizon 2020 R&I programmes

The proposed content of the research and innovation programmes of Horizon 2020 is presented in Annex I of the proposal for a regulation establishing Horizon 2020 and in more detail in Annex I of the proposal for a Council regulation establishing the specific programme Horizon 2020. As a first priority, it must be ensured that these two documents are fully consistent with each other.

As stated in the EUCAR position paper of 8th November 2011², R&I initiatives are necessary in a number of areas in the automotive field. Their overall target is to support the industrial challenge of Mobility and Transport for Europe, aiming at societal objectives and industrial competitiveness. Necessary initiatives for automotive R&I including the following:

- A European Green Vehicles Initiative (EGVI), as successor to the European Green Car Initiative (EGCI) which has been operating under FP7 since 2009. The EGCI enables the focusing of EU resources to major priorities of road transport and automotive R&I using a system approach. Its continuation through an EGVI in Horizon 2020 is an important step.
- ICT for mobility is an important and growing area of R&I, in which a potential large scale action is currently being assessed by stakeholders through the SATIE project (Support Action for a Transport ICT European large scale action).
- ICT is an essential tool for other areas of automotive R&I, including manufacturing, processes and simulation, with each of these applications representing an important initiative in its own right.
- An initiative in advanced materials and manufacturing applications in the automotive sector is essential for the development of efficiency and safety technologies and for supporting the competitiveness of the industry and the affordability of products for consumers.
- To support the EU's objectives of reduction of fatalities and injuries in road transport, an initiative on integrated safety is necessary to focus R&I resources on the necessary applications and to take advantage of the results in their most effective combination.
- Advanced powertrains for increased efficiency, lower emissions and enhanced performance represent an essential theme, in which the main technological elements (internal combustion engine, hybrid drives, electrically chargeable and fuel cell applications in combination with clean and alternative fuels) are to be considered together as an integrated theme.
- Heavy duty vehicles and green corridors constitute a coherent initiative, in which the above themes can be integrated with dedicated R&I on heavy duty applications.

The proposed broad lines of the activities as set out in the Annexes of the legislative proposals are consistent with the above automotive industry priorities for R&I initiatives. EUCAR therefore calls for the descriptions of the broad lines of activities in Horizon 2020 to be maintained as closely as possible to the proposed text, with only minor amendments where necessary to clarify facts and framework issues.

In order to support innovation in the above priority areas of automotive R&I, sufficient resources are to be directed. As noted in the EUCAR paper of 8th November 2011 "Mobility and Transport: Industrial contribution to the societal challenge for Europe", a budget share for automotive R&I in Horizon 2020 commensurate with the sector's economic and social contribution to Europe is necessary (direct contribution to GDP 6.9%^{2,3}). The automotive sector relies heavily on R&I investments to remain competitive and contribute to the societal challenges. The EU contribution to automotive R&I is crucial, as it leverages international expertise and supports faster implementation and exploitation of results. We therefore call for budget resources to be made available in the constituent programmes of Horizon 2020 totalling €5bn, to be dedicated to the above automotive R&I priorities.

Research & Innovation

The automotive industry's fundamental task is to practice innovation, the art of transforming knowledge into valuable products and services. We therefore welcome the move to enhance the contribution of the Framework Programme in supporting innovation.

The collaborative nature of industrially relevant R&D is the key characteristic of the Framework Programmes. Such activities in the automotive sector in the Seventh Framework Programme exhibit a broad spectrum. They range from pre-competitive research applied to components and systems such as powertrains and structural elements, to implementation of cooperative systems and field operational tests.

Horizon 2020 should be structured and managed to ensure that these types of activity are continued and enhanced, with industrial relevance to be assured. This can be done by ensuring a continued focus on pre-competitive collaborative projects, both large and medium sized depending on a projects specific needs, whilst enabling collaborative efforts closer to the market, including field testing and technology demonstrations.

In all these activities, the consistent and integrated participation of industry stakeholders in defining the content of the relevant, programmes, initiatives and calls is essential, to ensure the industrial and societal relevance of the R&I.

Public-private Partnerships

EUCAR's members are involved in a number of public-private partnerships (PPPs) within the seventh Framework Programme. These include Joint Undertakings such as Artemis and Hydrogen & Fuel Cells as well as unincorporated PPPs, in particular the European Green Cars Initiative (EGCI) and Factories of the Future.

The EGCI PPP has proven very effective in focusing FP7 resources on essential automotive R&I priorities. Its lean structure, relying on the expertise of the European Commission in programme and project management, has enabled speedy implementation of priority projects. The advisory structure, involving industry in the selection of priority topics, ensures a programme which is aligned to the needs of industry and therefore effectively supports automotive innovation.

Future PPPs in Horizon 2020 should be structured to be fit for purpose. In particular Horizon 2020 should enable continuation of the EGCI as a European Green Vehicles Initiative with a similar model as currently, with the addition of a contractual arrangement between industry and the European Commission. This will secure the commitment of both sides to the implementation of the PPP, whilst maintaining the light and flexible framework that enables speed and focus on the R&I priorities. The Horizon 2020 legislation should ensure the appropriate framework is in place to enable such contractual PPPs, amongst other potential PPP models. In this recommendation we support the information note issued by BusinessEurope on 10th May.⁴

The implementation of Horizon 2020 R&I programmes and projects, including those in the PPPs, is currently being considered in the context of the potential for externalisation of R&I management. Externalisation may take a number of forms, including programme management by (light) JTIs, the deployment of executive agencies (such at the REA or ERCEA) and potentially others. Each of these forms will have advantages and disadvantages and it cannot yet be stated with any certainty whether overall any method will deliver higher efficiency or effectiveness compared to each other or compared to the status quo.

We therefore reiterate our call for an independent impact assessment on externalisation in Horizon 2020, as expressed in EUCAR's 12th March position paper on the Horizon 2020 rules for participation and

dissemination. Such an impact assessment should be completed as early as possible to enable its results to be applied in Horizon 2020 and it should take advantage of all expertise available in the EU R&I community of stakeholders. Its results should be faithfully applied in decision making on the extent and form of R&I externalisation.

“Broad lines of the activities” detailed in Annex 1 of Council regulation establishing Horizon 2020 – COM(2011)811

Annex 1 of this document contains the broad lines of the activities of the pillars and constituent programmes proposed for Horizon 2020. This therefore acts as a framework for eventual decision making on the detailed content and budget breakdown of each programme and through this the work programmes and calls. In this respect, the descriptions within each societal challenge and technology section should exhibit a proper balance between different sectors, modes and technologies.

For automotive and road transport R&I the most relevant challenge is that of “Smart, green and integrated transport”. We consider the text of this section to be in appropriate balance, creating a suitable framework for the relevant R&D activities and also for the interaction between the different transport sectors. EUCAR therefore calls for there to be no realignment or major amendment to this section.

This statement equally applies to the other relevant sections of Horizon 2020, which under Societal Challenges include “Secure, clean and efficient energy”, “Climate action, resource efficiency and raw materials”. It also refers to topics under the Industrial Leadership pillar, “Information and Communication Technologies”, “Nanotechnologies, advanced materials and advanced manufacturing and processing” as well as the Excellent Science pillar. Where opportunities for automotive R&I exist that are relevant to more than one programme, synergies between the programmes should be exploited through appropriate communication and management mechanisms, including properly defined cross-cutting actions.

Conclusions and recommendations

- The proposed budget for Horizon 2020 of €80bn should be at least maintained, as this figure is the minimum necessary to ensure a continuation and enhancement of EU R&I following on from the Seventh Framework Programme.
- It is essential that the legislative package for Horizon 2020 be completed not later than mid 2013, to enable timely commencement of the programme and in particular the R&I work programmes and calls relating to its first active year, 2014.
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Annex: comments on specific articles

Proposal for a regulation establishing Horizon 2020 – COM(2011)809

Article 13, Cross Cutting Actions: the modalities for implementing and managing cross-cutting actions need to be clarified, to ensure that beneficiaries are able to understand the process and that simplification is maintained. In particular the mechanism for implementing cross-cutting actions is to be defined, whether through joint calls or a new scheme or programme.

Article 18, Small and medium-sized enterprises: EUCAR supports the move to encouraging more effective participation of SMEs in the Horizon 2020. SMEs are an essential part of the industrial fabric in the automotive and many other sectors. As suppliers and sub-suppliers to industry, they represent critical links of a chain of productivity. Most FP7 projects involving EUCAR's members include at least one SME. Therefore within the EU Framework Programmes, their most productive contribution and their best opportunity to participate is as part of this chain, in activities integrated with OEMs, other suppliers including large companies, RTOs and universities. In defining programmes relevant to SMEs, it is therefore essential that SMEs are not isolated, but are integrated within the full value chain to give them access to all opportunities.

Annex 1 Part III section 4.2 1st paragraph (page 69): in addressing the societal challenge of smart, green and integrated transport, it is essential that the importance of mobility and transport is expressed in the correct context. It is indeed correct that the direct contribution of transport industry and transport equipment makers is approximately 6.3% of EU GDP. Transport's full contribution is however much greater than this. Goods and agriculture represent about 30% of EU GDP, all of which is fully dependent on an effective and efficient transport system. Employees travelling to and from work as well as many of those working in the service economy are also dependent on the transport system. The magnitude of the full economic contribution of transport should be properly acknowledged, even if the precise GDP contribution is difficult to measure accurately. In addition to the economic contribution, it should be recognised that mobility and transport are an essential platform for society, by connecting people, which is not only a social good but also fundamental to the freedom of movement in the EU.

Annex 1 Part III para 4.2 3rd paragraph (page 70): this paragraph makes unsubstantiated statements regarding gridlock, congestions costs and the external costs of accidents. These statements should be removed.

Title III of the proposal for a regulation laying down the rules for participation and dissemination **"Rules governing dissemination of results"**

Article 2: the definition of "background" refers to article 42, whereas a definition should be fundamental to the legislative text. In addition, the reference in the definition "(ii) identified in accordance with Article 42" appears to restrict background unnecessarily. We therefore recommend deletion of this part (ii) in the definition

Article 38: a clarification is requested on the definition of "affiliated companies" and their differentiation from "3rd parties". In §2, all text after "..., each joint owner shall be entitled to grant non-exclusive licenses to third parties" should be deleted, including both sub-points. Such constraints on licensing are unnecessary and counterproductive for the exploitation of project results by industrial participants.

Article 39 §2: it is recommended to return to the FP7 version of the text, which stated that consent of the participant is required before the Commission assumes ownership of results, rather than the proposed text, which states that the participant may refuse only if it demonstrates its interests would suffer. The

new additional language, disallowing dissemination until the Commission has taken a decision, should also be deleted.

Article 40 §1: the proposed language requiring “best effort” in exploiting results is considered to be an acceptable expectation on project participants. However, the proposed language referring to potential additional requirements to be laid down in the grant agreement is unnecessary and would introduce an additional bureaucracy and delay in the completion of the grant agreement.

Article 40 §2: again, the proposed provisions for additional obligations in the grant agreement relating to dissemination and time limits for dissemination are considered unnecessary and should be removed. A clarification is requested regarding the meaning of open access in this respect.

Article 40 §3: this clause provides for too much reporting and potential open-ended dissemination of confidential activities and should be removed.

Article 41: the term “licensing” should be defined – it appears to refer to “access rights”.

Article 42: the word “shall” should be replaced by “may” in article 42, leaving the option for participants to identify the background as they wish (with either inclusion or exclusion lists).

Article 45: a definition of “exploitation” is needed. It is not sufficient to define the term by implication of the legislative articles.

Article 46: the inclusion of blanket access rights for the Union and the Member States is an inappropriate impingement on intellectual property rights of industrial companies and organisations participating in co-funded projects. This article should therefore be deleted.

References:

¹ “EUCAR position on the proposed rules for participation and dissemination of Horizon 2020 and ongoing issues of simplification”, 12th March 2012.

² EUCAR paper “Mobility and Transport: Industrial contribution to the societal challenge for Europe”, 8th November 2011 (http://www.eucar.be/publications/EUCAR_Industrial_contribution).

³ “European Assessment of Globally Funded Automotive Research”, EAGAR Benchmarking Analysis Report, October 2010.

⁴ BusinessEurope paper “How to improve Public Private Partnerships in Horizon 2020?”, 23rd April 2012.