

THE EUROPEAN CLUSTER MEMORANDUM

Promoting European Innovation
through Clusters:
An Agenda for Policy Action

Prepared by
The High Level Advisory Group on Clusters,
chaired by Senator Pierre Laffitte.

This work is coordinated
by the Center for Strategy and Competitiveness,
Stockholm School of Economics and performed
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of the European Commission.

1 Europe's Innovation Challenge: why we need stronger clusters based on innovation and excellence.

Europe faces an innovation challenge. The Aho-Report was only the last of many in-depth analyses to conclude that Europe needs to improve its innovation performance to sustain a high and rising standard of living.

Europe is particularly weak in the transformation of ideas in new products and services.

But it also needs to improve the creation of new ideas.

Over the last few years, Europe has not narrowed the innovation gap with the United States and leading Asian countries.

The most recent data on economic performance and innovation shows an upswing, but unfortunately there is little reason to believe that this welcome improvement is more than cyclical and signals the fundamental change in trend.

Innovation is the driver that will shape the European vision of growth and prosperity. Clusters can be powerful catalysts in this process and should function like interconnected territorial hubs. Innovation is heavily concentrated geographically, much more so than high prosperity or productivity.

Clusters — regional concentrations of specialised companies and institutions linked through multiple linkages and spill-overs — provide an environment conducive to innovation.

They enable “open innovation”, the creation and refinement of new ideas in networks of cooperating companies and institutions.

And they lower the barriers for transforming new ideas into businesses and capturing the benefits of globalisation.

In modern competition, all clusters need to be innovation clusters.

Regions that combine risk capital, skills, and research excellence with strong cluster portfolios face more opportunities to become innovation hubs, while regions with no clusters or isolated research risk falling behind.

Globalisation has further increased the benefits of true excellence and clear cluster specialisation.

Strong clusters emerge and flourish best in open markets where “coopetition” (i.e. a blend of cooperation and competition) exists within and between clusters. Clusters emerge, where competition across regions enables companies to choose the location of their activities based on underlying economic efficiency, not in response to artificial barriers that influence cross-border trade and investment.

Clusters can leverage this potential, if they create linkages with other clusters that provide complementary capabilities.

Globalisation has increased the need to combine strong internal dynamics within clusters with solid linkages to clusters and markets located elsewhere.

Clusters enable in particular SMEs to take advantage of the new opportunities in the global economy.

And clusters become key factors in attracting capital, people, and knowledge.

The European innovation debate needs to shift from a supply side support to a discussion on the broader innovation ecology, including clusters. This means turning ideas, opportunities, unique capabilities and “intellectual capital in-waiting” into tangible real value.

The European debate is still too often based on the assumption that more R&D inputs automatically lead to more innovation.

The evidence, however, supports a more holistic view: innovation depends on the inputs made available *and* on the framework conditions — including clusters — in which they are being applied.

It is the business environment, on both the supply and demand side, that drives companies’ decisions on whether to spend and compete on innovation.

Clusters are not the only answer to Europe’s innovation challenge.

But they are a part of the answer that Europe can ill afford to neglect.

2 Fostering excellence through strong innovation clusters: how governments can help.

Government policies at the national and regional level have a significant impact on clusters.

They can enable more effective competition between clusters and can strengthen business environments.

Clusters grow in regions that provide specific advantages as a location for companies' activities in a particular field and they can enable linkages and collaboration; clusters reach their full economic potential if clusters are well connected to markets and clusters elsewhere and when cluster participants cooperate to strengthen linkages and align decisions that are not designed or allowed to distort the market.

National and regional policies can play an important role in mobilising joint action in these areas within regions and clusters.

Effective government cluster policies need to mobilise a broad coalition of partners that integrate and encourage activities that meet the needs of specific clusters.

The success of these policies depends on the actions of many different actors — multiple levels of government and public agencies, companies, investors, trade associations, and chambers of commerce & industry, educational and research institutions, as well as other institutions affecting the business environment of clusters, for example the labour market partners.

Policy success depends on defining and implementing action agendas that reflect the specific needs of a particular cluster or region; general guidelines identifying policies that are beneficial "on average" are less effective.

Ultimately, policy success depends on integrating a broad range of government policies, from areas like innovation financing to the creation of effective technical education system, and stimulating private sector activities; cluster policies can to a large degree be a mechanism to apply existing policies in a more effective way.

They are not necessarily additional policy tools.

Policies at the national and regional level have a crucial impact on the ability of clusters to reach their full potential.

Strengthening the potential of clusters — moving them from co-located companies to dynamic clusters with high-levels of competition, interaction, and spill-overs — is a central task that regional and national governments are best placed to address.

Cluster initiatives are an important tool to achieve this goal.

National and regional government policies are crucial to upgrade the business environment; the work of cluster initiatives and the focus on clusters as a delivery mechanism for innovation and growth can significantly increase the effectiveness of national/regional innovation policies.

Overall, clusters underline the importance of strong territorial policy in a world where both local and global networks are important for success.

The more connections, relationships and interactions in a networked society, the higher the potential value added, especially in the development of intellectual assets.

Policies set at the European level have an important influence on the emergence and the trans-national linkages of clusters. ■ Increasing competition by deepening the internal market remains a central challenge for European policy.

Enabling trans-national cooperation between clusters needs to be further strengthened as well and again EU initiatives are essential to reinforce and extend national and regional policy.

European policies also affect the business environments across Europe where improvements require the coordination of activities across different countries.

In addition to these activities in which European institutions exert influence directly, they also play an important indirect role through providing knowledge and support to improve national and regional policies.

Government cannot do it alone; companies of all sizes are critical partners in cluster initiatives. ■ Successful cluster policy emerges, where companies — individually and through industry associations and other networks — are fully engaged, identify critical areas for joint action from a market perspective and participate in relieving existing bottlenecks.

Sometimes industry-led networks will be the prime movers in cluster development and there can be a role for public authorities to support this process.

3 Towards world-class clusters: the 4x5 principles for European policy.

European countries and regions have launched a wide range of cluster initiatives.

Some of them have started clusters policies long ago — Catalonia and the Basque Country in Spain, Veneto in Italy, Scotland in the UK, Sophia Antipolis in France, Denmark, the Netherlands — while others have started within the last few years — a number of Austrian regions, the Czech Republic, the UK, Sweden — or have further developed them through national initiatives — France, Germany.

Cross-border cluster initiatives operate in, for example, Republic of Ireland/Northern Ireland and the Oresund region. In the sheer number of cluster policies and programmes, Europe is now among the most active regions in the world economy.

The European Commission, too, operates many policies that affect cluster development.

European policies like the Single Market program shape the context for cluster development indirectly by shaping the overall European business environment.

Other European policies affect cluster development directly, through European programs or the support of national and regional cluster policy efforts.

Activities specifically related to clusters are currently under way in several parts of the European Commission. The Competitiveness Innovation Programme, the Cohesion Policy, and the 7th Framework Programme include a wide range of activities open to clusters, innovation and competitiveness.

Cluster policy is at a critical junction.

Cluster policies are efforts directed at strengthening the economic dynamism of existing clusters and to improving the opportunities for new clusters to emerge. They have been successfully used to, for example, support regional networks of SMEs, connect companies to universities and research institutions, and focus the work of investment attraction agencies.

These efforts have already improved the efficiency of existing economic development efforts. But they have often been focused only on strengthening individual clusters, not on developing mutually reinforcing portfolios of established and emerging clusters at the regional level.

And they have not always drawn on the best available learning from cluster policies throughout Europe, for example in areas like supporting cross-national linkages.

A step-change in cluster policy impact requires action on at least three levels:

executing agencies that implement cluster policies at national, regional and local level; ministries and regional authorities that set policies at the national and regional level; and European institutions that provide supporting and complementary policies at European level.

The signatories of this Memorandum representing executing agencies at regional and national levels...

...share the view that dynamic clusters

- 1 _____ are a key driver of innovation and prosperity, helping regions to build unique profiles of specialised capabilities that enable them to strengthen their role as active and attractive partners in the global economy;
- 2 _____ develop naturally in competitive markets. Cluster policy can make their emergence more likely, strengthen their competitiveness, and enable regional economies to leverage their full economic potential;
- 3 _____ thrive where cooperation within and across regions is strong. Europe needs a further removal of barriers to trade and an environment that allows competitive clusters to grow and structural change to occur in metropolitan areas as well as rural regions. Europe needs a further removal of barriers to trade and an environment that allows competitive clusters to grow and structural change to occur;
- 4 _____ reflect the presence of linkages and cooperation across institutional boundaries. Europe needs more results-oriented collaboration between companies, government agencies, research and educational institutions, and others that influence the overall ecology for innovative clusters;
- 5 _____ become more visible and attractive if they have strong linkages with related clusters in other regions and countries. Europe needs stronger trans-national co-operation between clusters with complementary strengths and between cluster initiatives learning from each other;

...are in their role as executing agencies of cluster policies committed to

- 1 _____ strengthening their own efforts to support the emergence and growth of dynamic innovative clusters and knowledge concentration areas driven by competition, internally as well as across regions;
- 2 _____ applying evidence-based strategies and implementing more effective impact assessments based on a broad mix of relevant data sources, including the European Cluster Observatory;
- 3 _____ defining cluster-specific action agendas and strategies that draw on the full range of European, national, and regional economic policy programs and tools to address the unique needs of specific regional clusters;
- 4 _____ strengthening the trans-national cooperation between cluster initiatives to create strategic business linkages and services platforms that leverage complementary assets and capabilities of different clusters;
- 5 _____ working closely together at strategic level in areas of common interest, for example the evaluation of cluster initiatives and related efforts to promote the development of world-class innovation clusters in Europe and strengthening practical cooperation between cluster initiatives and their participants.

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...fully support increasing efforts by policy setting institutions at national and regional levels to

_____ design and support cluster programmes and initiatives open to participation for all companies and institutions benefiting from collaboration in the cluster and where all members, including the government, are actively engaged in the design and execution of action agendas;

2

_____ provide active government cluster programmes only where they are needed, using open competitions to concentrate specific policy tools on those initiatives that have the strongest willingness and capacity to generate results, and allowing employment and capital to migrate from declining clusters to other parts of the economy;

3

_____ develop portfolio approaches to cluster policy that take account of overlaps between clusters and reflect changing needs over their life cycle to mobilise existing clusters, facilitate the emergence of new clusters from existing capabilities, and promote structural change where clusters have lost their competitive advantages;

4

_____ integrate cluster efforts with cross-cluster (horizontal) policies by providing feed-back mechanisms from cluster initiatives to horizontal policies and leveraging clusters;

5

_____ upgrade the overall environment for innovation in Europe through the development of lead markets, the strengthening of risk capital availability, the support of global research excellence, and other investments in innovative capacity.

...call upon the European institutions in particular the European Commission, the Committee of the Regions and the European Investment Bank to

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_____ streamline the support it provided to cluster efforts through different programmes to enable a more effective use of the available instruments;

2

_____ review the impact of existing policies on clusters and on structural change towards a more efficient geographic distribution of economic activities across Europe;

3

_____ strengthen the support for results-oriented transnational cooperation between clusters, for example in areas like financing and skill development, through the development of new policy tools, taking into account proximity involving neighbouring countries, and the individual needs of participating clusters;

4

_____ continue the development of neutral information on clusters, regional innovative capacity, cluster policies, and the impact of cluster policies on the economic prosperity of regions by continuously enriching the European Cluster Observatory;

5

_____ provide efficient open platforms to further facilitate trans-national cooperation, and establish an Advisory and Monitoring Group as a follow up mechanism of the European Cluster Memorandum to provide policy advice and recommendations.

Europe needs better cluster policies rather than more cluster policies.

European clusters need active collaboration contributing to clear business objectives. Taking account of the 4x5 principles of the European cluster policy and working actively with the European Cluster Alliance, **we invite the European Commission in association with the Member States to prepare a framework concept to outline the strategy for supporting the emergence and growth of world-class clusters in Europe.**

The European Competitiveness Council has identified clusters as one of nine priority actions to strengthen European innovation in its conclusions of December 2006.

This Memorandum contributes to this process, providing clear orientation and support for translating this political commitment into real action throughout Europe.

High level advisory group on clusters.

Esko AHO.

Mr Esko Aho has had a long and distinguished career serving Finnish society. He held the post of Prime Minister of Finland from 1991 to 1995. After the 2000 presidential campaign, Aho joined Harvard University for one year as a lecturer, and following his retirement from the Finnish Parliament, he worked as a private consultant. Mr. Aho was appointed President of the Finnish National Fund for Research and Development (Sitra) as of 1 July 2004. Most recently, Mr. Aho chaired a group of experts on European innovation policy, which submitted its report to the European Commission in January 2006.



Lieven DANNEELS.

Mr. Lieven Danneels holds an engineering degree from the university of Leuven. In 1998, together with a partner, he did a management buy-in of Televic, a Belgian SME active in audio and multimedia communications. In 2005 they received the price of the Flemish government for the most promising company, rewarding their innovation policies. Mr Danneels is also president of a local TV station (WTV zuid), member of the board of directors of VOKA (chamber of commerce) West-Vlaanderen, member of the ICT committee of Agoria (the technological industry federation of Belgium) and member of the board of directors of IBBT (the interdisciplinary institute for broadband technologies) of the Flemish government, fostering clusters between research groups and industry in that area.



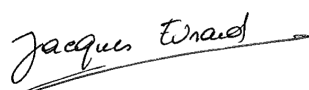
Jacques EVRARD.

Mr. Jacques Evrard is the General Manager of the International Relations Department at the Brussels Enterprise Agency, he has been manager and co-ordinator of the Brussels Innovation Relay Centre project (Brussels IRC). Since 1995, he is also SME and Innovation (5th and 6th EU R&D Framework Programme) National Contact Point for Belgium. Among his duties he is responsible for the attraction of Foreign Direct Investments for the Brussels Capital Region.

He is a member of the management committee of the Brussels Enterprise Agency. He is also EU expert, as a member of the Management Committee for the EU Innovation & SME programme (EU 5th RTD Framework programme) and the Research and Innovation Programme (6th RTD Framework programme).

He graduated from the Solvay Business School of the ULB (Université Libre de Bruxelles) and has also 15 years of past experience in enterprise environment as SME general Manager and development manager for a large Belgian multinational.

Since end of 2005 he is the President of EURADA. (European Association of regional development agencies).



Gerd MEIER zu KOCKER.

Dr. Gerd Meier zu Kocker is director of the agency "Competence Networks Germany" as well as the head of department International Technology Cooperation & Cluster within VDI/VDE Innovation + Technik.

As manager of the agency, he is responsible for the coordination and support of currently 120 German Competence Networks.

Furthermore is responsible for several ongoing programmes dealing with innovation and technology development and transfer between regions and clusters.

Besides of more than 30 scientific publications in the past, he has just published a study on barriers and enablers for internationalisation of clusters.



Pierre LAFFITTE.

Senator Pierre Laffitte, the founder of Sophia Antipolis and the President of the Fondation de Sophia Antipolis, undertook his studies at the Ecole Polytechnique and the Ecole Nationale Supérieure des Mines de Paris.

Focussing his activities around higher education, he became the Director of the Ecole des Mines de Paris. Later in 1969 Pierre Laffitte collaborated with a group of scientists, economists and elected members of the Alpes-Maritimes, the Association Sophia Antipolis, with the aim to promote an international city of wisdom based around science and technology, also named Sophia Antipolis.

In 1985 Pierre Laffitte began his political career, elected as Senator, Vice-President of the Commission of Cultural Affairs.

Senator Laffitte is President of the Franco-German Association for Science and Technology, member of the Royal Swedish Academy of Engineering Sciences.



Jean Paul MINGASSON.

Mr. Jean Paul Mingasson is General Adviser to BUSINESSEUROPE, after having served for more than 20 years in the European Commission services, lately as Director-General of DG Enterprise.

He is responsible for economics and internal market issues.



Gerard MONKS.

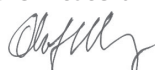
Mr. Gerard Monks contributes to developing national competitiveness policy at the Department of Enterprise, Trade and Employment in Ireland.

He is Secretary to the Enterprise Advisory Group that advises the Minister on enterprise policy.



Olof SANDBERG.

Mr. Olof Sandberg is a senior advisor with the Ministry of Enterprise and Energy in the unit responsible for Research Innovation and Industry Development. His main responsibility is research and innovation policy. He has a masters degree in aeronautical engineering from Royal Institute of Technology as well as a in Ocean engineering from UC Berkeley as well as a Masters of public administration from Uppsala University. He is a member of CREST (Scientific and Technical Research Committee) since 2001. Mr. Sandberg is responsible in the ministry for the restructuring of the Swedish Industrial Research Institute Sector.



Sandro SANDRI.

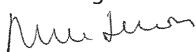
Mr. Sandro Sandri, graduated as electrical engineer at the University of Bologna in 1979; worked as substantive examiner at the European Patent Office from 1980 until 1987. In 1987 Mr Sandri established the IP Firm Europatent-Euromark Srl, based in Verona, Italy: the firm files and prosecutes patent applications worldwide. In 2002-2005 he was Chairman of Veneto Innovazione Spa, the innovation agency of the Region Veneto, and in 2005-2006 he was Regional Councilman of the Veneto Region.



Pierre SIMON.

Mr Pierre Simon is President of EUROCHAMBRES, the Association of European Chambers of Commerce and Chairman of the Paris Chamber of Commerce and industry. He acted as Deputy General Manager of "Lyonnaise de Banque", General Secretary of "Paribas", General Manager and Chairman of "Crédit du Nord", General Manager of the French Banking and Financial Associations, Director of SME's Bank and a series of other positions in French corporations. He is also member of the French and of the European Economic and Social Committees.

He is a graduate of Institut d'Etudes Politiques (Lyon) and has also a doctorate in Law.



Antoni SUBIRA.

Mr. Antoni Subira was born in Mataró (Spain) in 1940. Dr. Ind. Eng. Polytechnic University of Catalonia.

Master of Sciences in Industrial Management, Massachusetts Institute of Technology. Professor at IESE (University of Navarra).

MP (Parliament of Catalonia from 1980 to 2002. Minister of Industry, Trade and Tourism in the Catalan Government from 1989 to 2002.

Chairman of the Advisory Board of TCI.

Member of Boards of Directors of several firms. Member of the group that produced the report "Creating an Innovative Europe" under the Chairmanship of Mr. Esko Aho.



www.clusterobservatory.eu