



February 2011

CLUSTER POLICY

- ✚ CALLS FOR R&D PROJECTS > The FUI's new analysis orientations for collaborative R&D projects
- ✚ NATIONAL CLUSTERS DAY > The 8th national day for competitiveness clusters: the publication of the presentations
- ✚ PUBLIC RESEARCH > Policy of the competitiveness clusters: what impact for public research institutions?
- ✚ ECOSYSTEM OF THE CLUSTERS > The competitiveness clusters discuss their linkage with their local and European ecosystem
- ✚ STANDARDISATION > Methodological tools for strengthening the "management" of innovation: what role for the clusters?
- ✚ PRIVATE FUNDING > A new brochure to help the SMEs in the clusters to access private funding
- ✚ CLOSE-UP ON INVESTMENTS FOR THE FUTURE > 1st call for "Equipex" projects: 52 excellence equipment items selected, for total amount of 340 million euros

EU NEWS

- ✚ RTDFP > The calls for "regions of knowledge" projects: an opportunity for the competitiveness clusters to strengthen their transnational cooperation actions

INTERNATIONAL

- ✚ INTERNATIONAL PARTNERSHIP > Around 50 international actions: this is the outcome of the accompaniment efforts launched by the DGCIS and Ubifrance as part of the 2009 agreement

CLUSTERS IN ACTION

FOCUS ON COMPLETED PROJECTS

- ✚ HEALTH > Ingenis: new therapies thanks to advances in genome engineering

CLUSTER NEWS

- ✚ EUROPEAN PARTNERSHIP > The Atlanpole BiothéErapies cluster brings together European clusters around tissue engineering and regenerative medicine
- ✚ MAPPING OF RARE KNOWLEDGE > The Techtera cluster is launching the mapping of rare knowledge in textile techniques
- ✚ MEDITERRANEAN COOPERATION > The PASS cluster is initiating concrete cooperative efforts with the Mediterranean countries that produce aromatic plants



CLUSTER POLICY

- CALLS FOR R&D PROJECTS

The FUI's new analysis orientations for collaborative R&D projects

As a vector for innovation, the support for collaborative R&D projects is now giving greater consideration to the economic prospects of projects.

The anticipation of economic repercussions as of the design of the projects must be a growing requirement of the partners in order to enhance the economic impact of the supported projects, in terms of the creation of business and jobs.

Within the framework of the FUI...

Since the 11th call for collaborative research and development (R&D) projects from the competitiveness clusters, there have been changes to the analysis of the projects. The specifications of the call for projects are reasserting the attention to the economic dimension of projects now being paid by financial ministers.

The interministerial working group (IWG) will select the best projects that offer an objective of excellence in terms of innovation, but also:

- The development of new products or services that offer significant, properly defined, credible and well-supported market prospects;
- Concrete economic repercussions (increased turnover, creation of start-ups or spin-offs, creation of jobs) over and above the simple results in terms of procedures, prototyping, patents, etc.

...and of investments for the future

This importance devoted to the anticipated direct economic repercussions from projects also applies to the call for structuring R&D projects as part of the programme of investments for the future. The selected projects will offer "*significant direct economic repercussions in the form of new products, services and technologies*". This economic dimension can also "*take the form of indirect repercussions for the national territory, in terms of added value, jobs, investments, structuring of a sector or anticipated economic developments*".

LANDMARKS

13 *This is the number of innovation platforms funded as part of the first call for projects.*

▪ NATIONAL CLUSTERS DAY

The 8th national day for competitiveness clusters: the publication of the presentations

The 8th competitiveness clusters day was held at Bercy on 27 January 2011, in the presence of Mr. Bruno Le Maire, Minister for Agriculture, Food, Fishing, Rural Life and Territorial Development, and of Mr. Eric Besson, Minister for Industry, Energy and the Digital Economy.



Messrs. Bruno Lemaire and Emmanuel Berthier (DATAR)
Copyright Ministry for the Economy, Finance and Industry



Signing of the "Innovative company from the clusters" charter in the presence of Mr. Eric Besson, Luc Rousseau (DGCIS) and Aude Marty (Polinvest). Copyright Ministry for the Economy, Finance and Industry.

Most of the presentations given that day have released to the public.

This day generated considerable debate and reflection. Thirteen competitiveness clusters also signed the *Entreprise innovante d'un pôle* (Innovative company from a cluster) charter, in the presence of Minister Eric Besson, meaning that there are now 48 clusters that are partners in this initiative launched on 3 June 2010, under the aegis of the Ministry for the Economy, Finance and Industry.

▪ PUBLIC RESEARCH

Policy of the competitiveness clusters: what impact for public research institutions?

In 2010, the Ministry for Higher Education and Research (French acronym: MESR) turned to the Erdyn Consultants consulting firm for a study on the "impact of the policy of competitiveness clusters on public research institutions".

A summary of these works was presented to the competitiveness clusters during the 8th national clusters day. Indeed, as the participants in public research constitute a major and inescapable component of the clusters, the MESR wished to find out the status of the repercussions from the clusters policy on these participants. At the same time, it wished to see proposals for actions intended to optimise the operation of the public / private partnerships within the clusters. It was with this objective that Erdyn carried out more than 200 interviews, including 180 in-depth interviews with people involved in research (researchers, laboratory directors, managers of public research establishments).

With the support of the interministerial working group (IWG) responsible for steering of the policy of the competitiveness clusters, the MESR will examine the consultant's recommendations, and define priority avenues for actions.



▪ ECOSYSTEM OF THE CLUSTERS

The competitiveness clusters discuss their linkage with their local and European ecosystem

During the 8th national clusters day, a roundtable was devoted to “the positioning and linkage of the competitiveness clusters with the other regional, European and international ‘clusters’.”

This exchange was an occasion for the DATAR to recall that 84 new company groups had been selected in January 2011 as part of the second call for projects; this means a total of 126 groups have been selected in 2010 and 2011. These figures are indicative of the extent to which companies and territories are interested in taking part in collaborative dynamic efforts in all forms. The Ministry for Agriculture, Food, Fishing, Rural Life and Territorial Development has mobilised an envelope of approximately 24 million euros for the benefit of the company groups, with this amount being completed by support from other ministries, from the Caisse des Dépôts and from OSEO. The Overseas Ministry is contributing 1.5 million euros to this policy.

▪ STANDARDISATION

Methodological tools for strengthening the “management” of innovation: what role for the clusters?

Since 2009, new standardisation efforts have seen the light of day on the European level, in the field of innovation management.

Objective? To prepare practical tools that will allow private and public organisations to set up and improve their innovation management systems, but also to assess their capacity to innovate. Some 20 European Union countries are participating in these efforts in order to defend their practices. AFNOR has set up a French “Innovation management” standardisation commission in charge of defining France’s positions relative to the key subjects of these works:

- Innovation management (collaborative management, creativity management...);
- Intellectual property management;
- Strategic intelligence management;
- Assessment of the innovation management;
- Accompaniment services for innovation management.

Coordinated by Jeanne Jordanov from the CNRS, this commission brings together more than 80 organisations involved in innovation and research (companies, research institutions, clinical centres, Carnot institutes, institutional innovation and research actors, regional innovation actors, innovation and intellectual property management consulting firms, innovation teachers-researchers, etc.). As coordinators of the regional networks, the competitiveness clusters have a key role to play in the preparation of the future European normative reference texts that will become the reference for tomorrow in Europe.

 Contact

To take part in these works, contact Isabelle Lambert, Innovation management project head at the AFNOR
Tel.: +33 (0)1 41 62 80 92



▪ PRIVATE FUNDING

A new brochure to help the SMEs in the clusters to access private funding

To ensure the growth of SMEs, the competitiveness clusters encourage their participation in collaborative R&D projects.

To transform R&D projects into commercial successes, **greater recourse to private funding is necessary**. Prepared by CapinTech, CDC Entreprises, Polinvest and the DGCIS, **this brochure presents the common actions that have been set up by clusters and private funding sources**.

➔ Download [The brochure](#) (8 pages, PDF format, 800 KB)

▪ CLOSE-UP ON INVESTMENTS FOR THE FUTURE

1st call for “Equipex” projects: 52 excellence equipment items selected, for total amount of 340 million euros

52 projects were selected at the end of the “first wave” of the call for excellence equipment projects as part of the programme for investments for the future, in the amount of 340 million euros.

- ➔ **260 million** are intended for **equipment purchases**. The initial envelope was increased by 60 million euros of consumable credits, in order to select a larger number of projects.
- ➔ **80 million euros**, resulting from the investment of non-consumable allocations, will be paid to the beneficiaries of the projects in order to provide for the operation and upkeep of the equipment for 10 years.

Aid in what amounts?

24 projects will receive funding of between 1 and 5 million euros; 16 projects of between 5 and 10 million euros. Finally, 12 projects will each receive more than 10 million euros.

What geographical distribution?

32 excellence equipment items were selected in the Ile-de-France, the region that is home to the largest number of winners, followed by the regions of Rhône-Alpes (19), Provence-Alpes-Côte-d'Azur (7), Aquitaine (6) and Alsace (5). The Nord-Pas-de-Calais, Midi-Pyrénées and Languedoc-Roussillon regions each secured four projects.

What business sectors?

The biology-health sector is the most heavily represented in this first wave (15 winners, i.e. 29% of the total) followed by nanotechnologies (10 projects, 19%), energy (9 projects, 17%), environmental sciences (8 projects, 15%) and then a tie between human and social sciences and information technology sciences (5 projects each, i.e. 10% of the total).



EU NEWS

▪ RTDFP

The calls for “regions of knowledge” projects: an opportunity for the competitiveness clusters to strengthen their transnational cooperation actions.

Every year since 2008, the European Union has launched calls for projects intended to strengthen transnational cooperation between the regional research “clusters”.

Defining a joint action plan

The “Regions of knowledge” programme of the 7th RTDFP is thereby funding closer ties between European “clusters”, around a promising subject. The objectives of the selected consortia are to prepare a report on their respective research capacities, to define a joint action plan that notably includes measures intended to identify common R&D projects, international cooperation, and the mobility of researchers between industry and public research. However, the financing of the plan’s joint actions is not covered by the call for projects, but some of the actions to accompany the implementation of the action plan can constitute eligible expenditures. With its €18 million, the 2011 call was devoted to “green” transport systems. Around 10 French competitiveness clusters have already taken part in these projects lasting 36 months. The next call for 2012 will be launched in the summer of 2011.

INTERNATIONAL

▪ INTERNATIONAL PARTNERSHIP

Around 50 international actions: this is the outcome of the accompaniment efforts launched by the DGCIS and Ubifrance as part of the 2009 agreement.

In order to strengthen the international support of the competitiveness clusters, the DGCIS signed 3-year agreement with Ubifrance in January 2009.

The objective is to provide the clusters and their international members with support thanks to the Ubifrance services.

Around 50 actions carried out in 2009 and 2010

In 2009, 17 international actions, thanks to the collective missions of the clusters and to the technological partnership meetings, made it possible to provide accompaniment to more than 300 companies and laboratories. In 2010, 30 international actions were implemented with more than 400 accompanied companies and laboratories, in eight different sectors.

Around 30 new actions in 2012

This agreement’s 2011 programme calls for around 30 actions, with an increased effort targeting SMEs in the competitiveness clusters, by means of the technological partnership meetings. Each of these actions is

MOTEURS DE CROISSANCE ET D'EMPLOI

assessed at the end of the mission, and then in the medium and long terms, such as to measure the concrete results generated by the mission organised within this framework.

CLUSTERS IN ACTION

FOCUS ON COMPLETED PROJECTS

▪ HEALTH

Ingenis: new therapies thanks to advances in genome engineering

The INGENIS (*INGénierie GENomique pour les Industries de Santé*) collaborative R&D project, one of the first to be recognised by the worldwide competitiveness cluster Medicen Paris Region in 2005, received assistance within the framework of a call for projects from the FUI - Single interministerial fund.



Modelling of a meganuclease fixed to the specific DNA sequence that it recognises.
Copyright Collectis.

Many expectations for the use of genes for therapeutic purposes

Genetics have become inescapable as part of the newly implemented therapeutic strategies, but considerable effort is still required, notably in order to improve the usage of genetics. Today, in fact, when a gene is inserted into a cell's genome (1), in order to perform gene therapy, for example, this insertion is generally performed randomly. The inserted gene may then generate no reaction or, on the contrary, interfere with other genes, thereby disturbing the organism's proper functioning. This was, for example, the case of the two bubble babies who developed leukaemia (2).

Towards new and more efficient therapeutic methods

The purpose of the Ingenis project was to demonstrate various "genome engineering" (3) applications, i.e. a series of techniques capable of performing targeted and controlled gene modifications using precise tools. These techniques use "meganucleases" that make it possible to cut the DNA in a very precise manner, generally at a single location of the relevant genome. By using "genome engineering", it is possible to control the gene's insertion point and, consequently, to select it such as to be sure that no disturbances will occur.

(1) Genome: all of the genetic characteristics of an individual or of a species listed in its DNA.

(2) In 1999, the bubble babies underwent gene therapy for the first time, which triggered leukaemia.

(3) According to the Collectis company, genome engineering can be used to modify genomes in a very precise and controlled manner. Three primary approaches allow for the insertion, inactivation or correction of a given gene, with numerous applications in research, in agro-biotechnology and in human health.

The benefits in the health domain are very promising. For example, they are allowing the development and testing of genome modification technologies:

- To restore the operation of the immune system,
- To transport cells into the heart after cardiac arrests,
- For the generation of antibodies, as medication candidates.

In the end, Ingenis should open the door to new therapies, notably in the area of healing genetic illnesses or in the design of new antiviral approaches.

Partners with complementary skills

The success of the Ingenis project owes much to the synergy between the various partners, who were able to pool their skills at each step during the five years of their collaboration.

The programme involves three innovative SMEs:

- **Collectis**, the project coordinator, is a world champion company in genome engineering, that applies its expertise to many fields, including biological research and human therapeutics;
- **Myosix** is an innovative biotechnology company, specialising in new cell therapy technologies ;
- **Eucodis** is a company that produces enzymes for the pharmaceutical industry, biotechnologies and the diagnostic sector;

as well as academic partners the Inserm (U768, U633) and the *Assistance Publique Hôpitaux de Paris* (Saint Louis Hospital).



The Collectis Bioresearch teams are developing products intended for academic and industrial research. Copyright Collectis.



Already visible scientific repercussions

This project has opened the door to several developments, notably targeting:

- The treatment of a class of serious immunodeficiency. By re-establishing a functional immune system thanks to compensating for the genetic mutation that is responsible for the illness, patients can live normally;
- The validation of industrial tools for the development of medications;
- A range of products intended for academic and industrial research, already on the market. Collectis bioresearch makes it possible for researchers in the world of life sciences to make simple use of these sophisticated technologies, by marketing them in the form of ready to use kits.

Ingenis has also led to the filing of 3 patents and 6 scientific publications in peer-reviewed scientific magazines.

The economic repercussions

The project has also led to the creation by spin-off of Eviagenics, a Paris SME whose activity focuses on the development of cells resulting from the programme, in order to generate new antibody medication candidates.

Thanks to this project, Collectis, its subsidiary Collectis bioresearch, Myosix and Eviagenics will eventually be able to market new products.

CLUSTER NEWS

▪ EUROPEAN PARTNERSHIP

The Atlanpole BiothéErapiés cluster brings together European clusters around tissue engineering and regenerative medicine

Under the coordination of the Biotherapies cluster, specialising in innovative health and diagnostic domains, eight European regions have created a consortium in order to strengthen their competitive advantage in the area of tissue engineering ⁽¹⁾ and regenerative medicine ⁽²⁾.



The partners of the TERM consortium Atlantic Biotherapies

These innovative therapies are opening new prospects in the treatment of serious illnesses such as cancer, diabetes, Alzheimer's disease or Parkinson's disease. They are simultaneously recognised as sources of medical progress and of significant economic growth for Europe. Many challenges must still be met, however, equally in technical, legal or even ethical terms, in a significant competitive environment faced with Asia and the United States.

In order to develop these opportunities, 14 partners ("clusters" and regions) from 8 European countries, have organised themselves with the support of the European Union.. They have launched the "TERM" (Tissue Engineering and Regenerative Medicine) project, intended to encourage collaboration between R&D actors in the various regions involved in these therapies. Several tools will be created and then deployed in order to highlight all of the regional strengths, to share best practices, to develop interregional programmes with common objectives, and to suggest financial instruments that best suit these realisations.

The first action plan will be presented at the end of 2011. It will serve as the basis for the consortium's activities, intended to meet the expectations of industries and research institutes.

 [Contact](#)

 [Agnès Kammoun](#), coordinator of the TERM project

(1) Tissue engineering: usage of specific materials associated with biological elements such as cells in order to heal damaged tissue.

(2) Regenerative medicine: use of medication cells or gene cells in order to regenerate a patient's deficient or sick organs

▪ MAPPING OF RARE KNOWLEDGE

The Techtera cluster is launching the mapping of rare knowledge in textile techniques



The efforts to map the rare knowledge and machines of the participants using technical textiles in the Rhône-Alpes region by the Techtera cluster is entering its operational phase.

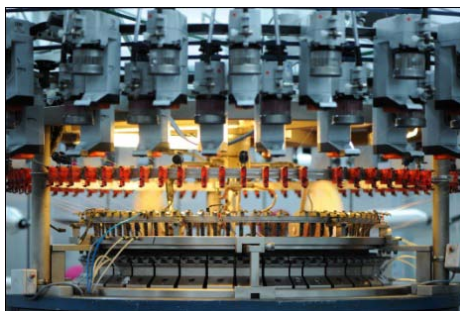
Supporting and enhancing the sector's dynamism in terms of innovation

The objective is twofold. The first is to identify and learn more about the rare skills that can be mobilised within the sector, in the service innovation, notably for SMEs. The next task will be to optimise the network and formalize the cluster's methodology in order to develop new cooperation actions. In a word: strengthening the sector's structuring in order to support and increase its dynamism in the area of innovation.

In time, this mapping will offer a kind of "exchange" for the components of R&D projects. This will allow a SME that is launching a project to find out about the existing resources within the sector, and to build on them.

The work began in the last quarter of 2010, and will continue for two years.

First step in 2011, with the design and production of this digital mapping.



One of the many weaving professions of a weaving specialist, the Bel Maille company. Copyright Laurent Cerino/Techtera.

A questionnaire will be distributed to the sector's actors. Amongst other things, it will help to identify rare or emerging skills.

In parallel, interviews will be held with the people who will be recommended to serve as the relays for the update and oversight of the mapping. These are two imperatives that will guarantee its dynamism and lasting quality.

This design period will end with an Internet-based area for making contacts, that will allow the sector's companies and actors to get in touch with one another and to establish collaborative efforts while building on their complementary skills.

Second step in 2012, with a work programme intended to refine the expertise portfolio created the previous year.

This will focus on steering the "collaborative" knowledge developed by Techtera since its creation in 2005. The cluster's know-how in the area of the emergence of innovation and the accompaniment of R&D projects will be modelled. A collaborative kit will be created and placed online, on an Internet site dedicated to accompanying the projects and reserved for the Techtera members. A truly virtual collaborative platform, coordinated by a network of consultants approved by the cluster.

▪ MEDITERRANEAN COOPERATION

The PASS cluster is initiating concrete cooperative efforts with the Mediterranean countries that produce aromatic plants

The Parfums Arômes Senteurs Saveurs (PASS) cluster has initiated enhanced trans-Mediterranean cooperation in order to develop the procurement of raw materials for the aromatic and cosmetics sector, while better highlighting the natural resources of our regions.

Indeed, the Mediterranean basin has particularly rich and diversified aromatic and medicinal flora, with varying levels of expertise for their exploitation, which can be a source of fruitful collaboration between the local actors.

An initial step was taken with the launch of an annual international conference on aromatic and medicinal plants in Morocco in 2009, then in Tunisia in 2010.



Signing of a partnership on 12 November 2010 between Mr. Han-Paul Bodifée, Chairman of the PASS Cluster, and Mr. Rachid Chemli, Chairman of Association Tunisienne des Plantes Médicinales. Copyright : PASS cluster

The objective is to develop exchanges between the sector's professionals. In addition to lectures and workshops, targeted meetings are organised during this event such as to encourage direct contacts and to lead to concrete partnerships between companies.

Partnership agreements have also been signed with the key actors in these two countries. The prospect is to eventually intensify this cooperation in order to lead to the creation of a Mediterranean federation of aromatic and medicinal plants, that would include all of the actors in the Mediterranean basin, ranging from plant production through to the finished product, while including their industrial transformation.

The creation of sector-specific momentum on this scale could result in particularly worthwhile development prospects, given that the market for natural products has been growing continuously for many years.

Focusing on economic research and development, this unifying structure has the following objectives:

- The development of knowledge on Mediterranean biodiversity.
- Multi-disciplinary research on aromatic and medicinal plants, including ethnobotany, extraction and transformation procedures for the natural raw materials, techniques for the biological screening of natural extracts.
- An intensification of the economic exchanges between the actors on both shores of the Mediterranean.
- The training of actors relative to the sector's stakes, from the agronomic aspects through to standardisation and regulations.

The aim is to structure this initiative starting in 2011, around an initial core of major actors from the Mediterranean basin.



[Philippe Claud](#), Executive officer of the PASS cluster



[_ Consult the archives \[http://www.competitivite.gouv.fr/spip.php?article116&lang=fr\]](http://www.competitivite.gouv.fr/spip.php?article116&lang=fr)

[_ Sign up \[http://competitivite.gouv.fr/\]](http://competitivite.gouv.fr/)

Legal mentions

This newsletter is published by the DGCIS and DATAR

Address: 8, rue de Penthièvre, 75 008 PARIS

- Director of publication: M. Patrick Crézé
- Editor in chief and copy: Martine Maillard
- Editorial committee (in alphabetical order): Delphine Abramowitz, Rémi Arquevaux, Véronique Barry, Nicolas Daubresse, Nicole Dechervois, Emma Delfau, Ana Dujmovic Blua, Aurélie Faitot, Arnaud Lafont, Fabienne Ragache, Laetitia Tailliez, Thierry Vautrin and all of the associated competitiveness clusters
- Design and production: **Stratis**
- Photos: **Stratis**, Ministry of Economy, Finance and Industry, Collectis, Competitiveness clusters Atlanpole Biotherapies, Vitagora, PASS and Techtera (Laurent Cerino), X

In accordance with the French Data Protection Act n° 78-17 of 6/01/1978, you have at all times the right of access and rectification of data concerning you. You may exercise your right of rectification by writing to us or by clicking on this link. In order to protect your privacy and your personal data, the DGCIS and DATAR undertake not to divulge your personal information to other companies for their use. Your e-mail address will not be used for any purposes other than distribution of this newsletter.

For any further information/requests: contact@competitivite.gouv.fr