# Opinion of the Committee of the Regions on 'Horizon 2020 (the framework programme for research and innovation)'

(2012/C 277/14)

THE COMMI	TTTEE OF THE REGIONS
has the follo	owing key messages:
stronger	oposed Council Regulation and the implementation plans of Horizon 2020 need to have a focus and impact on real-life practices, i.e. local and regional level needs to be challenged for participation to reach the Europe 2020 strategy targets;
— The Hor	rizon 2020 three-pillar system brings extensive added value to European Research;
intellectu	a 2020 should fund the research and development of concepts, methods and other forms of ual capital needed for the cooperation of regions and cities, universities and business on ion and valorisation of knowledge;
their cor tools an innovation	and cities should include Research, Development and Innovation (RDI) as an essential part of re policy agenda. Horizon 2020 and Cohesion funding should be used to create the concepts, and other pre-conditions through which local and regional authorities can actively promote ion, take risks and invest in the practical application of RDI, so as to provide a tailored dimension;
culture v	R proposes a strategic objective for Horizon 2020 to create the European open innovation via dedicated programmes and other instruments. Innovation ecosystems, key enabling techs, public procurement and research infrastructures require extensive developments;
	ng the framework programme means simplification of the programme practices and increasing eact of EU-funded RDI projects;
to form innovati	change of mindset is required in order to reach the set goals. CoR calls for pioneering regions a European consortiums integrating different capabilities to create ground-breaking societal ions for Europe-wide use; European Institute of Innovation and Technology EIT can add value also to the regional level.

Rapporteur

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Reference document Proposal for a Regulation of the European Parliament and of the Council estab-

lishing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020)

COM(2011) 809 final

## I. POLICY RECOMMENDATIONS

Key message 1:

The proposed Council Regulation and the implementation plans of Horizon 2020 need to have a stronger focus and impact on real-life practices, i.e. local and regional level needs to be challenged for active participation to reach the Europe 2020 strategy targets.

- 1. The Commission proposals form an excellent starting point in defining the EU research, development and innovation (RDI) activities for the next programme period 2014-2020. All regions and actors within the region can and should be effective in using knowledge. Thus it is of utmost importance to disseminate and further develop the outcomes of RDI throughout Europe.
- 2. In order to achieve the objectives of the Europe 2020 strategy, it is important that EU cohesion policy contributes to enhancing the skills base and innovation capacity at local level, as well as to developing instruments and cooperation that promote intra-European cooperation between regions. Such instruments and cooperation are needed to implement the results of Horizon 2020 on regional and local level. All regional research funded by Horizon 2020 should include a 'global excellence' dimension, facilitated by the principles of smart specialisation. Furthermore, a closer linkage of Horizon 2020 and the structural funds should be also properly reflected in the operational programmes and in the strategies for research, innovation and smart specialisation.
- 3. The Commission's proposals comply with the principles of subsidiarity and proportionality. Horizon 2020's measures are meant to be targeted so as to achieve as much added value and impact as possible when implemented at EU level. Activities can reinforce general principles of research and innovation, support the Member States' research functions and avoid overlapping. It is especially important that Horizon 2020 can help to achieve a critical mass in key sectors and to take on high risk and long-term R&D, because it allows risk to be shared and generates a breadth of scope and economies of scale that could not otherwise be achieved.

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4. emphasises the importance of Horizon 2020. The planned funding level EUR 80 billion is well argued for and the bare minimum needed with respect to its role in implementing the

Europe 2020 strategy and other Union policies, as well as in the realisation and functioning of the European Research Area. However, stressing that Europe needs to recover from the financial crisis and create a solid basis for selected priorities in its global role, Horizon 2020 needs to include instruments which are focused on changes in real-life practices and secure faster societal outcomes in the form of new jobs, smart growth and increasing welfare both on the short and long terms;

- 5. welcomes the Horizon 2020 target to obtain more innovation out of research, taking account of the innovation potential. It is therefore essential that already before the new programme period starts regional policy-makers and locally-based universities and research institutes begin to actively develop joint regional innovation strategies and implementation programmes that are strategically based on smart specialisation and jointly funded from different sources, including municipal budgets, business contributions and a number of EU financial instruments. It is important in this connection for the European research and innovation agenda and national and regional innovation strategies to be coordinated;
- 6. calls the Horizon 2020 plans (in terms of content, targeting of funds and instruments) to be assessed for their impact, especially their stimulating effect, as part of all RDI activities taking place across Europe. Horizon 2020 is a massive programme in financial terms (EUR 80 billion for the period 2014-2020). The budget for Marie Curie actions, however, will fall from nearly EUR 1 billion in 2013 to just EUR 0,7 billion in 2014. In view of the services provided by this programme, the financial contribution to these actions should be more in line with that of the ERC. Moreover, keeping in mind that the Horizon 2020 programme makes up only a few per cent of all European RDI activity, decision-making should emphasise the European RDI system as a whole, and make strict priorities in using the Horizon 2020 funds;
- 7. reiterates (¹) that bold steps must be taken on a practical level, to assign all levels of government in the Member States local and regional, as well as central greater responsibility and to involve all the other stakeholders. The major role for regional and local authorities in defining and implementing the Europe 2020 strategy should be acknowledged in the National Reform Programmes and a shared ownership of all the key actors focusing through Territorial Pacts on the regional RDI activities;

<sup>(1)</sup> CdR 72/2011 fin.

- calls for cities and regions to take a crucial role in forming new types of joint venture arrangements of public-privatepeople-partnerships in emphasising a stronger role of users, open innovation and the exploitation of excellent knowledge to boost the RDI needed for creating innovative solutions to societal challenges. When setting the target for Europe to become a global leader in tackling the grand societal challenges, as already stated in Horizon 2020, the RDI activities need to be multidisciplinary, multisectoral, multidimensional and multicultural by nature, thus requiring strong real-life participation. The laboratories are no longer traditional university facilities, but regional innovation ecosystems as test-beds for rapid prototyping of many types of user-driven innovations: new products, processes, structures and systems of transformative and scalable nature. These cannot be created and maintained without active participation by local and regional authorities;
- 9. stresses the importance of having a regional component in Horizon 2020 in order to achieve the aimed-for synergy between regional policy and research policy, and therefore calls for the retention of the instruments and programmes in Horizon 2020, such as the Regions of Knowledge (RoK) and Living Labs. These programmes have a strong regional dimension, regional participation and regional impact, strengthen regional innovation potential and go beyond simply 'knowledge exchange';
- 10. urges that the RoK programme must not be shut down not even on the grounds of similar activities being organised and funded to a significant extent through cohesion policy funds. Contrastively, the RoK programme should be deployed as an instrument of developing regional excellence and its volume should be multiplied. RoK can be of crucial importance in challenging and supporting regions towards Smart Specialisation and becoming a stairway to increased European collaboration and bench-learning. Bench-learning is a process focusing on co-creating systemic changes by bench-marking and collaborative learning;
- 11. proposes that RoK should assume a special role in funding research on how to integrate regional activities into different flagship initiatives for fruitful European collaboration. Thus one of the aims of RoK should be to boost the competitiveness of research-driven regional ecosystems in the domains of digital agenda and resource-efficient technologies Europewide and globally, thereby unleashing new business opportunities for participating SMEs, which play a crucial role in marketing and implementing innovative developments;
- 12. Expresses its concern that neither the European Union's Multiannual Financial Framework, proposed for the 2014-2020 period, nor Horizon 2020 did mention the future of the Intelligent Energy Europe Programme (IEE), which in the current programming period was essential for innovation in terms of

local governance, financial engineering, attracting local players and citizens, long-term vision and networking, and allowed the launching of initiatives such as the Covenant of Mayors. Calls therefore for a separate budget heading dedicated to non-technological solutions in the Horizon 2020 programme, within the spirit and furtherance of the IEE programme.

Key message 2:

The Horizon 2020 three-pillar system brings extensive added value to European Research

- 13. In order to increase the regional impact of European RDI activities, several issues need to be addressed:
- a) raising public awareness of innovation and the impact and scalability of RDI;
- b) the development of value metrics to help in increasing regional collaboration to tackle grand societal challenges and in creating and running joint platforms for open innovation and public-private-people partnerships;
- c) encouraging the dialogue between science and society, and through that deepening the understanding of the systemic nature of innovation and foresight.

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- 14. stresses that the key issues with respect to RDI in regions throughout Europe are:
- a) defining the role of RDI in renewing the traditional publicsector processes, including decision making;
- b) increasing the relevance and usability of the outcomes of EU flagship initiatives and based on that, speeding up the implementation of these activities;
- c) learning to exploit and market existing research and innovation knowledge through public-private partnerships and by sharing best practices and other relevant knowledge.
- 15. stresses that the three-pillar structure of Horizon 2020 creates opportunities to achieve the EU 2020 strategic targets. Keeping in mind that Horizon 2020 focuses on the EU-level RDI which should catalyze RDI in the Member States and regions, the following recommendations should be taken into account in redefining the Horizon 2020 regulations and practices:

- a) In terms of evaluation and funding criteria, the emphasis is on global excellence; all activities draw from scientific expertise. It should be highlighted, however, that each pillar needs to have its own criteria of excellence: in the first, it should be scientific excellence; in the second, the excellence of industrial innovations and business renewal; and in the third it should be the excellence and impact of societal innovations.
- b) In the Excellence Science priority pillar, increasing emphasis should be placed on the significance of the multidisciplinary nature of Future and Emerging Technologies. The impact assessment criteria should include, in addition to scientific publications and patents, also other forms of knowledge flows between various actors from knowledge creators through knowledge users to final beneficiaries.
- c) In the Industrial Leadership pillar the emphasis should strongly be on combining several technologies in RDI to increase the growth potential of European companies, particularly SMEs. This could include promoting SMEs' participation in public-private consortia. Tackling industrial complexities also requires increasing RDI agility, thus necessitating increased SME participation. Technologies should be viewed as enablers of fast development, even on the level of radical change, which stresses that the main emphasis should be on integrating digitalisation, human behaviour and market dynamics.
- d) In the Societal Challenges pillar the emphasis should be on combining the best European expertise to large-scale cocreation projects, allowing Europe to implement large system-level structure-renewing changes over traditional boundaries. Discipline-centred research is not sufficient to create knowledge to solve grand societal challenges. Focus should be directed to multidisciplinary RDI activities that yield concepts and components needed in those system-level structure-renewing changes. At the core of research lie experimentation and piloting. A good example is the extensive Smart City operating field. An essential part of all this is scalability of results in different conditions throughout Europe.
- e) As world-class results are required also in the short term, especially the Societal Challenges pillar should be utilised to renew the currently too inflexible framework policy that is also too isolated from the real world practices. Different programmes use different funding schemes according to their targets. As one solution could be regarded the multiphase funding policy, where each phase is effectively resourced and results are evaluated based on criteria that emphasise the need for excellent quality. Only successful projects, which meet these excellence requirements, continue to the next levels. The levels could address such project phases as 1) feasibility, 2) experimentation, 3) knowledge co-creation and 4) roll-out and scaling. The first phase focuses on solution creation in wide and open interaction. The second phase would aim at testing the diverse alternatives and conceptualising the system. In the

third phase, top researchers would elaborate on the required components. The fourth phase would be comprised of several parallel, applied and simultaneously new-creating experiments increasing the societal impact of the project.

f) The multi-phase project practice described above – when it is applied transparently and when disseminating results effectively – would provide also the regions and other cohesion funding receivers an immense amount of useful information about already-existing expertise and potential agents in development activities.

## Key message 3:

Regions and cities should include RDI as an essential part of their core policy agenda. Horizon 2020 and Cohesion funding should be used to create the concepts, tools and other pre-conditions through which local and regional authorities can actively promote innovation, take risks and invest in the practical application of RDI, so as to provide a tailored regional dimension.

- 16. Regions need to increase their preparedness to benefit from research. More focus and funding needs to be on this. The developed competences, practices and tools should then be used to leverage the research results to the European-wide use. This can only be accomplished by intensifying synergies in using all funding instruments, that is, Horizon 2020, cohesion policy as well as national, regional and local resources. The joint usage of resources is, however, not sufficient, but in addition, requires changes in the operating culture and administrative practices. Especially, there is a need to increase regional collaboration and joint learning with respect to effective use of RIS3 strategies (national/regional innovation strategies for smart specialisation).
- 17. However, complementarity of Horizon 2020 with other EU funding programmes, including the Structural Funds, must ensure that even those regions and cities that are not eligible for funding from such funds, are supported in the development of the so-called 'Triple Helix' constellation (involving local and regional authorities, knowledge institutes and industry) on innovation and valorisation of knowledge. To this effect, and given the relevance of Horizon 2020 for the EU as a whole, the programme's budget should foresee specific funds to be allocated for the research and development of such collaborative relationships.
- 18. Also a change of mindset is required in order to reach the set goals. The CoR calls for pioneering regions to form European consortiums integrating different capabilities to create ground-breaking societal innovations for Europe-wide use. It also calls for increased performance capabilities of regions and cities to use the Horizon 2020 Programme and other similar initiatives. The focus should be, in particular, on making full use of digitalisation and new key enabling technologies to modernise regional innovation policy. Furthermore,

the CoR encourages the regions to move towards open innovation, within a human-centred vision of partnerships between public and private sector actors, with universities and other knowledge institutions playing a crucial role.

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- 19. stresses the complementary role of Horizon 2020 with respect to the RDI in Member States. Implementing Horizon 2020 should, in particular, lead to programmes and other financing instruments that catalyze European innovation policies, encourage pioneering and increase corporate and especially SME participation. This calls for encouraging the risk-taking that is often associated to major innovations; it also calls for increased funding for SMEs especially in rapid prototyping, marketing and implementing innovative developments;
- 20. calls for the changes in role of Joint Research Centre to assist the regional and local decision making with the latest RDI outcomes. This focusing should be accomplished in close coordination with the new developments of the Smart Specialisation Platform. Instead of reports and other publications, the outcomes should revolve much more around funding of experimentations and rapid prototyping, applying research knowledge to practical change processes in all parts of Europe, thus increasing the renewal capital on regional and local levels;
- 21. pays special attention to ways of ensuring that new effective instruments with a strong regional dimension will be developed and taken up. The policy guidelines do exist in Horizon 2020. The specific programme implementing Horizon 2020 explicitly mentions items of regional relevance and coordination with cohesion funding sources. The societal challenges priority includes an item on closing the research and innovation divide in Europe, e.g. by teaming excellent research institutes and less-developed regions up, by recognising excellence in less-developed regions, and by facilitating policy learning at the regional level;
- 22. sends its strong message to local and regional authorities to encourage their active role within Horizon 2020. To get the most out of Horizon 2020, local and regional authorities face the challenge of developing cross-territorial and pan-European cooperation. To this effect, they must also exploit the potential of the European grouping of territorial cooperation (EGTC) (²). In particular, they need to be able to develop joint platforms (such as innovation forums and test-beds for cooperation by integrating real and virtual worlds) to foster open innovation and regional innovation ecosystems. Active European cooperation would result in economies of scale and the creation of wider markets for local businesses and other local developments. Smart specialisation as the key guiding principle both of Horizon 2020 and of cohesion policy is opening up new avenues to all this;
- (2) CoR 230/2010 final.

- 23. highlights that the implementation of Horizon 2020 should accentuate the systemic nature of the RDI chain and its final stages, in other words, the commercialisation of research results into the markets. An increase in Open Innovation activities necessitates more research activities related to innovativeness and innovation ecosystems. Therefore, the focus of multidisciplinary RDI should be especially on enablers of innovative change, including foresight, human capital, renewal competences and metrics for evaluating innovation;
- 24. proposes a strategic objective for Horizon 2020 to create the European open innovation culture via dedicated programmes and other instruments, e.g., for the involvement of end-users, citizens and civil society organisations developing ICT-based methods and tools for open innovation. The objective should include activities to create scalable experience in open innovation management, methods, tools and application environments. The experimental approach is needed especially in areas where innovations associated to digitalisation can have an enormous impact as e.g. smart cities and smart mobility.

## Key message 4:

Renewing the framework programme means simplification of the programme practices and increasing the impact of EU-funded RDI projects

25. Streamlining of administrative practices is one of the heaviest expectations placed on Horizon 2020. The aim should be on research topics and flexible, transparent funding systems that are attractive to the extent that they make it worthwhile for universities, research institutes and enterprises to seek extensive European collaboration and to allocate considerable amounts of their own funding to these endeavours. As adequate control measures, monitoring the spending of the funding could be regarded to be enough when based on each operator's legally valid book-keeping and routine auditing. This would considerably reduce the amount of audits conducted by the EU and its member states' administration officials, to a level even lower than planned.

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- 26. calls for simplification of administration and stresses that administrative practices should always support and serve the actual content targets of projects. Creating a one-stop shop at the European Commission could avoid a fragmentation in the coordination of innovative projects. This is particularly important for multidisciplinary projects and those financed from several European funds;
- 27. feels that it is imperative that Article 24 of the draft regulation on the rules of participation (COM(2011) 810 final), which deals with indirect costs, be amended. Under the model currently proposed (a 'flat rate' model), indirect costs are determined by applying a flat rate of 20 % of the total direct eligible costs. This would create often unreasonable difficulties

in meeting actual indirect costs. Either the rate should be lifted substantially or it should be made possible to accept actual costs with respect to indirect costs, too;

- 28. welcomes the alignment of Horizon 2020 and cohesion policy, and linking of the EU's various programmes and financial instruments. However, the Horizon 2020 plans should be further defined to secure the necessary changes. This means that each programme should adopt criteria catering for the goals of the programme in question, but they all follow the common principle that the project should include effective measures to transfer its research outcomes to the use of the project outsiders. In order to increase impacts, the use of funding should be made more flexible during the project. The outcome is what matters, not the administration;
- 29. reiterates support to the approach suggested by the European Parliament for a 'science and technology' or 'science and innovation' based approach, rooted in sound scientific/ technical quality criteria; relying on realistic management practices; acknowledging the commonalities and differences between science, technology development and market diffusion (3);
- 30. stresses the importance of close collaboration among the activities financed by Horizon 2020 and Cohesion Policy Funds. In the new programme period the cohesion funding should be used for the purpose which CoR pointed out in its opinion on Simplifying the implementation of the research framework programmes. CoR called for the creation of new mechanisms through which funding can be granted to local and regional authorities so that they can purchase the outcomes of successful research projects in order to meet the competence requirements of innovative regional development (4);
- 31. proposes the following measures to be applied to a large share of the Horizon 2020 programmes, with each programme emphasising themes most pertinent to its goals:
- a) One of the major weaknesses in the present system stems from existing knowledge not being benefited from sufficiently. At project start, sufficient time and other resources should be reserved to collect and analyze already-existing, topic-related knowledge. The results from this project phase should be openly published also to parties outside the project in order to improve information dissemination and usability everywhere.
- b) The weight of reaching the result targets should be accentuated more than stated before. In practice this means, e.g., that programme descriptions and project applications highlight the societal impact of RDI activities on both the short and the long run. More resources should be invested in increasing the impact, and also piloting and outcome dissemination activities should be increased and spread over the entire project lifecycle. Resources should be allocated to include new partners during the project

phases, by involving, in particular, knowledge co-creators and results implementers from different regions and fields.

- c) Openness, collaboration and reaction sensitivity in the project culture should be enhanced also so that part of the project budget (typically 10-20 %) is reserved for untargeted measures taken during the project to react to external changes and development in the field, thereby planned during the project. Such funding can also be utilised to introduce new partners into the project, when expertise valuable for the project is recognised in actors not originally involved in the project.
- d) Within the scope of the Financial Regulations, mechanisms should be developed for allowing small amounts of funding to be earmarked for further developing outstanding outcomes of projects. Such support would be bound to excellence criteria, and work primarily as an incentive for outstanding outcomes to be directed towards the next stage of the innovation cycle (e.g. from research to demonstration, and to commercialisation).
- e) The Knowledge Triangle (synergy between research, education and innovation) should be one of the key principles, not just in EIT, but throughout the entire Horizon 2020. Each project should plan activities to implement the Knowledge Triangle.

Key message 5:

Innovation ecosystems, key enabling technologies, public procurement and research infrastructures require extensive developments

- 32. Horizon 2020 needs to ensure that advanced methods and processes for partnerships between universities and industries are applied in all parts of Europe. The focus needs to be on increasing the potential for outputs which deliver more forms of innovation from research, as well as on profitable businesses, including those operating in the public sector.
- 33. Internationally successful products be they products in the strict sense, or systems, services or broader operational frameworks are the result of world-class expertise based on value chains and ecosystems. Horizon 2020 needs to be able to create the conditions for functional innovation chains. Only then will it be possible to respond to major societal challenges and the need for industrial regeneration.

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34. emphasises the role of key enabling technologies (KET) in Horizon 2020. Technologies should not only be developed in separate science and technology programmes; rather, they should be linked as early as the R&D stage to industrial value chains and global innovation value networks, and to activities that develop regional ecosystems and innovation clusters and strengthen expertise. Campus developments at regional level

<sup>(3)</sup> CdR 67/2011 fin

<sup>(4)</sup> CdR 230/2010 fin.

could make a contribution in this respect. This is important because it allows product development activities by small and also larger businesses to extend beyond the difficult early stages;

- 35. urges to benefit fully from the public-sector need for new services, products and technologies and use it as a leverage to create more demand for innovation through public procurement. The CoR has recognised (5) the vast purchasing power of public procurement, accounting for 17 % of EU27 GDP, and acknowledged the crucial role of public procurement as an innovation driver and obvious engine for increasing of (social, environmental ...) standards. The potential should be exploited at regional, national, and European governance levels and supported with appropriate capacity building measures;
- 36. reaffirms its belief that the European Research Area (ERA) could be strengthened if the procurement of research and development services were to be included in public procurement procedures; recalls the CoR opinion on the Green Paper on the procurement market (6) and the CoR opinion on pre-commercial procurement (7), provided this does not result in these services being exposed to competition;
- 37. acknowledges the key role of cities as contexts for broad, system-changing innovations with great potential impact in responding to difficult environmental, social, and economic challenges of our time. More support for the transformation process through which system-changing innovations in urban contexts can be developed, piloted, and scaled-up is required from policy and knowledge institutions;
- 38. stresses that it is crucial for local and regional authorities to be fully involved in order to achieve the goals of the Europe 2020 strategy for growth and jobs, particularly those under Innovation Union', on the basis of a tailored regional dimension. In this context, it highlights the key role that they play in bringing together businesses, universities, research centres and public institutions (via the triple helix or similar approaches);
- 39. highlights the importance of investments in Pan-European research infrastructures (RIs). To integrate local and regional actors for the achievement of the Europe 2020 objectives, the innovation dimension should be properly represented in all aspects of the ERA Framework, i.e. by developing the ERA towards the European Research and Innovation Area. RIs represent essential resources which complement university and other research facilities and equipment. RIs also attract excellent researchers on a global basis, and should be regarded as joint platforms for researchers from different disciplines and essential hubs of cooperation between academics, professionals from private and public industries, and other societal actors.

Key message 6:

European Institute of Innovation and Technology EIT can add special value also to the regional level

40. The Commission accentuates (8) that the EIT co-location centres play a major role in strengthening the local-global connectivity of the Knowledge and Innovation Communities (KICs) as a whole, through close co-operation with regional authorities, in particular those involved in designing and delivering the Regional Innovation Strategies for Smart Specialisation (RIS3). An excellent example of the concept development is the Climate KIC Regional Innovation and Implementation Communities (RICs). They provide an original pan-European regional innovation model, which uses regions as test beds, linking up the development of managerial capability and regional strengths to global challenges.

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- 41. welcomes the plans to establish new KICs as proposed by the Commission in the thematic areas: in the first wave on innovation for healthy living and active ageing, raw materials, and food for future, and in the second wave on urban mobility, added-value manufacturing and smart secure societies. Of special relevance is the role of KICs in encouraging and supporting open innovation through the means of advanced digitalisation, thus boosting innovation throughout Europe;
- 42. urges EIT to continue its mission, critical to actively developing and promoting the dissemination of good practices for the integration of the Knowledge Triangle in order to develop a common innovation and knowledge sharing culture. In the future, the EIT should promote the usability of the KIC experiences across European regions and create a collaboration culture that can act as a role model in Europe and beyond;
- 43. supports the EIT's governance structural development plans. Of special relevance is the Commission proposal (9) in the regulation that the EIT should directly engage with national and regional representatives and other stakeholders from across the innovation chain, generating beneficial effects on both sides. In order to render such dialogue and exchange more systematic, an EIT Stakeholder Forum should be organised, bringing together the wider community of stakeholders around crosscutting issues. CoR should have a bridging role between the Forum and the regions;
- 44. proposes that the EIT KICs should assume the task of organising top-level management training for regional decision makers to learn to take the existing opportunities in utilising RDI as an essential part of the grass-root level decision making and the networked bench-learning between European regions. This is extremely relevant, since the EIT network is the European innovation engine uniting top players in education, research and business.

<sup>(5)</sup> CdR 373/2010 fin.

<sup>(6)</sup> CdR 70/2011 fin.

<sup>(&</sup>lt;sup>7</sup>) CdR 58/2008 fin.

<sup>(8)</sup> COM(2011) 822 final.

<sup>(9)</sup> COM(2011) 817 final.

## II. RECOMMENDATIONS FOR AMENDMENTS

## Amendment 1

## Recital (19)

Text proposed by the Commission	CoR amendment
	European local and regional authorities have an important role to play in implementing the European Research Area and in ensuring an efficient coordination of Community financial instruments, in particular in fostering linkages between Horizon 2020 and the Structural Funds, within the framework of regional innovation strategies based on smart specialisation. Regions also have a key role in the dissemination and implementation of Horizon 2020 results and in offering complementary funding instruments, including public procurement. Moreover, Horizon 2020 should also provide funding aimed at research and development of concepts and methods needed for cooperation on innovation and valorisation of knowledge between regions and cities, universities and business.

## Reason

When setting the target for Europe to become a global leader in tackling the grand societal challenges, as already stated in Horizon 2020, the research, development and innovation activities need to have a strong regional component. The laboratories for innovation are no longer traditional university facilities, but regional innovation ecosystems operating as test-beds for rapid prototyping of many types of user-driven innovations: new products, services, processes, structures and systems which need to be transformative and scalable nature.

For this development there should be a particular regional dimension in the budget of Horizon 2020 to modernising triple helix activities. Special emphasis should be on research and innovation of concepts and methods needed to increase the societal impact of knowledge flows between various actors from knowledge creators through knowledge users to final beneficiaries. Structural Funds can be used to cover part of these costs. The complementarity of Structural Funds with Horizon 2020 covers only part of the development costs and only of those regions and cities eligible for such funding. Therefore, the issue arises for those regions or cities that are not eligible or are eligible for a small part and therefore, they are unable to use these funds for the development of triple helix activities on innovation and valorisation of knowledge.

## Amendment 2

## Recital (26)

Text proposed by the Commission	CoR amendment
develop close synergies with other Union programmes in areas such as education, space, environment, competitiveness and SMEs, the internal security, culture and	tiveness and SMEs, the internal security, culture and media and with the Cohesion Policy funds and Rural Development Policy, which can specifically help to

## Amendment 3

## Article 4

Text proposed by the Commission	CoR amendment
Horizon 2020 shall play a central role in the delivery of the Europe 2020 strategy for smart, sustainable and inclusive growth by providing a common strategic framework for the Union's research and innovation funding, thus acting as a vehicle for leveraging private investment, creating new job opportunities and ensuring Europe's long-term sustainable growth and competitiveness.	Horizon 2020 shall play a central role in the delivery of the Europe 2020 strategy for smart, sustainable and inclusive growth by providing a common strategic framework for the Union's research and innovation funding, thus acting as a vehicle for leveraging <u>public and private investment</u> , creating new job opportunities, <u>promoting economic, social and territorial cohesion and ensuring Europe's long-term sustainable growth and competitiveness. Horizon 2020 should fund the research and development of concepts, methods and other forms of intellectual capital needed for the cooperation of regions and cities, universities and business on innovation and valorisation of knowledge.</u>

## Reason

Not only the Structural Funds but also Horizon 2020 should provide funding for the development of triple helix activities related to innovation and valorisation of knowledge. Modernising triple helix is of crucial importance in challenging and supporting regions towards Smart Specialisation and in creating a stairway to European excellence through increased collaboration and bench-learning. For this, Horizon 2020 needs to include funding for pioneering universities and regions to closing the research and innovation divide in Europe, by teaming excellent research institutes and less-developed regions up, by recognising excellence in less-developed regions, and by facilitating innovation policy learning at the regional level.

## Amendment 4

## Article 5.1

Text proposed by the Commission	CoR amendment
Article 5	Article 5
General objective, priorities and specific objectives	General objective, priorities and specific objectives
1. Horizon 2020 shall contribute to building an economy based on knowledge and innovation across the whole Union by leveraging sufficient additional research, development and innovation funding. Thereby, it shall support the implementation of the Europe 2020 strategy and other Union policies, as well as the achievement and functioning of the European Research Area (ERA). The relevant performance indicators are set out in the introduction of Annex I.	1. Horizon 2020 shall contribute to building an economy based on knowledge and innovation across the whole Union by leveraging sufficient additional research, development and innovation funding. Thereby, it shall support the implementation of the Europe 2020 strategy and other Union policies, as well as the achievement and functioning of the European Research and Innovation Area (ERIA). The relevant performance indicators are set out in the introduction of Annex I.

# Reason

The entire Horizon 2020 programme underlines the importance of innovation. Research alone is not enough; rather, research should lead to innovations as well as economic growth and wellbeing. As proposed in point 39 of the opinion, a more suitable name for the ERA would be the European Research and Innovation Area (ERIA). This amendment should be made to all relevant parts of the draft regulation.

## Amendment 5

# Article 5.3

Text proposed by the Commission	CoR amendment
Article 5	Article 5
General objective, priorities and specific objectives	General objective, priorities and specific objectives
3. The Joint Research Centre shall contribute to the general objective and priorities set out in paragraphs 1 and 2 by providing scientific and technical support to Union policies. The broad lines of the activities are set out in Part IV of Annex I.	3. The Joint Research Centre shall contribute to the general objective and priorities set out in paragraphs 1 and 2 by providing scientific and technical support to Union policies. The role of JRC includes assisting the regional and local decision making with the latest research and innovation outcomes. The broad lines of the activities are set out in Part IV of Annex I.

## Reason

As stated in the point 20 of the opinion, Joint Research Centre should also assist the regional and local decision making with the latest RDI outcomes. This focusing should be accomplished in close coordination with the new developments of the Smart Specialisation Platform. Instead of reports and other publications, the outcomes should revolve much more around funding of experimentations and rapid prototyping, applying research knowledge to practical change processes in all parts of Europe, thus increasing the renewal capital on regional and local levels;

# Amendment 6

# Article 7.1 (b) (ii)

Text proposed by the Commission	CoR amendment
(b) (ii) have a good track record of participation in Union research and innovation programmes;	(b) (ii) have a good track record of participation in Union research and innovation programmes;

## Reason

This automatically eliminates newcomers.

# Amendment 7

# Article 12.1 and 12.2

Text proposed by the Commission	CoR amendment
Article 12	Article 12
External advice and societal engagement	External advice and societal engagement
1. For the implementation of Horizon 2020, account shall be taken of advice and inputs provided by: advisory groups of independent, high level experts set up by the Commission; dialogue structures created under international science and technology agreements; forward looking activities; targeted public consultations; and transparent and interactive processes that ensure responsible research and innovation is supported.	1. For the implementation of Horizon 2020, account shall be taken of advice and inputs provided by: advisory groups of independent, high level experts set up by the Commission; dialogue structures created under international science and technology agreements; forward looking activities; targeted public consultations; and transparent and interactive processes that ensure responsible research and innovation is supported.
2. Full account shall also be taken of relevant aspects of the research and innovation agendas established by European Technology Platforms, Joint Programming Initiatives and European Innovation Partnerships.	2. Full account shall also be taken of relevant aspects of the research and innovation agendas established by European Technology Platforms, Joint Programming Initiatives and European Innovation Partnerships.

Text proposed by the Commission	CoR amendment
	3. When setting the target for Europe to become a global leader in tackling the grand societal challenges, the research and innovation activities need to be multidisciplinary and multicultural with strong regional participation. This requires European-wide regional collaboration and striving for regional excellence through programmes such as Regions of Knowledge and Living Labs.

## Reason

This amendment is based on the points 8-11 in the opinion.

# Amendment 8

# Article 13.1

e 13 -cutting actions Linkages and interfaces shall be implemented across and
n the priorities of Horizon 2020. Particular attention shall id in this respect to the development and application of key ing competences and industrial technologies, to bridging discovery to market application, to cross-disciplinary ch and innovation, to social and economic sciences and inities, to fostering the functioning and achievement of the to cooperation with third countries, to responsible research nnovation including gender, and to enhancing the attracters of the research profession and to facilitating cross-border
in ch n t

# Reason

As stated in the point 34 of the opinion, the role of key enabling technologies needs to be seen on a much broader scale than technological development, i.e. technologies should be linked as early as the R&D stage to industrial value chains and global innovation value networks, and to activities that develop regional ecosystems and innovation clusters and strengthen expertise. This focus can better be defined as 'key enabling competences and industrial technologies'.

# Amendment 9

## Article 20

Text proposed by the Commission	CoR amendment
Article 20	Article 20
Public-public partnerships	Public-public partnerships
1. Horizon 2020 shall contribute to the strengthening of public-public partnerships where actions at regional, national or international level are jointly implemented within the Union.	1. Horizon 2020 shall contribute to the strengthening of public-public partnerships where actions at regional, national or international level are jointly implemented within the Union.
Particular attention shall be paid to joint programming initiatives between Member States.	Particular attention shall be paid to joint programming initiatives (JPIs) between Member States, and these JPIs may include EU regions and cities, where relevant.

Text proposed by the Commission	CoR amendment
2. Public-public partnerships may be supported either within, or across, the priorities set out in Article 5(2), in particular through:	2. Public-public partnerships may be supported either within, or across, the priorities set out in Article 5(2), in particular through:
(a) an ERA-NET instrument using grants to support public-public partnerships in their preparation, establishment of networking structures, design, implementation and coordination of joint activities as well as topping up of individual joint calls and of actions of a transnational nature;	(a) an ERA-NET instrument using grants to support public-public partnerships in their preparation, establishment of networking structures, design, implementation and coordination of joint activities as well as topping up of individual joint calls and of actions of a transnational nature;
(b) Union participation in programmes undertaken by several Member States in accordance with Article 185 TFEU.	(b) Union participation in programmes undertaken by several Member States in accordance with Article 185 TFEU, with participation of sub-national authorities where relevant.
For the purposes of point (a), top-up funding shall be conditional on a significant level of prior financial commitments of the participating entities to the joint calls and actions. The ERA-NET instrument may include an objective to harmonise rules and implementation modalities of the joint calls and actions. It may also be used in order to prepare for an initiative pursuant to Article 185 TFEU.	For the purposes of point (a), top-up funding shall be conditional on a significant level of prior financial commitments of the participating entities to the joint calls and actions. The ERA-NET instrument may include an objective to harmonise rules and implementation modalities of the joint calls and actions. It may also be used in order to prepare for an initiative pursuant to Article 185 TFEU.
For the purposes of point (b) such initiatives shall only be proposed in cases where there is a need for a dedicated implementation structure and where there is a high level of commitment of the participating countries to integration at scientific, management and financial levels. In addition, proposals for initiatives referred to in point (b) shall be identified on the basis of all of the following criteria:	For the purposes of point (b) such initiatives shall only be proposed in cases where there is a need for a dedicated implementation structure and where there is a high level of commitment of the participating countries to integration at scientific, management and financial levels. In addition, proposals for initiatives referred to in point (b) shall be identified on the basis of all of the following criteria:
(a) a clear definition of the objective to be pursued and its relevance to the objectives of Horizon 2020 and broader Union policy objectives;	(a) a clear definition of the objective to be pursued and its relevance to the objectives of Horizon 2020 and broader Union policy objectives;
(b) clear financial commitments of the participating countries, including prior commitments to pool national and/or regional investments for transnational research and innovation;	(b) clear financial commitments of the participating countries, including prior commitments to pool national and/or regional investments for transnational research and innovation;
(c) the added value of action at Union level;	(c) the added value of action at Union level;
(d) the critical mass, with regard to the size and the number of programmes involved, the similarity of activities and the share of relevant research they cover;	(d) the critical mass, with regard to the size and the number of programmes involved, the similarity of activities and the share of relevant research they cover;

# Reason

(e) the efficiency of Article 185 TFEU as the most appro-

priate means for achieving the objectives.

The active role of regions is crucial in order to achieve the targets of Horizon 2020. More flexibility and an increased of role regions in forming JPIs are needed.

(e) the efficiency of Article 185 TFEU as the most appro-

priate means for achieving the objectives.

Another target of the present amendment is that the same logic which applies to Member States should also apply to EU participation in programmes undertaken by Regional authorities. This would be in accordance with the spirit of Article 185 TFEU.

Brussels, 19 July 2012.

The President
of the Committee of the Regions
Mercedes BRESSO