



October 2011

CLUSTER POLICY

- 🚩 *R&D of the FUI* > Launch of the 13th call for collaborative R&D projects from the competitive clusters
- 🚩 *Documentation* > Study on the positioning of public research in view of the policy of the competitive clusters
- 🚩 *Focus on future investments* > The 6 leading Technological Research Institutes (French acronym: IRT) will receive €1.5billion
- 🚩 *Focus on future investments* > Pooled innovation platforms (French acronym: PFMI): 9 projects received in the call for projects' first wave of filings
- 🚩 *Focus on future investments* > Structuring projects of the competitive clusters (French acronym: PSPC): 5 new project received within the framework of the call for projects
- 🚩 *Focus on future investments* > Excellence initiatives: 11 new applications received as part of the 2nd wave of the call for projects

INTERNATIONAL

- 🚩 *Publication* > The October 2011 edition of the monitoring bulletin for State aid available to competitive clusters
- 🚩 *Franco-Israeli technological partnership* > The 1st France-Israel Innovation day at Bercy on 5 December 2011
- 🚩 *Franco-Japanese technological partnership* > First Franco-Japanese R&D call for projects launched by OSEO and its Japanese counterpart
- 🚩 *Franco-Chinese technological partnership* > The 5th "France-China Coopool Innovation" call for projects

CLUSTERS IN ACTION

FOCUS ON COMPLETED PROJECTS

- 🚩 *Food industry* > BléNNat: developing higher quality wheat for better nutrition

CLUSTER NEWS

- 🚩 *Dynamic mapping* > Images et Réseaux presents Visir, an example of dynamic mapping
- 🚩 *Inter-cluster partnership* > 11 French competitive clusters grouped around the recycling of composite materials
- 🚩 *European inter-cluster partnerships* > Alsace BioValley and ABC Europe: support services for innovative small businesses
- 🚩 *Skills management* > The Axelera competitive cluster is developing the repository of behavioural skills for the chemical / environmental sector
- 🚩 *Intellectual property* > The Filières équine competitive cluster is opting for industrial property

▪ R&D OF THE FUI


Launch of the 13th call for collaborative R&D projects from the competitive clusters

The ministers in charge of the policy of competitive clusters have launched the 13th call for collaborative projects within the framework of the single interministerial fund (French acronym: FUI).

This call for projects is open until **noon on 25 November 2011**. The promoters must file their projects put forward by the clusters, using the [OSEO secure extranet](#). After an assessment of the submitted projects, the ministries will select the files, with the list being published in early March 2012. The granted aid will be managed by OSEO.

Without exception, the proposed projects must lead to the marketing of an innovative product or service within a period of **5 years** as of the end of the R&D programme.

A 14th call for projects will be launched in March 2012.

 [En savoir plus](#)


 [The complete study](#)

▪ DOCUMENTATION

Study on the positioning of public research in view of the policy of the competitive clusters.

The Ministry for Higher Education and Research wished to obtain an assessment of how these roleplayers were affected by the clusters policy.

The competitive clusters are a key instrument in the public support policies for innovation. As public research actors constitute a key component of this policy, the Ministry for Higher Education and Research wished to obtain an assessment of how these actors were affected by the clusters policy.

 [En savoir plus](#)


 [Consult the complete study](#)

The 6 leading Technological Research Institutes (French acronym: IRT) will receive €1.5billion

The press release dated 30 September 2011 announced the allocations for the 6 leading IRTs in the investments for the future programme. These funds partly consist of a subsidy, and partly of a non-consumable allocation from which the IRT will receive interest over time.

After the call for projects launched in July 2010, 6 initial projects (AESE, Jules Verne, Lyon Biotech, M2P, Nanoelec and Railenium) were selected in May 2011 by an international jury chaired by Christian Streif. An in-depth review of the business plans of the six projects led to a determination of the amounts that each project would receive.

The IRTs aim to develop strategic public-private partnerships in the area of research and innovation. They will allow France to strengthen the ecosystems represented by the competitive clusters, and to attain excellence in sectors of the future. The IRTs will increase transfers of knowledge to companies thanks to the partnerships implemented upstream. Through their actions, they will contribute to the development of innovative new products and will help with the professional integration of students. They will establish partnerships and increase France's appeal in the eyes of companies and of the best international researchers.

 [En savoir plus](#)


 [The complete file](#)

Pooled innovation platforms (French acronym: PFMI): 9 projects received in the call for projects' first wave of filings

Launched on 7 July 2011, this call for projects is intended to support projects to mutualise equipment or services, intended primarily for companies.

These platforms are intended to accommodate R&D works, tests, prototyping, and the demonstration and even establishment of "living labs". The platforms' projects, promoted by at least one competitive cluster, bring together various partners around the establishment of companies that will eventually be economically autonomous. The involvement of the investments for the future programme is through its operator, the Caisse des dépôts et consignation, primarily in the form of capital contributions.

To facilitate the filing of projects as part of this ongoing call for projects, the deadlines for the next filing surges have been set as **7 December 2011 and 3 January 2012**.

 [En savoir plus](#)


 [The complete file](#)

Structuring projects of the competitive clusters (French acronym: PSPC): 5 new project received within the framework of the call for projects

The PSPC projects received on 30 September 2011 will now be reviewed for short-listing, with the results being announced by the end of 2011.

To facilitate the filing of projects as part of this ongoing call for projects, the next filing surges for PSPC projects have been set as **25 November 2011 and 16 January 2012**.

The call for PSPC projects is intended to support R&D projects promoted by competitive clusters and involving at least 2 companies and laboratories in a restructuring project for an existing or emerging economic sector.

 [En savoir plus](#)

 [The complete file](#)

Excellence initiatives: 11 new applications received as part of the 2nd wave of the call for projects

Higher education and research establishments have submitted 11 new applications within the framework of the "Excellence initiatives" call for projects as part of the Investments for the future programme.

The projects are the following:

- **A-M IDEX:** Aix-Marseille Initiative d'Excellence (Aix-Marseille Interdisciplinarity for excellence) - Provence-Alpes-Côte d'Azur
- **- CITIF 2440:** Connecting Innovative Talents to Invent the Future (Intelligent city of the future 2440) - Ile de France
- **HUMANIDEX 2:** Humanticipation (eco-technologies for man and the environment) - Burgundy, Franche-Comté
- **ICOUEST 2:** Innovation Campus Ouest - Brittany, Pays de la Loire
- **IDEXSF:** Initiative d'excellence Sud de France (South of France Interdisciplinarity for excellence) - Languedoc Roussillon - Languedoc Roussillon
- **INGEXYS:** Ecosystem engineering - Lorraine
- **IPS:** Idex Paris Saclay - Ile de France
- **LILLEVOLUTION:** Lille Evolutions - Nord-Pas-de-Calais
- **PNMU:** Paris Novi Mundi Université - Ile de France
- **UPE:** Université Paris Est - Ile de France
- **USPC:** Université Sorbonne Paris Cité - Ile de France

The applications will be reviewed by an international jury. They will have to demonstrate their current strengths, but also their level of ambition for the future and their ability to implement their strategy.

3 projects have already been selected as part of the first selection wave. They include the **UNISTRA in Strasbourg**, **Idex Bordeaux** (promoted by the PRES Université de Bordeaux), and **PSL Etoile** (13 partners including the Collège de France, the Ecole Normale Supérieure, the Université Paris Dauphine, ESPCI ParisTech, Chimie ParisTech, the Observatoire de Paris, and the Institut Curie).

With its allocated €7.7billion, this call for projects should lead to the emergence of 5 to 10 world-class multi-disciplinary higher education and research clusters.




 [En savoir plus](#)

 [The complete file \(Investments for the future site\)](#)

▪ PUBLICATION

The October 2011 edition of the monitoring bulletin for State aid available to competitive clusters

In the news this month:

-  The European Commission considers that aid provided for the residual and accessory activities of a research institution is compatible with the Treaty's provisions.
-  The European Commission has initiated a review of two cases of German aid to the automobile sector, one of which involves aid for the production of electric vehicles. It is striving to identify the existence of a new market.
-  The sale to a private operator of assets belonging to a public legal person does not constitute aid, provided that the disposal process is open and transparent and carried out at the market price as confirmed by an expert.

 En savoir plus

 [The October 2011 monitoring bulletin](#)

▪ FRANCO-ISRAELI TECHNOLOGICAL PARTNERSHIP

The 1st France-Israel Innovation day at Bercy on 5 December 2011

This event will be held at Bercy, in the presence of the two ministers in charge of Industry, Mr Shalom Simhon and Mr Eric Besson.

This day is notably intended to bring companies together for a better understanding of the tools and mechanisms of the innovation policies in both countries. The companies can register for workshops on medical nanotechnologies, ICTs, solar energy and so-called "alternative" fuels.

 En savoir plus

 [France-Israel Innovation Day](#)

 Contact

 **Contact DGCIS** : romain.sergent@finances.gouv.fr

▪ FRANCO-JAPANESE TECHNOLOGICAL PARTNERSHIP

First Franco-Japanese R&D call for projects launched by OSEO and its Japanese counterpart

Small French businesses wishing to develop technological partnerships with small Japanese businesses can obtain support from a joint programme launched by OSEO and its Japanese counterpart, the NEDO.

The sectors identified for these partnerships:

-  Electronic materials and technologies, and nanotechnologies

- [🔗 Biotechnology and medical technologies](#)
- [🔗 Environmental technologies](#)
- [🔗 Production systems](#)

This call for projects runs from 1st September to 15 December 2011

[📄 En savoir plus](#)

[🔗 The OSEO site](#)

FRANCO-CHINESE TECHNOLOGICAL PARTNERSHIP

The 5th “France-China Coopol Innovation” call for projects

The objective of this call for projects is the assessment and identification of French and Chinese cooperation partners involved in R&D projects throughout China.

The science and technology department at the French Embassy in China has launched the fifth edition of the Coopol Innovation programme, intended for all French competitive clusters and technology parks. This programme involves get-togethers organised by the scientific department of the French Embassy in China. Its aim is to offer innovative small businesses, in association with their academic research partners, a mission to assess and identify cooperation partners between French and Chinese participants in R&D projects. The programme provides for missions to be carried out throughout China.

[📄 En savoir plus](#)

[🔗 The 5th “France-China Coopol Innovation” call for projects](#)

REPÈRES

72 %

This is the share of fiscally independent companies with fewer than 250 employees that received a research tax credit in 2009.

[Source MESR](#)

FOCUS ON COMPLETED PROJECTS

FOOD INDUSTRY

BléNNat: developing higher quality wheat for better nutrition

BléNNat was promoted by the [Céréales Vallée cluster](#) and selected as part of the 3rd call for projects organised by the Single Interministerial Fund (FUI).



A wheat variety richer in fibre and nutrients for better health, tools for assisting with the natural selection of wheat grains, agronomic progress related to the reduced usage of fertilizer.

Naturally better cereals for nutrition

Modern eating methods are behind an increase of illnesses such as obesity, certain types of diabetes and colon cancer. Consumers are increasingly concerned about the impact of food on health. They are therefore asking for foods that are nutritionally worthwhile, i.e. rich in fibre or micronutrients. To meet this expectation, manufacturers have traditionally added these elements to foods. The BléNNat (Blé Nutrition NATuralité) project has chosen to innovate by developing cereals that are naturally superior in nutritional terms. Its aim is to include more fibre and micronutrients in wheat. As such, this innovation will take in the vast market of wheat flours, cereal ingredients and breadmaking products.

Partners gathered around the Limagrain Céréales Ingrédients research centre in Auvergne

- The project is promoted by [ULICE, the R&D centre of Limagrain Céréales Ingrédients](#), a subsidiary of Limagrain, the world's 4th leading seed producer;
- [Les Grands Moulins de Paris](#), the milling industry of the NutriXo group;
- [Pains Jacquet](#), manufacturer of crunchy packaged breads and pastries;
- [VetAgro Sup](#), Higher education and research institutes in the areas of food, animal health, agronomic sciences and environmental sciences;
- [UMR Genetics, diversity and ecophysiology of cereals INRA-Université Blaise Pascal](#);
- [UMR Engineering of agro-polymers and emerging technologies CIRAD-Université Montpellier II-INRA-Supagro](#).

Work in three steps carried out over more than three years

For a better response to nutritional needs, wheat grains and flours that are richer in magnesium

Magnesium is an essential mineral for the functioning of the human body. It notably provides for good nervous and muscular balance. It is also often considered as a natural anti-stress product. Cereal products are currently the leading source of magnesium for the French.

- **This project's first component** involved increasing the magnesium content of wheat grains. The varieties selected for their rich magnesium content were improved in terms of their agronomic and technological quality. The development of the crops was studied over three consecutive years. This effort showed that the effect of the soil, notably the natural contribution of nitrogen, predominates over the application of fertilizer when it comes to increasing the magnesium content of grains. Also, molecular tools were developed in order to allow for a faster selection of varieties with a rich magnesium content, directly from their gene pool or genome. The regions of the genome or the genes involved in this characteristic were identified. Finally, the ability of these varieties to be transformed into flour and to provide good quality bread was tested.
- **The second component** also strove to increase the magnesium content of wheat flours. It primarily focused on the friability of the 'aleurone' layer that is very rich in magnesium. This part of the grain is located between the bran and the kernel. The greater its friability, the more it is found in white flour instead of remaining attached to the bran. Tools were developed in order to sort grains according to the appearance and morphology of their aleurone layer. Combined with a study of the gene pool of grains having the most friable aleurone layer, these tools made it possible to detect wheat varieties that will provide flour with the highest magnesium content.
- **The third component** involved increasing the content of resistant starch in the wheat grain. This is a very interesting fibre for health reasons, notably for preventing diabetes and protecting the colon. Varieties of wheat likely to have this property were identified. Tools were developed for selecting varieties from a reading of their gene pool and from the morphology of the grains. The beneficial impact on health from resistant starch was assessed using an animal model.

In the end, very promising scientific results

- A concept of a better variety of high magnesium wheat with a high fibre content was validated;
- Tools were also developed to assist with the selection of varieties according to their gene pool;
- Moreover, the importance of the crop soil relative to fertilizer contribution was also demonstrated with regard to optimising the increased content of magnesium. The ground in the Limagne region is naturally rich in nitrogen, and thus particularly well-suited for this purpose;
- At the same time, tools were developed to assist with the selection of varieties according to their gene pool, for all of the targets for increased quality;
- Finally, the health benefits of flour high in fibres thanks to resistant starch were confirmed *in vivo*.

Initial project feedback

- **Results, products, prototypes, demonstrator, services resulting from R&D:** a concept of a better variety of high magnesium wheat with a high fibre content was validated. Tools were developed to assist with the selection of varieties according to their gene pool. The importance of the crop soil relative to fertilizer contribution was demonstrated, notably for optimising the increased content of magnesium. Tools were developed to assist with the selection of varieties according to their gene pool, for all of the targets for increased quality. Finally, the health benefits of flour high in fibres thanks to resistant starch were confirmed *in vivo*.
- **Publications:** 5 publications in scientific journals
- **Conferences, colloquia:** 12 presentations (international conferences, food industry trade fairs).
- **Thesis:** 1
- **Jobs created:** 4
- **Prospects:** the industrial projects for the development of products are still in progress. Varietal development is an effort that is spread over around some ten years. The research on the gene pool of wheat and on the impact of nutrition on the human body's metabolism is ongoing. It is necessary in order to develop a new commercial variety of wheat. The marketing of new wheat varieties with stable and improved agronomic and nutritional qualities could be possible within 5 years. Industrial partners already have tools for the development of these varieties and technological and nutritional arguments that have been validated scientifically and with consumers. Moreover, this project follows on the heels of the NutriPan project that seeks to improve the nutritional quality of bread, through working on innovative breadmaking processes. These processes could be

combined with the wheat flour resulting from the BléNNat project in order to guarantee optimised production throughout the production chain.

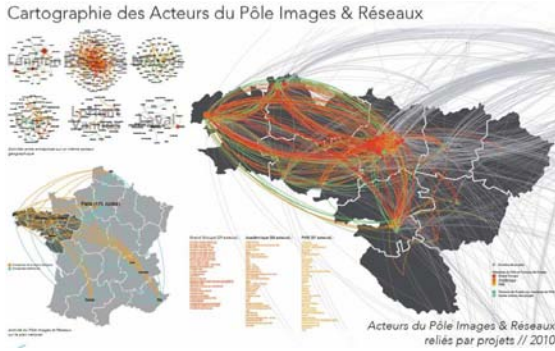
 En savoir plus

 [The Céréales Vallée cluster internet site](#)

▪ DYNAMIC MAPPING

Images et Réseaux presents Visir, an example of dynamic mapping

Easy display of inter-regional momentum and of the cross-pollination between roleplayers and sectors, this is the service proposed for managing a complex community.



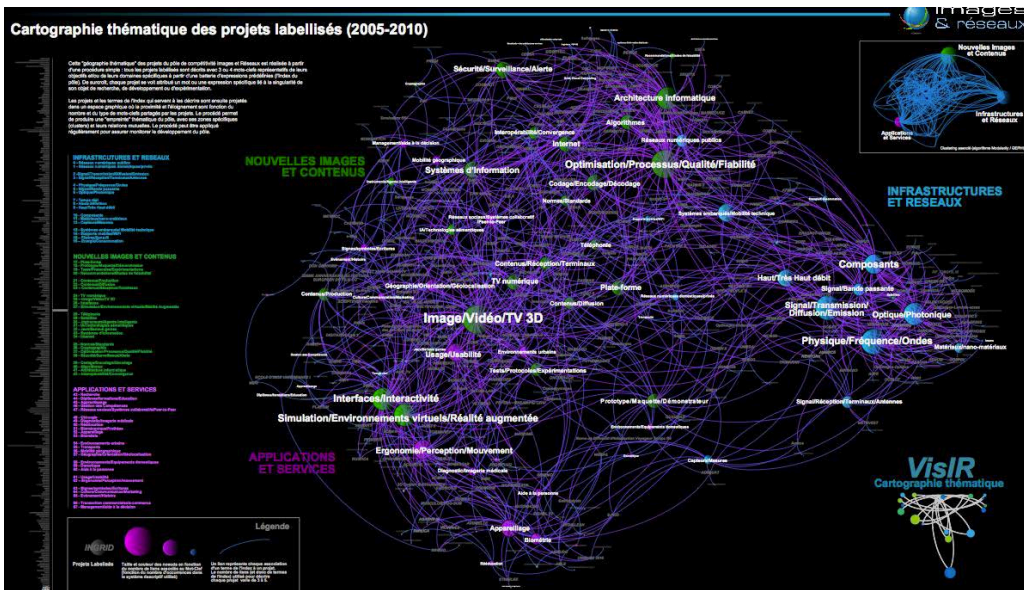
Copyright: Images&réseaux

At the end of 2010, the **Images & Réseaux** cluster launched an innovative project on the visual representation of the impact of collaborative projects across a territory and within business sectors. This is the Visir project. It includes geographical, qualitative, thematic and descriptive data produced from information within the competitive cluster. It is used to detect active communities and emerging areas of competence.

Promoted by Images & Réseaux and researcher Franck Ghitalla (**INIST-CNRS**) in partnership with the **Ecole de Design de Nantes**, this research is at the heart of a rapidly growing discipline, namely dynamic mapping.

The initial maps already bring to light strong inter-regional momentum, and true collaboration on the national level. They visually represent the progress with the cluster's major fields: Images and 3-D, Increased reality and simulation, interactivity, Infrastructures and networks. With this approach, unique in France, Images & Réseaux has a dynamic scoreboard that will serve to measure the cooperation and inter-pollination between roleplayers / sectors. It facilitates the management of a complex community.

A new interactive step is expected this autumn, namely a documentation and visualization tool for funded projects. Visir offers a simple and instantaneous depiction of the day-to-day reality within a cluster. It will soon be enhanced by an offer with a service dedicated to the mapping of complex networks.



Copyright Images&Réseaux

11 French competitive clusters grouped around the recycling of composite materials

Looking ahead to 2014, a national recycling charter for composite materials has defined a roadmap.



11 French competitive clusters ([Aerospace Valley](#), [Astech](#), [Axelera](#), [EMC2](#), [Fibres](#), [IAR](#), [I-Trans](#), [Plastipolis](#), [Team²](#), [Techtera](#) and [Uptex](#)) have committed to working with the Groupement de la Plasturgie Industrielle et des Composites (GPIC) (Grouping of Industrial Plastics and Composites) and the Composittec resource centre in order to develop a national structure for the recycling of composite materials.

Since April 2011, their initiative has been formalized in a national recycling charter for composite materials, that has defined a roadmap looking ahead to 2014. The planned actions include a review of what already exists, the coordination of regional initiatives, the launch of R&D projects intended to overcome technological roadblocks and the economic hindrances that include, amongst other things, the collection, sorting and reclamation of these materials. Certain actions have already been programmed, namely the set-up of recycling structures in the regions closest to manufacturers and users, the coordination of existing structures, the study and massification of deposits of waste products, and the organisation of collection and sorting. The organisation of access to markets is also being envisaged, along with the set-up of collaborative R&D projects promoted by the clusters and the dissemination of the results.

The stakes of this commitment include the sector's future and the compliance with the future regulations on product lifespans and eco-design. Indeed, the composite materials sector is suffering from a lack of organisation of the management of its production and end-of-life waste. Based on this finding, the Aerospace Valley, EMC2 and Plastipolis clusters have come together with Composittec in order to reflect on and launch a national grouping initiative.

Alsace BioValley and ABC Europe: support services for innovative small businesses

The ABC Europe consortium offers a wide range of services for innovative small businesses participating in clusters



The [Alsace BioValley](#) competitive cluster is active within ABC Europe, a large project bringing together the biggest European health clusters. The objective is to develop common support services for innovative small businesses, in order to encourage their development and internationalisation.

Over 3 years, this consortium offers a wide range of services for small European businesses, such as partnership support, easier access to research infrastructures, centralisation of the support mechanisms for protecting intellectual property, and the implementation of an "ambassadors programme" (exchanges of experts between the consortium's various clusters). The very latest initiative has to do with the www.toolsforscience.eu portal launched on 15 September of this year. It includes information on the best installations and service companies in Europe's 13 bio-regions.



Contact : agnes.legoll@alsace-biovalley.com

The Axelera competitive cluster is developing the repository of behavioural skills for the chemical / environmental sector

This document proposes a range of 22 behavioural skills organised into 8 major categories.

The technical and behavioural skills of the employees are inseparable. They contribute to the employee's professionalization, with a more global dimension that is based on the employee's personal resources.



The "Training, Skills Forecasting" working group of the [Axelera](#) cluster is made up of professionals from the sector and representatives from the Observatoire prospectif des industries chimiques (Prospective Observatory for Chemical Industries). Its priority has been to catalogue these behavioural skills within a reference document. This repository is intended for various roleplayers: students and employees at the start of their careers, initial and continuing vocational training institutions, directors and managers.

Copyright Axelera

It should therefore provide precise reference points and stimulate exchanges between the various contacts in question.

From resource management to customer satisfaction, and without overlooking communication, the repository proposes a range of 22 key behavioural skills, organised into 8 major categories on three appropriation levels.

Working on the level of the professional world, its aim is to position the individual and his/her behaviour at work at the heart of the chemistry / environment commitment in favour of sustainable development. On 13 May of this year, a morning of exchanges on this topic brought together some 60 professionals from the corporate and training sectors. It served to confirm the expectations of companies, while identifying initial innovative pedagogical approaches.

 En savoir plus

 [Axelera Internet site](#)

The Filières équine competitive cluster is opting for industrial property

Patent-related monitoring across the sector is certainly the most promising action for the very small businesses and small businesses that are members of the cluster.



The [Filière équine](#) competitive cluster wishes for its members, primarily very small businesses and small businesses, to include the notion of industrial property within their actions. For this purpose, it has signed a partnership agreement with the Institut national de la propriété industrielle (INPI) (National Institute of Industrial Property). As such, the awareness of the cluster's members is being raised, either collectively or individually. Projects that are soon to be promoted can be submitted to an industrial property expert, and projects in progress have access to a search for patents.

Also, and this is certainly the most promising action, this partnership has led to the implementation of patent monitoring within the sector. As such, each member company of the cluster receives an historical record of the patents. Since early 2011, the cluster has also informed them of newly granted patents, in the form of targeted notices.

As such, in the first half of 2011, more than 100 patents were identified and sent to members, meaning nearly 500 targeted e-mails. Using this tool, the companies can also monitor the products in their sector, as well as the trends of their competitors. This monitoring is very useful for their current or pending R&D projects: ensuring that they are not committing an infringement, finding potential partners, or even finding new ideas.







 Consult the archives [<http://www.competitivite.gouv.fr/spip.php?article116&lang=fr>]

 Sign up [<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, Sofiène Lourimi, Arnaud Lafont, Fabienne Ragache, Laetitia Tailliez and all of the associated competitiveness clusters.
-  Design and production : [Stratis](#)
-  Photos : [Stratis](#), Competitiveness clusters Céréales Vallée, Images et Réseaux, Techtera, Axelera
-  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 : <http://competitivite.gouv.fr/contact-9.html>

Datar



dgcis
direction générale de la compétitivité
de l'industrie et des services