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Committee on Culture and Education

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OPINION

of the Committee on Culture and Education

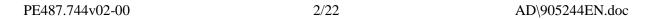
for the Committee on Industry, Research and Energy

on the proposal for a Council decision establishing the Specific Programme Implementing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020)

(COM(2011)0811 - C7 - 0509/2011 - 2011/0402(CNS))

Rapporteur: Emma McClarkin

AD\905244EN.doc PE487.744v02-00



SHORT JUSTIFICATION

The specific proposal for a Regulation of the European Parliament and of the Council on Horizon 2020 aims to bring together all EU research and innovation funding under a single programme and complements the Framework regulation on Horizon 2020.

The Rapporteur welcomes the proposal and very strongly supports the commitment to excellence in science as the key funding criteria. However, the Rapporteur believes that funds must be more accessible and easier to apply for. The Rapporteur therefore welcomes the focus on simplifying the application processes but believes that this simplification should go further than that proposed by the Commission.

In addition, the Rapporteur believes that Horizon 2020 should complement other European programmes, in particular the Erasmus the All programme and that further emphasis should be placed on the role of academic research in the development of dynamic SME's. Furthermore, research into the Cultural Heritage of Europe, which was included in previous research funding programmes, does not specifically appear in Horizon 2020. The Rapporteur therefore wants to include specific mention of cultural heritage within this regulation.

In addition, as the Lisbon treaty gave the European union new competences in the field of sport, the Rapporteur wants to make use of the funding opportunities available within Horizon 2020 to specifically highlight the potential of research into sport as a means to improve the overall health of people in Europe and as a means to foster social cohesion and inclusiveness.

AMENDMENTS

The Committee on Culture and Education calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following amendments in its report:

Amendment 1 Proposal for a decision Recital 11

Text proposed by the Commission

(11) Part III 'Societal challenges' should increase the effectiveness of research and innovation in responding to key societal challenges by supporting excellent research and innovation activities. Those activities should be implemented using a challenge-based approach which brings together resources and knowledge across different fields, technologies and disciplines. Social

Amendment

(11) Part III 'Societal challenges' should increase the effectiveness of research and innovation in responding to key societal challenges by supporting excellent research and innovation activities. Those activities should be implemented using a challenge-based approach which brings together resources and knowledge across different fields, technologies and disciplines. Social

sciences and humanities research is an important element for addressing all of the challenges. The activities should cover the full range of research and innovation with an emphasis on innovation-related activities such as piloting, demonstration, test-beds, and support for public procurement, pre-normative research and standard setting, and market uptake of innovations. The activities should support directly the corresponding sectoral policy competences at Union level. All challenges should contribute to the overarching objective of sustainable development.

sciences and humanities research is an important element for addressing all of the challenges. The activities should cover the full range of research and innovation with an emphasis on innovation-related activities such as piloting, demonstration, test-beds, and support for public procurement, pre-normative research and standard setting, and market uptake of innovations. Research into the health and societal cohesion aspects of physical activity should be supported. Cultural and linguistic diversity research and the protection of traditional knowledge should also be supported, not least when pursuing cooperation with third countries. The activities should support directly the corresponding sectoral policy competences at Union level. All challenges should contribute to the overarching objective of sustainable development.

Amendment 2

Proposal for a decision Recital 13

Text proposed by the Commission

(13) The direct actions of the Joint Research Centre should be implemented in a flexible, efficient and transparent manner, taking into account the relevant needs of the users of the Joint Research Centre and Union policies, as well as respecting the objective of protecting the Union's financial interests. Those research actions should be adapted where appropriate to these needs and to scientific and technological developments and aim to achieve scientific excellence.

Amendment

(13) The direct actions of the Joint Research Centre should be implemented in a flexible, efficient and transparent manner, taking into account the relevant needs of the users of the Joint Research Centre and Union policies, as well as respecting the objective of protecting the Union's financial interests. Those research actions should be adapted where appropriate to these needs and to scientific and technological developments and aim to achieve scientific excellence and ensure dissemination in the cultural, communication and education sectors.

Amendment 3

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Proposal for a decision Recital 15

Text proposed by the Commission

(15) The specific programme should complement the actions carried out in the Member States as well as other Union actions which are necessary for the overall strategic effort for the *implementation* of the Europe 2020 Strategy, in particular with actions in the policy areas of cohesion, agriculture and rural development, education and vocational training, industry, public health, consumer protection, employment and social *policy*, energy, transport, environment, climate action, security, marine and fisheries, development cooperation and enlargement and neighbourhood policy.

Amendment

(15) The specific programme should complement the actions carried out in the Member States as well as other Union actions which are necessary for the overall strategic effort for the *realisation* of the Europe 2020 Strategy, in particular with actions in the policy areas of cohesion, agriculture and rural development, education and vocational training, culture and the arts, industry, public health, consumer protection, employment and social policies, gender issues, sport, energy, transport, environment, climate action, security, marine and fisheries, cultural heritage, development cooperation and enlargement and neighbourhood policy.

Amendment 4
Proposal for a decision
Article 3 – paragraph 3 – subparagraph 1 – point a

Text proposed by the Commission

Amendment

(a) improving the lifelong health and wellbeing;

(a) improving the lifelong health and wellbeing *including through participation in sporting activities*;

Amendment 5

Proposal for a decision Article 3 – paragraph 3 – subparagraph 1 – point f a (new)

Text proposed by the Commission

Amendment

(fa) promoting and safeguarding cultural and linguistic diversity and protecting the historical, artistic and cultural heritage in the Union.

Amendment 6

Proposal for a decision Annex I – point 1 – point 1.1 – paragraph 3

Text proposed by the Commission

Particular attention will be paid to ensuring a broad approach to innovation, which is not only limited to the development of new products and services on the basis of scientific and technological breakthroughs, but which also incorporates aspects such as the use of existing technologies in novel applications, continuous improvement, non-technological and social innovation. Only a holistic approach to innovation can at the same time tackle societal challenges and give rise to new competitive businesses and industries.

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Particular attention will be paid to ensuring a broad approach to innovation, which is not only limited to the development of new products and services on the basis of scientific and technological breakthroughs, but which also incorporates aspects such as the use of existing technologies in novel applications, continuous improvement, non-technological and social innovation, and maximising the dissemination, accessibility, and use of the knowledge produced. Only a holistic approach to innovation can at the same time tackle societal challenges and give rise to new competitive businesses and industries.

Amendment 7

Proposal for a decision Annex I – point 1 – point 1.2 – paragraph 1

Text proposed by the Commission

Social sciences and humanities research will be fully integrated into each of the general objectives of Horizon 2020. This will include ample opportunities for supporting such research through the European Research Council, the Marie Curie actions or the Research Infrastructures specific objective.

Amendment

Social sciences and humanities research will be fully integrated into each of the general objectives of Horizon 2020. These fields constitute the foundation of the activities undertaken to tackle the whole range of challenges posed to the Union from the point of view both of integration of citizens of all origins and of the access that citizens should have to education and social and cultural rights. This will include ample opportunities for supporting such research through the European Research Council, the Marie Curie actions or the Research Infrastructures specific objective.

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Amendment 8 Proposal for a decision Annex I – point 1 – point 1.2 – paragraph 2

Text proposed by the Commission

Social sciences and humanities are also mainstreamed as an essential element of the activities needed to tackle each of the societal challenges to enhance their impact. This includes: understanding the determinants of health and optimising the effectiveness of healthcare systems, support to policies empowering rural areas and promoting informed consumer choices, robust decision making on energy policy and in ensuring a consumer friendly European electricity grid, supporting evidence based transport policy and foresight, support to climate change mitigation and adaptation strategies, resource efficiency initiatives and measures towards a green and sustainable economy.

Amendment

Social sciences and humanities are also mainstreamed as an essential element of the activities needed to tackle each of the societal challenges to enhance their impact. This includes: understanding the determinants of health, including physical *education* and optimising the effectiveness of healthcare systems, support to policies empowering rural areas and promoting informed consumer choices, robust decision making on energy policy and in ensuring a consumer friendly European electricity grid, supporting evidence based transport policy and foresight, support to climate change mitigation and adaptation strategies, resource efficiency initiatives and measures towards a green and sustainable economy, and support for the protection and promotion of cultural diversity and tangible and intangible cultural heritage.

Amendment 9

Proposal for a decision Annex I – point 1 – point 1.2 – paragraph 3

Text proposed by the Commission

In addition, the specific objective 'Inclusive, innovative and secure societies' will support social sciences and humanities research into issues of a horizontal nature such as the creation of smart and sustainable growth, social transformations in European societies, social innovation, innovation in the public sector or the position of Europe as a global actor.

Amendment

In addition, the specific objective 'Inclusive, innovative and secure societies' will support social sciences and humanities research into issues of a horizontal nature such as the creation of smart and sustainable growth, social transformations in European societies, social innovation, innovation in the public sector or the position of Europe as a global actor, in order to help maintain a high level of cultural interaction and communication

with third countries.

Amendment 10

Proposal for a decision Annex I – point 3 – paragraph 2

Text proposed by the Commission

Cross-cutting actions will be promoted between Part I 'Excellent science' and the societal challenges and the enabling and industrial technologies to develop jointly new knowledge, future and emerging technologies, research infrastructures and key competences. Research infrastructures will also be leveraged for broader usage in society, for example in public services, promotion of science, civil security and culture. Furthermore, priority setting during implementation for the direct actions of the Joint Research Centre and the activities of the European Institute of Innovation and Technology (EIT) will be adequately coordinated with the other parts of Horizon 2020.

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Amendment 11 Proposal for a decision Annex I – point 3 – paragraph 5

Text proposed by the Commission

Particular attention will also be paid to the coordination of activities funded through Horizon 2020 with those supported under other Union funding programmes, such as the Common Agricultural Policy, the Common Fisheries Policy or the Erasmus

Amendment

Particular attention will also be paid to the coordination of activities funded through Horizon 2020 with those supported under other Union funding programmes, such as the Common Agricultural Policy, *cultural policy (including conservation and*

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For All: the Union's programme for Education, Training, Youth and Sport or the Health for Growth Programme. This includes an appropriate articulation with the Cohesion policy funds, where support to capacity building for research and innovation at regional level may act as a 'stairway to excellence', the establishment of regional centres of excellence may help close the innovation divide in Europe or support to large-scale demonstration and pilot line projects may aid in achieving the objective of generating industrial leadership in Europe.

development of the tangible and intangible cultural heritage), the Common Fisheries Policy or the Erasmus For All: the Union's programme for Education, Training, Youth and Sport or the Health for Growth Programme. Compatibility, interconnectivity and integration with these programmes are fundamental to ensure the success of Horizon 2020. This includes an appropriate articulation with the Cohesion policy funds, where support to capacity building for research and innovation at regional level may act as a 'stairway to excellence', the establishment of regional centres of excellence may help close the innovation divide in Europe or support to large-scale demonstration and pilot line projects may aid in achieving the objective of generating industrial leadership in Europe.

Amendment 12 Proposal for a decision Annex I – part I – point 2 – point 2.1

Text proposed by the Commission

Supporting a large set of embryonic, high risk visionary science and technology collaborative research projects is necessary for the successful exploration of new foundations for radically new future technologies. By being explicitly nontopical and non-prescriptive, this activity allows for new ideas, whenever they arise and wherever they come from, within the broadest spectrum of themes and disciplines. Nurturing such fragile ideas requires an agile, risk-friendly and highly interdisciplinary research approach, going well beyond the strictly technological realms. Attracting and stimulating the participation of new high-potential actors in research and innovation, such as young researchers and high-tech SMEs is also important for nurturing the scientific and

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industrial leaders of the future.

also important for nurturing the scientific and industrial leaders of the future.

Amendment 13

Proposal for a decision Annex I – part I – point 3 – point 3.1 – paragraph 2

Text proposed by the Commission

This will be achieved in particular by structuring and raising excellence in a substantial share of the high-quality initial training of early stage researchers and doctoral candidates throughout Member states and associated countries. By equipping early stage researchers with a diversity of skills that will allow them to face current and future challenges, the next generation of researchers will benefit from enhanced career perspectives in both public and private sectors, thereby enhancing also the attraction of young people to research careers.

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Amendment 14
Proposal for a decision
Annex I – part II – point 1 – point 1.3 – point 1.3.5

Text proposed by the Commission

Applying design and the development of converging technologies to create new business opportunities, including the preservation of Europe's materials with historical or cultural value.

Amendment

Applying design and the development of converging technologies to create new business opportunities *for SMEs within the creative industries*, including the preservation of Europe's materials with historical or cultural value.

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Amendment 15 Proposal for a decision Annex I – part II – point 3 – point 3.1 – paragraph 1

Text proposed by the Commission

SMEs will be supported across Horizon 2020. For this purpose a dedicated SME instrument is targeted at all types of innovative SMEs showing a strong ambition to develop, grow and internationalise. It will be provided for all types of innovation, including non-technological and service innovations. The objective is to help filling the gap in funding for early stage high risk research and innovation, stimulate break-through innovations and increase private-sector commercialisation of research results.

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Amendment 16

Proposal for a decision Annex I – part II – point 3 – point 3.2 – point 3.2.3

Text proposed by the Commission

This will support market-driven innovation in view of enhancing the innovation capacity of firms by improving the framework conditions for innovation as well as tackling the specific barriers preventing the growth of innovative firms, in particular SMEs and enterprises of intermediate size with potential for fast growth. Specialised innovation support (on e.g. IP exploitation, networks of procurers, support to technology transfer offices, strategic design) and reviews of public policies in relation to innovation will be supported.

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This will support market-driven innovation in view of enhancing the innovation capacity of firms by improving the framework conditions for innovation as well as tackling the specific barriers preventing the growth of innovative firms, in particular SMEs and enterprises of intermediate size with potential for fast growth, including those in the creative *industries*. Specialised innovation support (on e.g. IP exploitation, networks of procurers, support to technology transfer offices, strategic design) and reviews of public policies in relation to innovation will be supported. Innovation also has a cultural dimension as content drives technology. The cultural development for innovation, beyond the pure technological understanding of innovation, has been an

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important step forward and the current program shall enforce this pace.

Amendment 17

Proposal for a decision Annex I – part III – point 1 – paragraph -1 (new)

Text proposed by the Commission

Amendment

In connection with the provision of support under Horizon 2020 for the social sciences and humanities sector, a separate priority defining the specific scope of that support needs to be established.

Amendment 18
Proposal for a decision
Annex I – part III – point 1 – point 1.1 – paragraph 2

Text proposed by the Commission

Amendment

In particular, a better understanding of the environment as a determinant of health will require integrated molecular biological, epidemiological and toxicological approaches to investigate healthenvironment relationships, including studies of modes of action of chemicals, combined exposures to pollution and other environmental and climate related stressors, integrated toxicological testing as well as alternatives to animal testing. Innovative approaches to exposure assessment are needed using newgeneration biomarkers based on 'omics' and epigenetics, human biomonitoring, personal exposure assessments and modelling to understand combined, cumulative and emerging exposures, integrating socio-economic and behavioural factors. Improved links with environmental data using advanced information systems will be supported.

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Amendment 19

Proposal for a decision Annex I – part III – point 1 – point 1.12

Text proposed by the Commission

Multidisciplinary advanced and applied research and innovation with behavioural, gerontological, digital and other sciences is needed for cost effective user-friendly solutions for active, independent and assisted daily living (in the home, the workplace, etc.) for the ageing population and people with disabilities. This applies in a variety of settings and for technologies and systems and services enhancing quality of life and human functionality including mobility, smart personalised assistive technologies, service and social robotics, and ambient assistive environments. Research and innovation pilots to assess implementation and wide uptake of solutions will be supported.

Amendment 20 Proposal for a decision Annex I – part III – point 1 – point 1.13

Text proposed by the Commission

Empowering individuals to improve and manage their health throughout life will result in cost savings to healthcare systems by enabling the management of chronic disease outside institutions and improve health outcomes. This requires research into behavioural and social models, social attitudes and aspirations in relation to personalised health technologies, mobile and/or portable tools, new diagnostics and personalised services which promote a healthy lifestyle, wellbeing, self-care,

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improved citizen/healthcare professional interaction, personalised programmes for disease and disability management, as well as support for knowledge infrastructures.

personalised services which promote a healthy lifestyle, wellbeing, self-care, improved citizen/healthcare professional interaction, personalised programmes for disease and disability management, as well as support for knowledge infrastructures.

Amendment 21
Proposal for a decision
Annex I – part III – point 5 – point 5.1 – point 5.1.2

Text proposed by the Commission

There is incomplete knowledge on the ability of society and the economy to adapt to climate change. Effective, equitable and socially acceptable measures towards a climate resilient environment and society require the integrated analysis of current and future impacts, vulnerabilities, population exposure, risks, costs and opportunities associated with climate change and variability, taking into account extreme events and related climate-induced hazards and their recurrence. This analysis will also be developed on the adverse impacts of climate change on biodiversity, ecosystems and ecosystem services, infrastructures and economic and natural assets. Emphasis will be placed on the most valuable natural ecosystems and built environments, as well as key societal, cultural and economic sectors across Europe. Actions will investigate the impacts and growing risks for human health stemming from climate change and increased greenhouse gases concentrations in the atmosphere. Research will evaluate innovative, equitably distributed and costeffective adaptation responses to climate change, including the protection and adaptation of natural resources and ecosystems, and related effects, to inform and support their development and implementation at all levels and scales. This will also include the potential impacts, costs and risks, of geo-engineering options.

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The complex inter-linkages, conflicts and synergies of adaptation and risk-prevention policy choices with other climate and sectoral policies will be investigated, including impacts on employment and the living standards of vulnerable groups.

and support their development and implementation at all levels and scales. This will also include the potential impacts, costs and risks, of geo-engineering options. The complex inter-linkages, conflicts and synergies of adaptation and risk-prevention policy choices with other climate and sectoral policies will be investigated, including impacts on employment and the living standards of vulnerable groups.

Amendment 22

Proposal for a decision Annex I – part III – point 6 – point 6.1 – paragraph 2

Text proposed by the Commission

In this context, the objective is to enhance social, economic and political inclusion, combat poverty, enhance human rights, digital inclusiveness, equality, solidarity and inter-cultural dynamics by supporting interdisciplinary research, indicators, technological advances, organisational solutions and new forms of collaboration and co-creation. Research and other activities shall support the implementation of the Europe 2020 strategy as well as other relevant Union foreign policies. Humanities research may have an important role to play in this context. Specifying, monitoring and assessing the objectives of European strategies and policies will require focused research on high-quality statistical information systems, and the development of adapted instruments that allow policy makers to assess the impact and effectiveness of envisaged measures, in particular in favour of social inclusion.

Amendment

In this context, the objective is to enhance social, economic and political inclusion, combat poverty, and enhance human rights, digital inclusiveness, equality, solidarity, cultural diversity, and intercultural dialogue by supporting interdisciplinary research, indicators, technological advances, organisational solutions, drawing, for example, on the action of the social economy sector in the field of social innovation, and new forms of collaboration and co-creation, taking into account the important role and the specific features of social sciences and the humanities, not least where research is concerned. Research and other activities shall support the implementation of the Europe 2020 strategy as well as other relevant Union foreign policies. Specifying, monitoring and assessing the objectives of European strategies and policies will require focused research on high-quality statistical information systems, and the development of adapted instruments that allow policy-makers to assess the contribution of envisaged measures, in particular in favour of social inclusion.

Amendment 23 Proposal for a decision Annex I – part III – point 6 – point 6.1 – point 6.1.2 – paragraph 1

Text proposed by the Commission

Understanding social transformations in Europe requires the analysis of changing democratic practices and expectations as well as of the historical evolution of identities, diversity, territories, religions, cultures and values. This includes a good understanding of the history of European integration. Besides, understanding the strains and opportunities arising from the uptake of ICT, both at individual and collective levels, is important in order to open new paths of inclusive innovation. It is essential to identify ways to adapt and improve the European welfare systems, public services and the broader social security dimension of policies in order to achieve cohesion and promote more social and economic equality and intergenerational solidarity. Research will analyse how societies and politics become more European in a broad sense through evolutions of identities, cultures and values, the circulation of ideas and beliefs and combinations of principles and practices of reciprocity, commonality and equality. It will analyse how vulnerable populations can participate fully in society and democracy, notably through the acquisition of various skills and the protection of human rights. The analysis of how political systems respond or not to such social evolutions and themselves evolve will thus be central. Research will also address the evolution of key systems that provide underlying forms of social bonds, such as family, work, education *and employment* and help combat poverty. It will take into account the importance of

migration and demography in the future

Amendment

Understanding social transformations and creating culturally sustainable development in Europe requires the analysis of changing democratic practices and expectations as well as of the historical evolution of identities, diversity, territories, religions, cultures and values. This should be seen as an opportunity to raise awareness of Europe's history, of its diversity, the value of cultural heritage and to help Europe's citizens to interact with the range of cultural and communication tools and opportunities that are available to them today. **Understanding** the strains and opportunities arising from the uptake of ICT, both at individual and collective levels, is important in order to open new paths of inclusive innovation. It is essential to identify ways to adapt and improve the European welfare systems, public services and the broader social security dimension of policies in order to achieve cohesion and promote more social and economic equality, cultural heritage and intergenerational solidarity. Research will analyse how societies and politics become more European in a broad sense through evolutions of identities, cultures and values, the circulation of ideas and beliefs and combinations of principles and practices of reciprocity, commonality and equality. It will analyse how vulnerable populations can participate fully in society and democracy, notably through the acquisition of various skills and the protection of human rights. The analysis of how political systems respond or not to such social evolutions and themselves

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development of European policies.

evolve will thus be central. Research will also address the evolution of *cultural* key systems that provide underlying forms of social bonds, such as family, *employment* and access to leisure, culture and intercultural dialogue, and (formal, informal, and non-formal education), sport, work, education and help combat poverty. It will take into account the importance of migration and demography and the cultural challenge they create in the future development of European policies. Research will also take into account the role of cultural heritage in the Union.

Amendment 24

Proposal for a decision Annex I – part III – point 6 – point 6.1 – point 6.1.3 – paragraph 1

Text proposed by the Commission

Amendment

Europe's distinct historical, political, social and cultural system is increasingly confronted with the impact of global changes. In order to further develop its external action in its neighbourhood and beyond and its role as a global actor, Europe has to improve its capacities for defining, prioritising, explaining, assessing and promoting its policy objectives with other world regions and societies to further cooperation or prevent or solve conflicts. In this regard, it also has to improve its capacities for anticipating and responding to the evolution and impacts of globalisation. This requires a greater understanding of the history, cultures and political-economic systems of other world regions, as well as of the role and influence of transnational actors. Finally, Europe also has to contribute effectively to global governance in key domains like trade, development, work, economic cooperation, human rights, defence and security. This implies the potential to build new capacities whether in terms of tools,

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systems and instruments of analysis or in terms of diplomacy in formal and informal international *arena* with governmental and *non governmental* actors.

new capacities whether in terms of tools, systems and instruments of analysis or in terms of diplomacy in formal and informal international *arenas* with governmental and *non-governmental* actors.

Amendment 25

Proposal for a decision Annex I – part III – point 6 – point 6.1 – point 6.1.4 – indent 1

Text proposed by the Commission

- Linking *in a competition* emerging institutions, centres of excellence and innovative regions in less developed Member States to international leading counterparts elsewhere in Europe. This will involve teaming of excellent research institutions and less developed regions, twinning of staff exchanges, expert advice and assistance and the development of joint strategies for the establishment of centres of excellence that may be supported by the Cohesion policy funds in less developed regions. Building links with innovative clusters and recognising excellence in less developed regions, including through peer reviews and awarding labels of excellence to those institutions that meet international standards, will be considered.

Amendment

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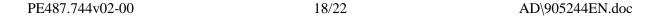
Amendment 26

Proposal for a decision Annex I – part III – point 6 – point 6.1 – point 6.1.4 – indent 3 a (new)

Text proposed by the Commission

Amendment

- Facilitating the widest possible access to scientific and academic literature and to research data in the above-mentioned regions.



Amendment 27

Proposal for a decision Annex I – part III – point 6 – point 6.2 – point 6.2.2 – paragraph 1

Text proposed by the Commission

Social innovation generates new goods, services, processes and models that meet societal needs and create new social relationships. It is important to understand how social innovation and creativity may lead to change in existing structures and policies and how they can be encouraged and scaled-up. Grassroots on-line and distributed platforms networking citizens and allowing them to collaborate and cocreate solutions based on an extended awareness of the social, political and environmental context can be a powerful tool to support the objectives of Europe 2020. Support will also be given to networking and experimentation of the use of ICT for improving learning processes, as well as to networks of social innovators and social entrepreneurs.

Amendment

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Amendment 28

Proposal for a decision Annex I – part III – point 6 – point 6.2 – point 6.2.3

Text proposed by the Commission

Enabling all societal actors to interact in the innovation cycle increases the quality, relevance, acceptability and sustainability of innovation outcomes by integrating society's interests and values. This requires developing specific skills, knowledge and capacities at individual and organisational as well as at national and transnational levels. A scientifically literate, responsible and creative society will be nurtured through the promotion of and research on appropriate science education methods. Gender equality will be promoted in

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particular by supporting changes in the organisation of research institutions and in the content and design of research activities. In order to improve knowledge circulation within the scientific community and the wider public, the accessibility and use of the results of publicly funded research will be further developed. An Ethics Framework for research and innovation, based on the fundamental ethical principles including those reflected in the Charter of Fundamental Rights and all the relevant Union laws and Conventions, will be promoted in coordination with relevant international organisations.

gender equality will be promoted in particular by supporting changes in the organisation of research institutions and in the content and design of research activities. In order to improve knowledge circulation within the scientific community and the wider public, the accessibility and use of the results of publicly funded research will be further developed. An Ethics Framework for research and innovation, based on the fundamental ethical principles including those reflected in the Charter of Fundamental Rights and all the relevant Union laws and Conventions, will be promoted in coordination with relevant international organisations.

Amendment 29

Proposal for a decision Annex I – part III – point 6 – point 6.3 – point 6.3.2

Text proposed by the Commission

Technologies and capabilities are also required to enhance systems, equipments, tools, processes, and methods for rapid identification to improve border security, including both control and surveillance issues, while exploiting the full potential of EUROSUR. These will be developed and tested considering their effectiveness. compliance with legal and ethical principles, proportionality, social acceptability and the respect of fundamental rights. Research will also support the improvement of the integrated European border management, including through increased cooperation with candidate, potential candidate and European Neighbourhood Policy countries.

Amendment

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Amendment 30

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Proposal for a decision Annex I – part III – point 6 – point 6.3 – point 6.3.3

Text proposed by the Commission

Cyber security is a prerequisite for people, business and public services in order to benefit from the opportunities offered by the Internet. It requires providing security for systems, networks, access devices, and software and services, including cloud computing, while taking into account the interoperability of multiple technologies. Research will prevent, detect and manage in real-time cyber-attacks across multiple domains and jurisdictions, and to protect critical ICT infrastructures. The digital society is in full development with constantly changing uses and abuses of the Internet, new ways of social interaction, new mobile and location-based services and the emergence of the Internet of Things. This requires a new type of research which should be triggered by the emerging applications, usage and societal trends. Nimble research initiatives will be undertaken including pro-active R&D to react quickly to new contemporary developments in trust and security.

Amendment

Cyber security is a prerequisite for people, business and public services in order to benefit from the opportunities offered by the Internet. It requires providing security for systems, networks, access devices, and software and services, including cloud computing, while taking into account the interoperability of multiple technologies. Research will prevent, detect and manage in real-time cyber-attacks across multiple domains and jurisdictions, and to protect critical ICT infrastructures. The digital society is in full development with constantly changing uses and abuses of the Internet (requiring, among other things, specific technological research into means of putting an end to child pornography on the Internet), new ways of social interaction, new mobile and location-based services and the emergence of the Internet of Things. This requires a new type of research which should be triggered by the emerging applications, usage and societal trends. Nimble research initiatives will be undertaken including pro-active R&D to react quickly to new contemporary developments in trust and security.

PROCEDURE

Title	Specific Programme Implementing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020)
References	COM(2011)0811 – C7-0509/2011 – 2011/0402(CNS)
Committee responsible Date announced in plenary	ITRE 17.1.2012
Opinion by Date announced in plenary	CULT 17.1.2012
Rapporteur Date appointed	Emma McClarkin 31.1.2012
Discussed in committee	27.3.2012 29.5.2012
Date adopted	10.7.2012
Result of final vote	+: 25 -: 2 0: 0
Members present for the final vote	Zoltán Bagó, Malika Benarab-Attou, Lothar Bisky, Piotr Borys, Jean-Marie Cavada, Silvia Costa, Santiago Fisas Ayxela, Lorenzo Fontana, Mary Honeyball, Petra Kammerevert, Morten Løkkegaard, Emma McClarkin, Emilio Menéndez del Valle, Doris Pack, Chrysoula Paliadeli, Marie-Thérèse Sanchez-Schmid, Marietje Schaake, Marco Scurria, Emil Stoyanov, Hannu Takkula, László Tőkés, Helga Trüpel, Marie-Christine Vergiat
Substitute(s) present for the final vote	Ivo Belet, Nessa Childers, Seán Kelly, Iosif Matula, Mitro Repo
Substitute(s) under Rule 187(2) present for the final vote	Evžen Tošenovský

