OPINION

of the Committee on Fisheries

for the Committee on Industry, Research and Energy


Rapporteur: Ioannis A. Tsoukalas
PA_Legam
SHORT JUSTIFICATION

With 68,000 km of coastline, 22 Member States with maritime borders, nearly 50% of EU residents living less than 50 km from the coast, 5 million Europeans working in sea-related jobs, and a contribution of more than 5% to EU GDP, it is clear that the marine environments and the related activities play a key role for the European social and economic development. The role of the marine environment becomes even more important, when we take into consideration its contribution to EU efforts to meet the multiple modern challenges it faces, such as energy efficiency, climate change, transport, tourism, health, population growth, which will lead to a corresponding increase in demand for food, etc.

In this context, fisheries constitute vital and, at the same, time extremely sensitive socio-economic resource for EU citizens. With a total consumption of about 12 million tons of fishery products annually (€55 billion), the EU is one of the most important global markets, yet is not able to adequately meet internal consumption.

The interdependence between the EU and the marine environment requires high level marine and maritime research, as the latter contributes to a better understanding and a better protection of marine ecosystems and aims to develop sustainable fishery, which respects the environment while taking into account the socio-economical needs of coastal and island communities.

At present, over 90% of marine biodiversity remains unexamined. The lack of reliable scientific data makes the efforts to achieve sustainable management of fish stocks in European waters even more difficult. The need of sufficient, reliable data for marine environments is becoming urgent and the collection of such data should be enhanced to the largest extent possible through relevant research projects and collaborations.

In the last years, the EU has invested systematically in marine and maritime research, aiming at developing innovative technological methods to unlock the vast potential of the marine environment and producing growth and jobs through sustainable exploitation of natural, food, energy and biological resources. In the current 7th Framework Programme a significant - yet insufficient - amount is allocated for fisheries, aquaculture and marine biotechnology. Given the increase of the research budget in Horizon 2020, the amount allocated to marine and maritime research should be increased as well.

Cross-cutting and interdisciplinarity research is fundamental for better understanding marine ecosystems and the sustainable management of the fish stocks. Industrial, academic and public partnerships involving marine and maritime research should be strengthened, actively engaging the private sector, especially SMEs, in developing innovative technologies and methods and promoting applied research. The support of interdisciplinary, multidisciplinary and intersectoral partnerships in marine and maritime research programs will contribute to a better understanding of the aquatic environment, and inevitably, to sustainable fisheries and aquaculture. Within this framework, we could examine whether the creation, under the auspices of the European Institute of Innovation and Technology, of a relevant Knowledge and Innovation Community (KIC) would be beneficial in promoting marine research.
A closer cooperation of research programs with cohesion policy, regional policy and Structural Funds should be considered as there is a need for development of comprehensive, dynamic and territorial approaches to innovation, research and competitiveness in the fisheries sector. Such synergies would facilitate smart specialization strategies and the capacity of EU regions to cope with modern challenges Effective coordination and complementarities of actions in Horizon 2020 with the actions financed by the European Maritime and Fisheries Fund are also necessary.

A climate of mutual confidence and trust between researchers and stakeholders should be created. Their involvement would improve the quality of scientific data and the knowledge required to manage marine resources sustainably. The fishing industry often considers research as an obstacle to fishing activity and this should change. Opportunities for mobility of researchers, international cooperation, high level training and education, advanced technologies and incentives to participate in fishing activities could make European fisheries very competitive at international level. Exchange of good practices and of the effective use of the results from existing research programs through the open access could also help to bridge the gap between research and stakeholders.

Finally, we consider as a positive step that marine and maritime research is included explicitly in Horizon 2020. The aim of this research should be productive seas and oceans, through sustainable fisheries and aquaculture. Without adequate funds, however, the great potential of marine science and technology sector will remain untapped and the marine wealth will be overexploited to extinction. The EU is called to establish a specific budget line for cross-cutting actions in order to develop possible synergies between marine and maritime cross-societal challenges.

**AMENDMENTS**

The Committee on Fisheries 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 regulation**

**Recital 1**

<table>
<thead>
<tr>
<th>Text proposed by the Commission</th>
<th>Amendment</th>
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<tbody>
<tr>
<td>(1) The Union has the objective of strengthening its scientific and technological bases by achieving a European Research Area (&quot;ERA&quot;) in which researchers, scientific knowledge and technology circulate freely, and encouraging the Union to become more</td>
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</table>
competitive, including in its industry. To pursue those objectives the Union should carry out activities to implement research, technological development and demonstration, promote international cooperation, disseminate and optimise results and stimulate training and mobility.

**Justification**

*The education and the training should be targeted, taken into account the real needs of the European citizens.*

**Amendment 2**

**Proposal for a regulation**

**Article 2 – point (a)**

**Text proposed by the Commission**

(a) 'research and innovation activities'

means the whole spectrum of activities of research, technological development, demonstration and innovation, including the promotion of cooperation with third countries and international organisations, dissemination and optimisation of results and stimulation of the training and mobility of researchers in the Union;

**Amendment**

(a) 'research and innovation activities'

means the whole spectrum of activities of research, technological development, demonstration and innovation, including the promotion of cooperation with third countries and international organisations, dissemination and optimisation of results and stimulation of the high quality targeted training and mobility of researchers in the Union;

**Justification**

*The education and the training should be targeted, taken into account the real needs of the European citizens.*

**Amendment 3**

**Proposal for a regulation**

**Article 13 – paragraph 1**

**Text proposed by the Commission**

1. Linkages and interfaces shall be implemented across and within the priorities of Horizon 2020. Particular

**Amendment**

1. Linkages and interfaces shall be implemented across and within the priorities of Horizon 2020. Particular
attention shall be paid in this respect to the development and application of key enabling and industrial technologies, to bridging from discovery to market application, to cross-disciplinary research and innovation, to social and economic sciences and humanities, to fostering the functioning and achievement of the ERA, to cooperation with third countries, to responsible research and innovation including gender, and to enhancing the attractiveness of the research profession and to facilitating cross-border and cross-sector mobility of researchers.

attention shall be paid in this respect to the development and application of key enabling and industrial technologies, to bridging from discovery to market application, to cross-disciplinary research and innovation, to social and economic sciences and humanities, to climate change, productive seas and oceans and sustainable development, to fostering the functioning and achievement of the ERA, to cooperation with third countries, to responsible research and innovation including gender, and to enhancing the attractiveness of the research profession and to facilitating cross-border and cross-sector mobility of researchers.

Amendment 4
Proposal for a regulation
Article 21 – paragraph 2 – subparagraph 1

Text proposed by the Commission

Targeted actions with the objective of promoting cooperation with specific third countries or groups of third countries shall be implemented on the basis of common interest and mutual benefit, taking into account their scientific and technological capabilities and market opportunities, and the expected impact.

Amendment

Targeted actions with the objective of promoting cooperation with specific third countries or groups of third countries, in particular the EU’s strategic partners, shall be implemented on the basis of common interest and mutual benefit, taking into account their scientific and technological capabilities and market opportunities, and the expected impact.

Amendment 5
Proposal for a regulation
Annex 1 – paragraph 14 – point b

Text proposed by the Commission

(b) Food security, sustainable agriculture, marine and maritime research, and the bio-economy;

Amendment

(b) Food security, sustainable agriculture, sustainable and productive seas and oceans, and the bio-economy;
Amendment 6
Proposal for a regulation
Annex 1 – section 3 – point 2 – introductory part

Text proposed by the Commission
2. Food security, sustainable agriculture, marine and maritime research and the bio-economy

Amendment
2. Food security, sustainable agriculture, sustainable and productive seas and oceans, and the bio-economy

Amendment 7
Proposal for a regulation
Annex 1 – section 3 – point 2 – point 2.1 – paragraph 1

Text proposed by the Commission
The specific objective is to secure sufficient supplies of safe and high quality food and other bio-based products, by developing productive and resource-efficient primary production systems, fostering related ecosystem services, along side competitive and low carbon supply chains. This will accelerate the transition to a sustainable European bio-economy.

Amendment
The specific objective is to secure sufficient supplies of safe and high quality healthy food and other bio-based products, by developing productive and resource-efficient primary production and food processing systems, fostering related ecosystem services, along side competitive and low carbon supply chains. This will accelerate the transition to a sustainable European bio-economy.

Amendment 8
Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.1 – paragraph 2

Text proposed by the Commission
More and more biological resources are needed to satisfy market demand for a secure and healthy food supply, bio-materials, biofuels and bio-based products, ranging from consumer products to bulk chemicals. However the capacities of the terrestrial and aquatic ecosystems required for their production are limited, while there

Amendment
More and more biological resources are needed to satisfy market demand for a secure and healthy food supply, bio-materials, biofuels and bio-based products, ranging from consumer products to bulk chemicals. However the capacities of the terrestrial and aquatic ecosystems required for their production are limited, while there
are competing claims for their utilisation, and often not optimally managed, as shown for example by a severe decline in soil carbon content and fertility. There is under-utilised scope for fostering ecosystem services from farmland, forests, marine and fresh waters by integrating agronomic and environmental goals into sustainable production.

Justification

Aquaculture farms should be included given their reaction with marine environment and their contribution to the sustainable production.

Amendment 9

Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.2 – paragraph 1

Text proposed by the Commission
Agriculture, forestry and fisheries together with the bio-based industries are the major sectors underpinning the bio-economy. This latter represents a large and growing market estimated to be worth over EUR 2 trillion, providing 20 million jobs and accounting for 9% of total employment in the Union in 2009. Investments in research and innovation under this societal challenge will enable Europe to take leadership in the concerned markets and will play a role in achieving the goals of the Europe 2020 strategy and its Innovation Union and Resource Efficient Europe flagship initiatives.

Amendment
Agriculture, forestry, **sustainable** fisheries and aquaculture together with the bio-based industries are the major sectors underpinning the bio-economy. This latter represents a large and growing market estimated to be worth over EUR 2 trillion, providing 20 million jobs and accounting for 9% of total employment in the Union in 2009. Investments in research and innovation under this societal challenge will enable Europe to take leadership in the concerned markets and will play a role in achieving the goals of the Europe 2020 strategy and its Innovation Union and Resource Efficient Europe flagship initiatives.

Justification

The contribution of sustainable fisheries and aquaculture to the bio-economy should not be underestimated.
Amendment 10

Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.2 – paragraph 2

Text proposed by the Commission

A fully functional European bio-economy – encompassing the sustainable production of renewable resources from land and aquatic environments and their conversion into food, bio-based products and bioenergy as well as the related public goods - will generate high European added value. Managed in a sustainable manner, it can reduce the environmental footprint of primary production and the supply chain as a whole. It can increase their competitiveness and provide jobs and business opportunities for rural and coastal development. The food security, sustainable agriculture, and overall bio-economy – related challenges are of a European and global nature. Actions at Union level are essential to bring together clusters to achieve the necessary breadth and critical mass to complement efforts made by a single or groups of Member States. A multi-actor approach will ensure the necessary cross-fertilising interactions between researcher, businesses, farmers/producers, advisors and end-users. The Union level is also necessary to ensure coherence in addressing this challenge across sectors and with strong links to relevant Union policies. Coordination of research and innovation at Union level will stimulate and help to accelerate the required changes across the Union.

Amendment

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Justification

Policy makers can play an important role. They should examine and take into account the real needs both of marine ecosystems and the relevant stakeholders before taking a decision.
The contribution of fisheries and aquaculture to the bio-economy should not be underestimated.

Amendment 11

Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.2 – paragraph 3

<table>
<thead>
<tr>
<th>Text proposed by the Commission</th>
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<tr>
<td>Research and innovation will interface with a wide spectrum of Union policies and related targets, including the Common Agriculture Policy (in particular the Rural Development Policy) and the European Innovation Partnership 'Agricultural Productivity and Sustainability', the Common Fisheries Policy, the Integrated Maritime Policy, the European Climate Change Programme, the Water Framework Directive, the Marine Strategy Framework Directive, the Forestry Action Plan, the Soil Thematic Strategy, the Union's 2020 Biodiversity Strategy, the Strategic Energy Technology Plan, the Union's innovation and industrial policies, external and development aid policies, plant health strategies, animal health and welfare strategies and regulatory frameworks to protect the environment, health and safety, to promote resource efficiency and climate action, and to reduce waste. A better integration of research and innovation into related Union policies will significantly improve their European added value, provide leverage effects, increase societal relevance and help to further develop sustainable land, seas and oceans management and bio-economy markets.</td>
<td>Research and innovation will interface with a wide spectrum of Union policies and related targets, including the Common Agriculture Policy (in particular the Rural Development Policy) and the European Innovation Partnership 'Agricultural Productivity and Sustainability', the Common Fisheries Policy, the Integrated Maritime Policy, the European Climate Change Programme, the Water Framework Directive, the Marine Strategy Framework Directive, the Forestry Action Plan, the Soil Thematic Strategy, the Union's 2020 Biodiversity Strategy, the Strategic Energy Technology Plan, the Union's innovation and industrial policies, external and development aid policies, plant health strategies, animal health and welfare strategies and regulatory frameworks to protect the environment, health and safety, to promote resource efficiency and climate action, and to reduce waste. A better integration of the full cycle from fundamental research to innovation into related Union policies will significantly improve their European added value, provide leverage effects, increase societal relevance, provide healthy food products and help to further develop sustainable land, seas, inland waters and oceans management and bio-economy markets.</td>
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</table>
Amendment 12

Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.2 – paragraph 5

Text proposed by the Commission

Challenge-driven actions focusing on social and economic benefits and the modernisation of the bio-economy associated sectors and markets shall be supported through multi-disciplinary research, driving innovation and leading to the development of new practices, products and processes. It shall also pursue a broad approach to innovation ranging from technological, non-technological, organisational, economic and social innovation to for instance novel business models, branding and services.

Amendment

Challenge-driven actions focusing on social and economic benefits and the modernisation of the bio-economy associated sectors and markets shall be supported through multi-disciplinary research and cross-sectoral approach between various themes, better cooperation between researchers and all relevant stakeholders, driving innovation and leading to the development of new practices, products and processes. It shall also pursue a broad approach to innovation ranging from technological, non-technological, organisational, economic and social innovation to for instance novel business models, branding and services.

Justification

An effective and coordinated research, through cross-sectoral approach, is needed given the various challenges with which the EU has to cope. To this effort the knowledge and the expertise of all stakeholders are essential.

Amendment 13

Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.3 – point c – title

Text proposed by the Commission

(c) Unlocking the potential of aquatic living resources

Amendment

(c) Unlocking the potential of fisheries, aquaculture, marine biotechnologies and aquatic resources through sustainable fisheries management

Justification

The aquatic environment includes both living and non-living resources. Sustainable fisheries management, taking into account the needs of ecosystems as well as those of fishermen, is necessary.
The aim is to sustainably exploit aquatic living resources to maximise social and economic benefits/returns from Europe's oceans and seas. The activities shall focus on an optimal contribution to secure food supplies by developing sustainable and environmentally friendly fisheries and competitive European aquaculture in the context of the global economy and on boosting marine innovation through biotechnology to fuel smart 'blue' growth.

The aim is to sustainably exploit aquatic resources to maximise social, economic benefits/returns from Europe's oceans and seas and inland waters (fresh water, salt water and brackish water). Productive seas and oceans could guarantee the prosperity of the maritime sectors as well as the protection of the marine biodiversity and can be achieved through the development of sustainable fisheries and aquaculture. The activities shall focus on an optimal contribution to secure food supplies by developing sustainable and environmentally friendly fisheries and competitive European aquaculture which encompasses all relevant aquatic species and production systems in the context of the global economy and on boosting marine innovation through biotechnology to fuel smart "blue" growth, which will deliver sustainable and innovative solutions to unlock the great potential of the seas. Given the strong interaction between exploited aquatic living resources and the environment, the objective is to develop cross-cutting marine and maritime scientific and technological knowledge with a view to making a better use of the marine potential across marine and maritime industries, while protecting the marine environment and adapting to climate change. This strategic coordinated approach for marine and maritime research across all challenges and pillars of Horizon 2020 will also support the implementation of relevant Union policies to help deliver key blue growth objectives and ensure the economic and social prosperity of the European seafood sector (encompassing the whole seafood chain from production to the consumer) as well.
A specific budgetary line will be dedicated to cross-cutting actions.

Amendment 15
Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.3 – point c – paragraph 1 a (new)

Text proposed by the Commission

It is important to have targeted research in order to meet the real needs both of ecosystems and of the fisheries and aquaculture field. To this end, cooperation between researchers and all levels of stakeholders (fishermen, enterprises, consumers, policy makers, etc) and an effective coordination of existing relevant research institutions is essential. This will help to build mutual trust and confidence between stakeholders and scientists, which will lead to a long-term sustainable management of the marine resources. In addition to this, the exchange of good practices as well as the effective use of the results taken from the existing research program through open access to research results can play a vital role. Given the significant lack of credible scientific data, already existing relevant mechanisms (for example the EMODnet) should be reinforced. New European research projects on collecting data as well as on providing an easy and free access to these should be put forward.

Justification

A climate of mutual confidence and trust between researchers and representatives of the fisheries sector (industries, SMEs, consumers, policy makers, etc.) is needed to improve the scientific data and knowledge required for the effective implementation of the measures. Targeted research and reliable scientific data will contribute to meet the technical, social and economic needs of the sector and environmental requirements.

Amendment 16
Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.3 – point c – paragraph 1 a (new)

Text proposed by the Commission

Amendment

Cooperation and stronger links between people working in marine and maritime research and researchers in other fields (environment, energy, transport, etc) should also be put forward. These fields are complementary, hence, stronger relations between them should be established.

Amendment 17

Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.3 – point c – paragraph 1 b (new)

Text proposed by the Commission

Amendment

In this framework, it is necessary to try to close the gap between fundamental and applied research and to underline that excellence in research includes basic and applied research as well.

Justification

Stairway to excellence is in the core of Horizon 2020, but it should be taken into account the fact that excellence includes applied research as well. Horizon 2020 pays attention to the innovation and the practical application of knowledge and research.

Amendment 18

Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.3 – point c – paragraph 1 c (new)

Text proposed by the Commission

Amendment

Synergies and closer cooperation with the structural funds will contribute to the boost of marine and maritime research and will have positive results in environmental, social and economic level. Funding a project from different sources
will contribute, also, to boosting regions' participation in the EU research efforts.

**Justification**

The marine environments and the related activities play a key role for the European social and economic development and more precisely for the development of European regions. Cooperation with Structural funds will have a positive impact on fisheries sector through targeted actions at national and regional level.

**Amendment 19**

**Proposal for a regulation**
Annex 1 – Part III – point 2 – point 2.3 – point c – paragraph 1 d (new)

<table>
<thead>
<tr>
<th>Text proposed by the Commission</th>
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<tbody>
<tr>
<td>Closer cooperation and good coordination with the European Maritime and Fisheries Fund is needed in order to avoid overlapping and to support the active participation of the fisheries sector in European projects.</td>
<td></td>
</tr>
</tbody>
</table>

**Justification**

Effective coordination and complementarities of actions in the "Horizon 2020" with the actions financed by the European Maritime and Fisheries Fund are necessary in order to avoid overlapping and duplication between them.

**Amendment 20**

**Proposal for a regulation**
Annex 1 – Part III – point 2 – point 2.3 – point c – paragraph 1 e (new)

<table>
<thead>
<tr>
<th>Text proposed by the Commission</th>
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<tbody>
<tr>
<td>To be in conformity with the Common Fisheries Policy, the activities shall also take into account a bottom-up approach and pay more attention to the cooperation at national and regional level.</td>
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</tr>
</tbody>
</table>

**Justification**

EU’s top-down approach in the fisheries sector has failed and a general need for better
communication with stakeholders is now clear. Regions have an important role to play in marine and maritime research. Coastal and island communities can put forward research and innovation through their expertise and practical knowledge.

Amendment 21
Proposal for a regulation
Annex 1 – Part III – point 2 – point 2.3 – point d – paragraph 1

Text proposed by the Commission

The aim is the promotion of low carbon, resource efficient, sustainable and competitive European bio-based industries.
The activities shall focus on fostering the bio-economy by transforming conventional industrial processes and products into bio-based resource and energy efficient ones, the development of integrated biorefineries, utilising biomass from primary production, biowaste and bio-based industry by-products, and opening new markets through supporting standardisation, regulatory and demonstration/field trial activities and others, while taking into account the implication of the bio-economy on land use and land use changes.

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The activities shall focus on fostering the bio-economy by transforming conventional industrial processes and products into bio-based resource and energy efficient ones, the development of integrated biorefineries, utilising biomass from primary production, biowaste and bio-based industry by-products, and opening new markets through supporting standardisation, regulatory and demonstration/field trial activities and others, while taking into account the implication of the bio-economy on land use as well as land and sea use changes.

Amendment 22
Proposal for a regulation
Annex 1 – Part III – point 5 – point 5.1 – paragraph 4

Text proposed by the Commission

The growing impacts from climate change and environmental problems, such as ocean acidification, ice melting in the Arctic, land degradation and use, water shortages, chemical pollution and biodiversity loss, indicate that the planet is approaching its sustainability boundaries. For example, without improvements in efficiency, water demand is projected to overshoot supply by

Amendment

The growing impacts from climate change and environmental problems, such as ocean acidification, changes in ocean circulation, the increase in seawater temperature, ice melting in the Arctic, land degradation and use, water shortages, chemical pollution and biodiversity loss, indicate that the planet is approaching its sustainability boundaries. For example,
40% in 20 years time. Forests are disappearing at an alarmingly high rate of 5 million hectares per year. Interactions between resources can cause systemic risks – with the depletion of one resource generating an irreversible tipping point for other resources and ecosystems. Based on current trends, the equivalent of more than two planet Earths will be needed by 2050 to support the growing global population.

Amendment 23
Proposal for a regulation
Annex 1 – Part III – point 5 – point 5.2 – paragraph 4

**Text proposed by the Commission**

Addressing the availability of raw materials calls for co-ordinated research and innovation efforts across many disciplines and sectors to help provide safe, economically feasible, environmentally sound and socially acceptable solutions along the entire value chain (exploration, extraction, processing, re-use, recycling and substitution). Innovation in these fields will provide opportunities for growth and jobs, as well as innovative options involving science, technology, the economy, policy and governance. For this reason, a European Innovation Partnership on Raw Materials is being prepared.

**Amendment**

Addressing the availability of raw materials calls for co-ordinated research and innovation efforts across many disciplines and sectors to help provide safe, economically feasible, environmentally sound and socially acceptable solutions along the entire value chain (exploration, extraction, processing, re-use, recycling and substitution). Water challenges include water use in rural, urban and industrial environments and the protection of aquatic ecosystems. Innovation in these fields will provide opportunities for growth and jobs, as well as innovative options involving science, technology, the economy, policy and governance. For this reason, European Innovation Partnerships on Water Efficiency and Raw Materials are being prepared.

Amendment 24
Proposal for a regulation
Annex 1 – Part III – point 6.3 – point 6.3.1 – paragraph 2 – point b a (new)
(ba) strive to set European models for social cohesion and well-being as international benchmarks; and make efforts to comply with the ILO’s recommendations on fostering research and training pertaining to health, hygiene and safety in the workplace.

Amendment 25
Proposal for a regulation
Annex 1 – Part IV – point 3 – point 3.3 – point b – introductory part

(b) Food security, sustainable agriculture, marine and maritime research and the bio-economy.

Amendment 26
Proposal for a regulation
Annex 1 – Part IV – point 3 – point 3.3 – point b

Support the development, implementation and monitoring of European agriculture and fisheries policies, including food safety and security and the development of a bio-economy through e.g. crop production forecasts, technical and socio-economic analyses and modelling.

Support the development, implementation and monitoring of European agriculture, fisheries and aquaculture policies, including food safety and security and the development of a bio-economy through e.g. crop production forecasts, technical and socio-economic analyses, modelling and scientific and technical basis of fisheries management.

Justification
Scientific and technical basis will contribute to a sustainable fisheries management through, for example, the use of more selective gears and other instruments more environmentally friendly.
Amendment 27

Proposal for a regulation
Annex 1 – Part V – point 1 – paragraph 2

*Text proposed by the Commission*

Europe is facing a number of structural weaknesses when it comes to innovation capacity and the ability to deliver new services, products and processes. Among the main issues at hand are Europe's relatively poor record in talent attraction and retention; the underutilisation of existing research strengths in terms of creating economic or social value; low levels of entrepreneurial activity; a scale of resources in poles of excellence which is insufficient to compete globally; and an excessive number of barriers to collaboration within the knowledge triangle of higher education, research and business on a European level.

*Amendment*

Europe is facing a number of structural weaknesses when it comes to innovation capacity and the ability to deliver new services, products and processes. Among the main issues at hand are Europe's relatively poor record in talent attraction and retention; the underutilisation of existing research strengths in terms of creating economic or social value; the lack of research results brought to the market; low levels of entrepreneurial activity and the lack of an entrepreneurial mindset; low levels of public investment in R&D, a scale of resources, including human resources, in poles of excellence which is insufficient to compete globally; and an excessive number of barriers to collaboration within the knowledge triangle of higher education, research and business on a European level.

Amendment 28

Proposal for a regulation
Annex 1 – Part V – point 3 – point c – title

*Text proposed by the Commission*

(c) Development of talented, skilled and entrepreneurial people with the aid of education and training

*Amendment*

(c) Development of talented, skilled and entrepreneurial people with the aid of high-level and targeted education and training

*Justification*

*The education and the training should be targeted, taken into account the real needs of the European citizens.*
**PROCEDURE**

<table>
<thead>
<tr>
<th>Title</th>
<th>Establishment of Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee responsible</td>
<td>ITRE</td>
</tr>
<tr>
<td>Date announced in plenary</td>
<td>13.12.2011</td>
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<tr>
<td>Opinion by</td>
<td>PECH</td>
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<td>Date announced in plenary</td>
<td>13.12.2011</td>
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<tr>
<td>Rapporteur</td>
<td>Ioannis A. Tsoukalas</td>
</tr>
<tr>
<td>Date appointed</td>
<td>20.12.2011</td>
</tr>
<tr>
<td>Date adopted</td>
<td>19.9.2012</td>
</tr>
</tbody>
</table>
| Result of final vote | +: 21  
  --: 0  
  0: 3 |
| Members present for the final vote | Antonello Antinoro, Kriton Arsenis, Alain Cadec, Chris Davies, João Ferreira, Carmen Fraga Estévez, Pat the Cope Gallagher, Dolores Garcia-Hierro Caraballo, Marek Józef Gróbarczyk, Ian Hudghton, Iliana Malinova Iotova, Werner Kuhn, Isabella Lövin, Gabriel Mato Adrover, Guido Milana, Maria do Céu Patrão Neves, Crescenzio Rivellini, Ulrike Rodust, Raúl Romeva i Rueda, Isabelle Thomas, Nils Torvalds, Jarosław Leszek Wałęsa |
| Substitute(s) present for the final vote | Jean-Paul Besset, Luis Manuel Capoulas Santos, Diane Dodds, Julie Girling, Ana Miranda, Jens Nilsson, Nikolaos Salavrakos, Antolin Sánchez Presedo, Ioannis A. Tsoukalas |
| Substitute(s) under Rule 187(2) present for the final vote | Nuno Teixeira |