Preparing Europe for a New Renaissance: the vision and the proposed actions of ERAB

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ERAB (2008-2012)

- ERAB assists, independently of any outside influence, the EC in developing, promoting and evaluating policy initiatives and actions to meet the goals of the ERA and the IU.
- High level triple helix representative composition
- Chair: John Wood (ex-ESFRI chair)



ERAB has briefed the Commission:

Preparing Europe for a New Renaissance: A Strategic View of the European Research Area (October 2009)

- Realising the New Renaissance: Policy Proposal for Developing a World-class Research and Innovation Space in Europe 2030 (October 2010), including the 2030 ERAB Milestones (May 2010)
- Towards a Common Strategic Framework for the EU Research and Innovation (April 2011)
- 10 Key Recommendations for realising ERA (June 2010)
- The contribution of FP7 to the Establishment of a Genuine ERA (February 2009)
- The Communication "Simplifying the implementation of the Research Framework Programmes" (May 2010)
- The Role of Public Procurement for the R&I Strategy (April 2010)
- The Role of Venture Capital for the R&I Strategy (April 2010)
- Achieving Cohesion in European Research and Innovation (April 2011)
- Recommendation to Maximize High Risk High Gain Research in the Next Framework Programme (December 2010)
- Social Innovation (April 2011)
- International Collaborations (April 2011)





To understand ERAB's thinking

- 3 fundamental drivers affecting the present and future of ERA:
- Clobalisation of the world and of the world of science (European researchers feel acute global pressure)
- \triangleright Virtualisation (more than e-science \rightarrow mode 2)
- > Grand challenges
 - → European research (policy) system as it is now not seen as apt to make the changes needed.

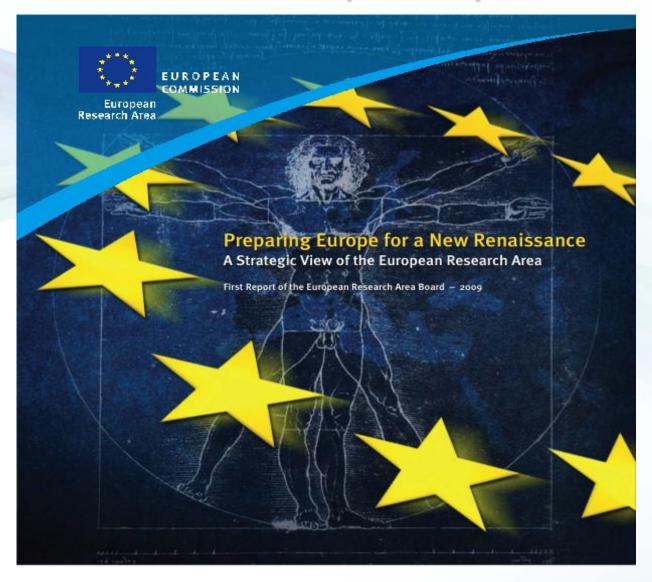
New Renaissance

- In order to cope with the challenges ahead we need a 'New Renaissance'.
- The 'New Renaissance', is a paradigm shift in how we think, live and interact, as well as a paradigm shift regarding the role and place of science in society.
- The 'New Renaissance' calls for our *rationality* and *creativity* the fundamentals of science to face the challenges and to help '*inventing*" a new way of living.
- The 'New Renaissance' needs a thriving and open ERA by 2030.





ERA 2030: ERAB's STRATEGIC VIEW (10-2010)





6 strategic approaches for ERA

A united ERA across Europe

An ERA driven by societal needs to address the 'Grand Challenges'

An ERA based on a shared responsibility between science, policy and society

An ERA of open innovation between all public and private stakeholders

An ERA to deliver excellence

An ERA of cohesion across the continent

1 & 6 \rightarrow Global challenges

 $2 \& 3 \rightarrow$ Grand challenges

 $4 \& 5 \rightarrow$ E-science and Europe

The ERA is necessary

Action required by 2030 on 6 fundamental themes

The European Research Area comprises many people and institutions – but unless they work together, in a borderless marketplace for talents and ideas, they will be ineffectual.

We are concerned by the fractured state of the ERA today: still too much driven by inward-looking national priorities, too much centralism and sub-optimal institutional and legal frameworks. In view of the challenges our planet and Europe face, we must act, and act now. Otherwise, Europe will not only become marginalized in a global market, but will fail to contribute to solving our greatest challenges. As a result, bold leadership along six policy themes is needed to achieve a fully functioning ERA by 2030:

- A united ERA to permit ideas and people to move freely across a dynamic and open society.
- 2. An ERA driven by societal needs to address the 'Grand Challenges', such as climate change, energy supply, water resources, ageing societies, healthcare and sustainable prosperity for all.
- 3. An ERA based on a shared responsibility between science, policy and society, where public policy is based on evidence and underpinned by a 'new social contract' between science and society that emphasizes responsibility for action as well as freedom of thought.
- An ERA of open innovation between all public and private stakeholders so as to strengthen our research base and our economy.
- An ERA to deliver excellence where risk-taking in research, regardless of its public or private origin, will be the guiding principle for the ERA policy.
- An ERA of cohesion across the continent to allow all European research actors to take part in the knowledge-based society.



77 recommended actions to realise 27 milestones

ERAB Vision: goals by 2030	Recommended Actions	Impact by 2030
1. The EC's share of ERA-wide public, non-military research funding doubles to 10%.	 1.1 The current funding for thematic research programmes is maintained to at least the present levels (Cooperation programme). 1.2 The overall research budget is increased by adding a tenth of a percentage point to VAT, for the benefit of research into grand challenges. 1.3 30% of the Structural Funds are used for research, development and innovation (RDI), 10% of the Common Agricultural Programme budget goes specifically to agricultural research dedicated to agribased issues in food, health and energy. 	The innovation gap with the US and other innovation leaders is reduced to zero and Europe acts as a role model in research and innovation with respect to addressing the "Grand Challenges", such as climate change, energy supply and ageing societies. Europe increases its share of top-ranked universities (see theme IV) and becomes more attractive for private investment on research.

ERAB 2nd report – October 2010

Realising the New Renaissance

Policy proposals for developing a world-class research and innovation space in Europe 2030

Second Report of the European Research Area Board - 2010





10 + 1 RECOMMENDATIONS

SHORT-TERM (immediate action)

Create a single EU-wide patent and an Open Innovation Charter		
Agree on a fast track timeline for a full and widespread implementation of pre-commercial procurement of Research and Development (R&D).		
Concentrate Research & Innovation (R&I) funding around a selection of themes relevant for "Europe 2020"		
Create an annual "City/region of Innovation in Europe"		
Make an EU Framework Directive on Research & Innovation focusing on creating a single market for RDI.		

MID-TERM (3-5 years)

6	Fully implement pre-commercial procurement of Research and Development (R&D) around a few of				
	agreed big projects				

- Concentrated and streamline all R&D funding in the Eight Framework Programme (FP8) by minimising management obligations for all funding schemes and by earmarking 30% of the Structural Funds and 10% of the Common Agricultural Policy (CAP) for RDI projects
- 8 Foster an acceptable degree of risk taking and excellence throughout all RDI programmes

7

9 Create a European Venture Capital fund capable of investing in early stage "proof of concept" and business development prior to commercial investment

LONG-TERM (5+ years)

Make **result and risk-oriented funding** of research and innovation projects the dominant criterion for R&I funding of the EC

RECOMMENDATIONS FOR IMMEDIATE ACTION

- 1. Create a single EU-wide patent and an Open Innovation Charter.
- ► ERAB recommends the Belgium Presidency to make the Community Patent a reality as soon as possible.
- ► ERAB recommends that awareness among EU researchers on Intellectual Property Rights should be raised and that academic credibility and ratings place more importance on these marks of esteem.
- ► ERAB recommends developing an Open Innovation Charter, to be ready for endorsement by key stakeholders in 2012.

 This OI Charter should build on the 2008 EC Recommendation on the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organizations.
- ► ERAB recommends against imposing mandatory adherence to the Open Innovation Charter by all beneficiaries of such programmes or even by all RDI actors, to prevent a regulatory straightjacket stifling innovation and in line with the Union's efforts towards "Better Regulation and Simplification."
- ►ERAB recommends that these restrictions need to be clarified (as elaborated in the Responsible Partnering Handbook) in the forthcoming revision of the State aid framework and have to be complemented by operational guidance in the Open Innovation Charter.





Essential recommendations for the CSF

- 1. Be ambitious and be prepared to take managed risks for the sake of the European economy.
- 2. Concentrate funding on a selection of high-impact research themes driven by key societal challenges, whereby Member States and the European Commission would agree on a common approach and joint support mechanisms to move forward (e.g. SET-plan and Active and Healthy Ageing Innovation Partnerships).
- 3. Create a more efficient mechanism that would facilitate pooling Member State resources.
- 4. Encourage Member States to harmonise support structures between themselves to increase the impact of research and innovation across Europe.
- 5. Support high-risk, high-gain excellence frontier research (continue and increase ERC funding to this end).
- 6. Extend ERC model to support Future Emerging Technologies for which there may not exist apparent market at first.
- 7. Integrate all EC support mechanisms to focus on key challenges and create a common approach between different Directorate-Generals of the Commission.
- 8. Encourage specific mechanisms to support less performing countries or regions in their research and innovation efforts.





Essential recommendations (2)

- 9. Use Structural and other funds constructively to support cutting edge research linked to solving societal challenges in all areas including health and secure food supply.
- 10. Divide support between curiosity and mission-driven. The latter to include both high risk enabling technologies and further support for European competitiveness.
- 11. Develop ways of supporting excellent research management in all sectors, more specifically when associated with the Grand Challenges.
- 12. Create a number of independent arms length funding agencies to support and govern different types of excellent research and innovation. The agencies should be funded on the long term and be legally allowed to make long-term commitments (e.g., ERC for basic, curiosity driven research, a similar institutional setting (agency) to support industrial and applied research, mobility, research infrastructures, etc).
- 13. Better support near-market research and innovation (e.g., demonstrations and pilots).
- 14. Revise and agree on State Aid rules to further encourage innovation.
- 15. Incentivise and encourage higher mobility at all levels including mid-career mobility between private and public institutions.
- 16. The European Commission should pursue the creation of a global forum to agree actions pertinent to global research and investment.
- 17. The Commission should be mandated to act on behalf of the Member States at such a forum.





ERAB's proposal for the CSF

Distribution of EU Funds		70%	30%
	Initiative:	EU MS/Private contributions	MS/Private EC facilitating
	Characterof research:		
30%-40% Mainly led by DG R&I	Curiosity driven	ERC/FET Marie Curie Grants Other enabling activities	Research Infrastructures Specific schools and universities training
60%-70% Led by DG R&I plus all relevant DG's according to the specific Grand Challenges	Mission driven (Innovation in Industry/SME) Grand Challenges EU 2020 agenda	European Innovation Partnerships With all MS Cooperation	European Innovation Partnerships With Groups of MS SME EIT



Next

- ➤ From ERAB to ERIAB: To expand mandate and enhance competence base
- Innovation Union Communication: "The Commission will expand the European Research Advisory Board (ERAB) to include high level leaders from business, science, government and young innovators to evaluate the Innovation Union on a continuous basis, reflect on new trends, and provide recommendations on priorities and actions"

Thank you for your attention

