Study overview
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Summary of french regions' regional innovation strategies

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Introduction

Innovative economies and businesses are key success factors for the competitiveness and wealth of nations in the current globalisation. Increasing the innovation capacity of the territories and their different stakeholders (businesses, employees, universities, researchers etc.) is therefore a good way to prepare for the future.

There is still a long way to go before the European Union becomes “the world’s most competitive and dynamic” knowledge-based economy. However, this goal has been resolutely pursued by all national, local and European policies since 2000 with the “Lisbon Strategy”, reaffirmed by the “Europe 2020” strategy for “smart, sustainable and inclusive” growth.

This ambition requires the concerted commitment of all stakeholders and all public policies. Consequently, the 2007-2013 cohesion policy and its French version, via the National strategic reference framework (NSRF) and operational programmes, defined research, innovation and entrepreneurship support as the key priorities of the new intervention strategy of structural funds in regions.

Since 2007, structural funds have constituted a significant lever to help disseminate the innovation culture, assisting companies in carrying through their innovative projects and, more generally, helping the territories enhance their innovation potential. While not all territories have the same assets, all of them have innovation potential to be exploited, once this notion of innovation is interpreted in the broad sense (technological of course but also social and territorial) and that the “assets” and “comparative advantages” of the territory are clearly identified and promoted.

To improve the identification of the specific strengths and weaknesses of the innovation process in each region, based on a proposal by the European Commission and in agreement with the French government, the French regions were invited, in 2007, to develop a “regional innovation strategy”, for experimental purposes but in keeping with the strategic objectives of the CRSN. Implemented in each of the French regions in accordance with a common methodology proposed at national level, the SRIs were driven by three ambitions: that of a strategic approach based on a shared diagnosis of the assets and weaknesses of the territory, as part of a dialogue with all the socio-economic partners as well as local and regional players; the desire to impose a broader vision of innovation in all its forms; and the ambition to constantly improve coordination between national, local and European policies in favour of innovation.

The results of the “SRI experience” are positive and now exemplary. SRIs are now universally implemented and have instilled a new energy into the already strong actions undertaken in favour of innovation and businesses in the regions, by establishing the conditions for increasing the number and success of innovative projects.

In addition, the SRIs have opened up new opportunities and avenues of reflection and work for the future so as to further increase the efficiency of innovation systems (human capital, innovation management, design, innovative financial instruments, territorial cooperation, etc.).

Finally, at a time when the future of European policies is under discussion (cohesion, research, clusters, etc.) and the territories have the opportunity, as encouraged by the European Commission, to commit to “smart specialisation strategies”, regional innovation strategies ensure that French regions are one step ahead while providing them with valuable experience with a view to future action.

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1 “Method for the diagnosis of the innovation system in French regions”, ADIT, 2008
In 2007, the European Commission proposed that the French regions, in agreement with the French government, each develop a “regional innovation strategy” to optimise the implementation of the European funds from operational programmes dedicated to research and development, innovation and business support. France firmly embarked on the SRI approach insofar as it was in keeping with European and national policies for innovation and competitiveness. The new programming initiated in 2007 marked a significant change in direction for structural funds, which must now serve the objectives of the Lisbon strategy and promote a knowledge economy based on R&D, innovation and corporate culture. However, the spirit of SRIs is also in line with the ambitions of the new Europe 2020 strategy for “intelligent, sustainable and inclusive” growth, to which the future cohesion policy must also ultimately contribute.

Regional innovation strategies help gain greater insight into innovation and business requirements in terms of innovation. Thanks to the SRI approach, the regions believe they now have a better understanding of the demand and multiple needs of companies in terms of innovation than when they were preparing their operational programme. In 2007, 22 of the 26 operational programmes made no reference to the analysis of business demand or requirements in terms of innovation. Conversely, in 2010, 17 of the 26 regions claimed that the SRI approach had improved their understanding of the needs of SMEs in terms of innovation (advice, funding, human factor, etc.).

Currently adopted and implemented throughout the regions, SRIs are above all a way to increase the number and success of innovative projects.

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2 “Study of the evolution of diagnoses and regional innovation strategies within French regions as part of the ERDF OPs, 2007-2013”, ADE, July 2010.
Adjusting the focus on businesses, the preliminary diagnoses of the Regional innovation strategies clearly showed that their needs are not solely technological and financial: what businesses, in particular SMEs and SMIs, also need to become more innovative is expert advice, qualified human resources, adapted financing tools but also, more generally, transparency with regard to the innovation support and assistance systems made available by public authorities.

By interviewing business users, the SRI diagnoses highlighted the need to reinforce coordination between the multiple stakeholders (RDT, incubators, development and transfer units, technical platforms etc.) making up the regional innovation systems. These systems are often deemed opaque and complex by companies, who do not always know, in the words of the Alsace SMEs surveyed as part of the SRI diagnosis, “Who to start with to enter the system?”.

With the desire to address the expectations and requirements of these key innovation players – businesses – SRI diagnoses led to a comprehensive review of innovation mechanisms within the regions from 2007 to 2009: what inputs does the region benefit from, for what outputs? Who are the stakeholders of the innovation system and what relationships are they governed by? Are financing tools adapted to the logics of innovation? What do companies need to take a leap towards innovation? The diagnoses performed by the regions (studies, surveys, working groups, etc.) made it possible to respond to these specific questions with a view to consolidating a strategy.
Therefore, to address the need to improve coordination between the system stakeholders, several regions decided to promote a “business” or “key functions” approach (Alsace, Aquitaine) to innovation support and assistance structures, by envisaging the implementation of “Objectives and resources contracts” with these stakeholders (Limousin, Nord-Pas-de-Calais, Alsace, Haute-Normandie), reinforcing the role of Regional innovation agencies (e.g. Innovergne, ARITT in the Centre region, SEINARI in Haute-Normandie, CARINA in Champagne-Ardenne), and even, in some cases, building closer links with their regional development agencies (Bretagne, Aquitaine), following in the footsteps of the SRI.

In terms of innovation financing, the SRI diagnoses unequivocally highlighted the lack of instruments to support the crucial start-up and maturation phases of innovative projects (“proof of concept” problem for the first financing round), as well as the need to reinforce the equity (“capital financing”) of businesses.
The SRIs now provide concrete responses to these challenges: creation of aid schemes or seed capital funds (Bretagne, Centre, Auvergne, Aquitaine, Bourgogne, Languedoc-Roussillon, Limousin, Midi-Pyrénées, PACA, Île-de-France, Reunion Island, etc.), deployment of financial engineering, security, co-investment instruments focused on innovation, with the support of European funds (ERDF) and national financial partners (OSEO, Caisse des dépôts, banks), mobilisation and professionalisation of business angel networks, etc.

All these practical and targeted initiatives are perfectly in keeping with the ambition of the SRIs, i.e. improve support measures for innovative companies by optimising the use of European and national funds.

However, the SRI approach has also shown that increasing the number and success of innovative projects requires more than just additional financial resources. Stakeholders – entrepreneurs, students or researchers keen to innovate – must be ready to commit to an innovative approach. This is why the dimension aimed at reinforcing businesses’ demand for innovation or capacity to innovate is so important in SRIs and their action plans. Diagnoses universally demonstrated that the level of human resources and the command of non-technological skills for innovation (management, IPL, patents, standards, etc.) feature amongst the most critical elements of businesses’ capacity to innovate. Thus, to increase the number of innovative companies, Regional innovation strategies envisage concrete measures not only to structure the R&D function within companies but also to disseminate the innovation culture (via initial and continuing education) and reinforce the innovation management capacity in SMEs and SMIs (e.g.: DINAMIC schemes in the Pays-de-Loire region, Pack-Services in Poitou-Charentes, Innov’acteur in Bretagne, etc.)
STRENGTHS

• Strong population growth rate: +7% between 1996 and 2005
• Diverse industry present on the international stage: France’s 2nd most industrial region in 2007
• Comprehensive and operational knowledge transfer and dissemination system (Conectus Alsace network, 6 CRITTs - regional innovation and technology transfer centres, 4 PFTs - Technological platforms)
• Well-structured innovation ecosystem coordinated by the ARI (Regional Innovation Agency)
• Universities, research centres and public R&D of international excellence
• Significant scientific production = + 20% patents between 2004 and 2007
• Considerable cross-border cooperation within the upper Rhine area
• Competitiveness clusters: Alsace Biovalley, Fibres et Véhicule du Futur (Fibres and Vehicle of the Future), Hydréos and Energivie (certified in 2009)
• Winner of the Investissements d’Avenir award: SATT Connectus, Mix-Surg UH, IDEX Strasbourg and 10 Labex and Equipex (Laboratories and Equipment of Excellence)
• Findings of the Marketing territorial de l’innovation survey on the strengths of the Alsace region:
  > active, young and qualified population with internationally-minded HERIs (Higher Education and Research Institutions);
  > an industrial territory hosting foreign companies within reach of the major European economic hubs

AQUITAINE REGION

• World-class research in certain sectors (materials, laser)
• High public and private research potential (France’s 7th region for R&D staff)
• The region is currently being restructured (HER: PRES, IPB) and simplified: Innovalis, Aquitaine Valo, Allègre incubator for research enhancement
• Proactive policy (Aquitaine Regional Council; France’s no. 1 region in terms of proportion of the budget dedicated to RDI)
• Diverse offer in terms of risk capital (14 funds / €440 million)
• 4 competitiveness clusters and 7 business clusters
• Strategic sectors: Aerospace, Wood, New energy sources, Laser and Photonics, Agri-food, Chemicals and Materials
• Winner of the Investissements d’Avenir award: IDEX, IEED Bordeaux, LYRIC UH, numerous Equipex and Labex (10)

WEAKNESSES

ALSACE REGION

• Limited weight of private R&D, essentially concentrated in companies employing 500 to 2,000 staff (transport, capital goods, pharmaceuticals, chemicals) = 0.84% of the GDP in 2005 compared with 1.33% for the national average
• Small proportion of SFIC = 2.39% of jobs compared with an average 3.51% in the regions of reference in 2007
• Insufficient qualification of high-level human resources in companies
• Innovation system: limited collaboration between SMEs and public research; underdeveloped partnership culture and businesses’ and limited ability to absorb the results of public research; structured but insufficient steering and legibility (“Who should we start with to enter the system?”), according to companies; ability to support mature projects but limited emergence of new projects.
• Limited access to venture capital: dedicated private investment funds (biotechnology, ICT) managed outside Alsace

AQUITAINE REGION

• Growth dynamics fails to create jobs and innovation; poor specialisation in key domains; good scientific potential but low efficiency (inputs/outputs).
• 65% of industrial firms are low-technology and unlikely to register patents (essentially instrumentation and chemicals)
• R&D largely concentrated in high technology and companies employing more than 1,000 staff (Aerospace, Medical and precision instruments, Optics, Chemicals, Health, Genomics, Imaging)
• R&D is essentially private
• Innovation system: multitude of players but lack of visibility; limited flow of projects; gaps in the innovation chain (in particular development support);
• Funding: strong focus on technological innovations; lack of seed capital (“holes in the racket”: investment does not exceed €100,000 in seed capital and €250,000 in venture capital); limited number of private players providing seed capital; opportunistic policy of venture capitalists; small number and insufficient professionalism of Business Angels

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STRATEGIC ISSUES AND DOMAINS
(Promising Fields, Future-Oriented Sectors, Etc.)

• Promote entrepreneurship and innovation (*Dare to innovate*)
• Improve the appeal and influence of Alsace (*Open up to the world*)
• Become a region of reference on rapidly growing markets (*Make choices*)

THEMATIC PRIORITIES OF THE SRI
(REGIONAL INNOVATION STRATEGY):
  Green economy
  Health and well-being
  Humanism and society

KEY PROPOSALS

• Support “Creativity”: graduate school of innovation and creativity
  (University of Strasbourg + Alsace Tech)
• Innovation cheque
• Human resources for innovation
• Innovation fellows (entrepreneurs assisting micro to medium-sized businesses though initial innovation procedures, in conjunction with the network of stakeholders of the aid system: project structuring, identification of the partners and skills required for the project, financial engineering, etc.)
• Creation of a commercialisation company based on the Connectus Alsace network
• SRI structuring: approach via “business spheres” focusing on the functions of the innovation chain rather than the structures and networking:
  > Awareness and promotion
  > Detection of requirements and support
  > Implementation support
  > Provision of services
  > Thematic collective strategies
  > Public research development and transfer
  > Raise the laboratories’ awareness of innovation and value enhancement (economic activities, patents, partnerships)
• Governance: the ARI as a focal point

• Moving towards a knowledge and innovation economy
• Technological skills rooted in the existing industrial fabric
• Disseminate technological skills: give priority to SMEs-SMIs
• Innovation in all its forms
• Formalise governance

• SRI’s function approach with 9 functions identified
• Creation of a joint investment fund; guarantee the continuous financing of innovation by developing the offer between €250,000 and €500,000; optimise capital financing (consultation and cooperation, expediting decisions, anticipation)
• Creation of a seed capital fund
• Integration of structures dedicated to non-technological innovation (4 Design and Créacoll) into the Innovalis regional agency.
### WEAKNESSES

#### AUVERGNE REGION
- A region aging behind: Ranked 20th in France in terms of GDP/employment (-3 places since 1990).
- The decrease in active population generates recruitment difficulties and an increase in the number of companies for sale.
- Dense network of micro companies (2008: 93%), poorly structured, family-owned, not export-oriented, lacking the resources to innovate (CIR: 15th position in France), not very open to partnerships with laboratories.
- The key industrial sectors are mature and create few jobs (AFI, textile, automotive, wood and paper, chemicals, rubber, etc.) with the exception of mechanical equipment; the Auvergne industrial sector has been hit hard by downsizing operations due to international competition (job losses between 1997 and 2006: -9% mechanics/metallurgy; -17% rubber/plastic).
- Creation of innovative businesses which create fewer jobs than the national average; few patents (15th position in France); research insufficiently rooted in the territory: 60% of industrial research contracts are entered into with customers outside the region; lack of research in key sectors (mechanics, plastic processing, AFI, ICT, etc.).
- Well-structured but inefficient aid system, low on detection and seed capital and without governance.

#### BASSE-NORMANDIE REGION
- Genuine R&D offer but companies are unaware.
- Transfer services and equipment are essentially based on a supply logic; only the incubator responds to a project logic.
- Difficulties in the recruitment of qualified human resources for high-level positions and highly qualified industrial trades.
- Lack of expert advice, except for production and quality.

### STRENGTHS

#### AUVERGNE REGION
- Significant public research (public R&D staff in 2006: 2,497 FTE) and a recognized scientific basis (Smart materials, Life sciences, Genomics and Health biotech).
- Strong presence of private R&D (13th position in France in terms of private DERD): Michelin, Limagrain, ADISSEO.
- Advanced technology transfer and research enhancement schemes (Auvergne valorisation, structure common to Clermont universities).
- Financial effort by public authorities, which provides companies with an almost complete environment.
- Companies are financially healthier and business creations are more sustainable than the national average.
- Pioneering region for the implementation of the JEREMIE (European scheme for SME access to funds).
- Public decision-makers very involved; full and diverse range of public aid for innovation.

#### BASSE-NORMANDIE REGION
- World-class research capacity in “hard” sciences (nuclear physics: GANIL – National large heavy-ion accelerator in Caen).
- Outputs in physics and chemistry for publications, in instrumentation and electronics-electricity for patents.
- Strong industrial skills: Automotive, Nuclear sector, Electronics (semiconductors), Pharmaceutical and cosmetic industry.
- Highly qualified labour force; numerous companies work for the nuclear and defence industry (DCNS in Cherbourg – naval defence systems, SNLE).
Summary of French regions’ regional innovation strategies

**STRATEGIC ISSUES AND DOMAINS**
(Promising Fields, Future-Oriented Sectors, Etc.)

- Support of SMEs’ innovation projects
- Enhance the value of research
- Opening up of the Auvergne economy
- Genuine governance

**THEMATIC PRIORITIES OF THE SRI:**
- Nutrition – Food - Health
- Biotechnologies
- Future mobility

**KEY PROPOSALS**

- Reinforce Auvergne Valorisation and the incubator
- Reinforce networking as part of Innovergne to support research enhancement projects via technology transfer or the creation of innovative companies
- Centre for entrepreneurship and innovation, the objective of which is to coordinate and structure all public aids for innovation in the region
- Develop the innovation and entrepreneurship culture

- Reinforced role of MIRIADE (Regional Mission for Innovation and Economic Development Action) and agreements with all innovation stakeholders
- “Manufacture of Innovative Projects” to ensure a continuous support flow, by improving the integration of competitiveness clusters and networks
- Skills improvement programme: train fund raisers (public aid system, State aids, ERDF).
- Mobilisation of the renovated economic intelligence scheme to encourage laboratories and businesses to work on lead markets where they may have a competitive edge in the medium term

- Structure the regional innovation system and focus regional resources on “promising fields”

**THEMATIC PRIORITIES OF THE SRI:**
- Health
- IT
- Materials / mechanics / metallurgy
- Environment, sustainable development and quality of life
### Bourgogne Region

- Demographic downturn and expatriation of graduates means that qualified human resources is a scarce commodity
- Lack of activities in the domain of high technologies and KIS
- Limited economic specialisation and geographical dispersal hinder the dissemination of innovation
- Mutual lack of understanding and/or relationships between research and businesses, businesses and transfer centres
- Research and businesses insufficiently open internationally
- The Regional Council’s strategy lacks legibility and clarity; insufficient networking between transfer organisations; poor formal dialogue between stakeholders; stakeholders lack professionalism

### Bretagne Region

- Research intensity (DERD/GDP) does not live up to the potential; GDP per capita lower than the national average; low employment rate in high-technology sectors; limited appeal on the world stage; highly qualified human resources, which does not translate into more jobs
- Innovation system: diverse but unclear offer in terms of support, in particular for the uninitiated; lack of coordination and complementarity between the 90 existing structures; logic of competition for the “best projects”
- Funding: few private resources devoted to venture capital and seed capital; poor legibility and clarity of available aid; inadequate type and amount of aid (public aid eligibility); preference for technological and patentable products; shortage of seed capital; lack of Business Angels (“fearful” private players)

### Strengths

- Positive evolution of public investments in R&D and technology transfer
- The innovation transfer and support system is well distributed across the territory, with a strong technological offer in the major regional sectors, working towards a regional technopole logic
- 4 priority research domains: Agri-food (AGRALE), Materials, Health/ICST (Information and communication sciences and technologies), Humanities and social sciences (HSS)
- Public research enhancement scheme initiated as part of a resource sharing logic (UB filiale, Synerjinov programme) and based on completed and partner-oriented research initiatives (joint public-private laboratory, Pharminage JV, Gérontopôle, etc.)
- A small but dynamic circle of innovative companies and significant innovation potential, as attested by the increasing number of high-technology patents, the level of private R&D expenditure and the emergence of business clusters.
- Winner of the *Investissements d’Avenir* award: Equipex (2)
- Strategic sectors: Agri-food, Metallurgy, Wind energy, Rail transport, ICT

### Weaknesses

- Positive net migration
- Sustained growth in GDP
- Overall and female employment rate > French and EU average
- Public and private research staff
- Sharp increase in DERD, due in particular to private investments from 2005 to 2009
- Number of patents
- Widespread use of ICTs
- Winner of the *Investissements d’Avenir* award: Equipex and Labex (7), IRT, IEED
- Innovation system coordinated by *Bretagne Innovation*; strong network organisation, notably in terms of technological aspects: stakeholders specialising in sectors and technologies; local support and territorial networking
Summary of French regions’ regional innovation strategies

**Strategic Issues and Domains**

- Qualification and skills development at the heart of the innovation issue: develop human capital and entrepreneurship to improve attractiveness and competitiveness
- Network dynamics (hubs, business and competitiveness clusters)
- Support of non-technological innovations
- Open up the Bourgogne SRI to new ideas and international expansion

**Key Proposals**

- Creation of a seed capital fund (BCI) and reinforcement of the entire regional public offer in terms of equity
- Reinforcement of the SME equity financing platform (“investors’ club”)
- Help companies recruit innovation project managers by integrating technological and non-technological aspects (project management, marketing, human resources, IPL)
- Scheme designed to help develop an innovation strategy (”innovation advice” cheque book)

- Address the risk of falling behind: 6 challenges for the SRI:
  - Broaden the scope of innovation and reinforce the innovation management capacity in micro to medium-sized companies
  - Improve the visibility of and access to the support system
  - Provide assistance through all stages of the innovation process by reinforcing the networking of support stakeholders and enhancing public research across the territory
  - Complete the funding mechanism (continuum) in particular in terms of seed capital
  - Develop the international openness of innovation stakeholders
  - Develop Brittany’s innovative economic image on the international stage
- Transversal challenge: develop governance (strategic and operational) to reinforce stakeholder commitment, the visibility, coherence and efficiency of the action for businesses

- Reinforcement of the innovation management capacity in SME (Innov’acteur)
- Creation of a regional innovation Index to gain a foothold on the international market (chart of trends, strengths and weaknesses, with a comparison at national and European level)
- Structuring of the Réseau breton de l’Innovation via the reform and expansion of Brittany’s RDT
- Launch of unifying transversal programmes based on key themes, stimulating collaborative approaches (e.g.: Capbiotek programme on biotechnologies in Brittany)
- Launch of a development fund and a financing scheme for the seed capital phase of innovative companies
- Support the engineering of European projects to assist project initiators and increase regional participation in and coordination of European research and innovation projects
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<th>CENTRE REGION</th>
<th>STRENGTHS</th>
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<tr>
<td>• Lack of identity and technological specialisation</td>
<td>• Strong tertiary sector</td>
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<td>• Level of qualification below national average</td>
<td>• France’s 6th largest industrial region (22% of jobs)</td>
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<td>• Economic development marked by proximity to Paris: competition between territories and risk of relocation</td>
<td>• Leading position in France in the following sectors: medicinal products (1st), cosmetics (2nd), rubber (2nd), graphic arts (2nd), subcontracting (3rd), electronics-IT (3rd), mechanics (3rd); automotive, the region’s no. 1 industrial sector with 30,000 jobs; pharmaceuticals: 40% of the national production (Orléans-Tours and Dreux-Chartres axes), 3rd behind the Ile-de-France and Rhône-Alpes regions; beauty products: world’s leading exporter</td>
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<td>• Limited innovation capacity of SMEs-SMIs</td>
<td>• Winner of the <em>Investissements d’Avenir</em> award: Equipex and Labex (4)</td>
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<td>• DERD: France’s no. 8 region (2006)</td>
<td>• Significant public research: 2 universities (Orléans, Tours); 9 research institutes (INRA, INSERM, CEMAGREF, CEA, BRGM, etc.)</td>
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<th>CHAMPAGNE-ARDENNE REGION</th>
<th>WEAKNESSES</th>
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<tr>
<td>• Worsening of the demographic situation</td>
<td>• Strong tertiary sector</td>
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<td>• Shortage of qualified human resources</td>
<td>• Industrial tradition</td>
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<td>• Weakness of innovation within companies</td>
<td>• Champagne image</td>
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<td>• Few high-technology services</td>
<td>• Reims hosts innovative companies (regional incubator created in 2007 by the Regional Council + OSEO)</td>
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<td>• Limited academic research and risk of marginalisation within the national research restructuring movement (URCA)</td>
<td>• 2 key lines of research: agro-resources and materials, based on 2 inter-regional competitiveness clusters, IAR and MateriaLia (mechanics and metallurgy)</td>
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<td>• HER restructuring: ENSAM (Châlons) member of the Carnot ARTS Institute (Research Actions for Technology and Society), Troyes University of technology, member of the Carnot UT Institute (technology and innovation through companies)</td>
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<td></td>
<td>• Winner of the <em>Investissements d’Avenir</em> award: Equipex (1)</td>
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Enhance the development of the agro-resources and materials sectors
Activate the innovation lever to support economic change
Help companies develop via the innovation lever
Disseminate the innovation and entrepreneurship culture

THEMATIC PRIORITIES OF THE SRI:
- Agro-resources
- Materials

STRATEGIC ISSUES AND DOMAINS
(Promising Fields, Future-Oriented Sectors, Etc.)

- Develop a European centre of excellence in terms of energy efficiency, based on the S2E2 centre (Electrical Energy Sciences and Systems) and the presence of the BRGM (Bureau of Geological and Mining Research)
- Build a territorial identity of innovation through associated services

THEMATIC PRIORITIES OF THE SRI:
- Reinforce traditional factors
- Energy efficiency
- Innovation through services

KEY PROPOSALS

- Development of a proactive support offer with a unique network (RDT Centre) and annual workload plans (monitoring and evaluation), sharing of resources, diversification of the private offer
- Seed capital fund with OSEO
- Shared platforms and laboratories common to public research centres and companies
- Incentives for collaborative R&D projects
- Reinforcement of the region’s human capital: organisational and social innovation, GPEC, lifelong training and qualification
- Governance: pivotal role of ARITT (CSRI secretariat + extended CRI)
- Encourage social dialogue to enhance innovation at company and territorial level (“Innovation-related change requires significant effort by employees whose involvement is also a prerequisite for the pursuit and development of this innovation. Failure to acknowledge this fact can only increase the risk of failure. This is why it is essential to implement genuine social dialogue”, extract from the SRI of the Centre region)

- Aid for the implementation of the R&D function within companies
- SRI governance: reinforce the implementation of the CARINNA tool (ARI providing companies with services in terms of project engineering, transfer and development, innovation structuring)
- Training courses in innovation management and entrepreneurship
- Innovation-oriented work experience
- Facilitate access to funding for innovative companies
Regional innovation strategies contribute to a more strategic approach to the competitiveness and economic development of the regions based on innovation in the broad sense. This is probably why the regions have made the most of the SRI approach, as part of an efficient partnership between State services and regional councils, and why the reflection has largely exceeded the framework of the ERDF operational programmes for 2007-2013.

This in-depth reflection on innovation conditions and usages for all territories also pointed out the necessity to take into account the specific characteristics of each of these territories, their potential, constraints and needs. Innovation can be undertaken in all territories once the public innovation policies are open to the idea of creativity and innovation.

With its method and objectives, the SRI approach aims at helping stakeholders develop their assets and complementarity, improve their collective organisation and reinforce their economic development and innovation strategies. It relies on a logic of partnerships and synergy, both vertical (European Commission, State, Regions) and horizontal, with all territorial stakeholders, emphasising the fact that partnerships are key factors for efficient territorial competitiveness, cohesion and sustainable development strategies.

In this respect, the SRI approach completes the range of contractual tools and procedures for spatial planning and territorial development associating Europe, the State, local authorities and companies (CPER, "pôles de compétitivité" or competitiveness and business clusters, etc.), as part of a global logic of territorial "excellence", based on the promotion of their "competitive advantages" and the balance between these territories.

The diversity of territories matches the diversity of Regional innovation strategies; while the tools may be similar (in terms of SRI structuring, financing, partnerships), their application must take into account the diversity of territories, i.e. their constraints, assets and potential.
Now that they are being implemented, these regional innovation strategies are an essential tool for the achievement of the objectives of the cohesion policy and Lisbon strategy, and its successor “Europe 2020”. For the time being, they must help increase the pace and quality of the OPs’ “Innovation” programming and measures, which already represent, since 2007, nearly 30% of the ERDF funds programmed and 45% to 50% if all actions in favour of research and technological development (RTD) and entrepreneurship are included.

SRIs are evolving documents designed to constantly adapt. Certain aspects could be expanded, notably those relating to employment and initial and continuing education, all studies showing the importance of human capital for innovation; partnerships, for the constant involvement of businesses and financiers; cooperation between territories (inter-regional and cross-border dimension); territorial governance, the objective being to enhance the involvement of all “active” stakeholders of the regional innovation system (universities, PRES, “pôles de compétitivité” and other clusters but also social partners). While the ambition is to render the strategic approach sustainable and go beyond the SRI scheme, appropriate tools must be acquired to monitor and evaluate innovation policies with a view to making the right decisions.

Regional innovation strategies are a living, continuously improving process

3 According to the European nomenclature of priority themes eligible for the 2007-2013 programming, innovation is included in the “RTD, innovation and entrepreneurship” category.
<table>
<thead>
<tr>
<th>WEAKNESSES</th>
<th>STRENGTHS</th>
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<tbody>
<tr>
<td><strong>CORSICA</strong></td>
<td>• France’s no. 1 region in terms of GDP growth over the 1997-2007 period (+3.4% per annum)</td>
</tr>
<tr>
<td>• GDP/capita 20% lower than the national average</td>
<td>• Strong business creation momentum (construction, business services)</td>
</tr>
<tr>
<td>• Weight of the tertiary sector: tourism (25% of the added value), administered services (31%) and construction (10%); weakness of the industrial sector (6%); low territorial specialisation; weakness of exports (0.2% of the GDP) focused on traditional productions</td>
<td>• Good level of managerial positions and increasing number of students</td>
</tr>
<tr>
<td>• Fragmented production capacity, essentially micro businesses (construction, business services)</td>
<td>• Good broadband territorial coverage (97%)</td>
</tr>
<tr>
<td>• Ageing population of managers and entrepreneurs; low activity (65%) and employment rate (57%) for the 15 to 64 age category; low-skilled employment and low level of qualified young people</td>
<td>• Participation in the PACA-Corsica CAPENERGIES Competitiveness Cluster; business cluster logic in the aeronautics sector (Corsica-PIAC Aerospace Industries Cluster)</td>
</tr>
<tr>
<td>• Limited research staff (150 FTE), essentially public (CNRS/University of Corsica; INRA, CIRAD, ENSAM, IFREMER, BRGM)</td>
<td>• Research capacity in HSS, Environment and renewable energy, natural hazards (fire), Water management and recovery in the Mediterranean (GEM), agricultural research and promotion of natural resources</td>
</tr>
<tr>
<td>• Demand for innovation is low and technological jobs are under-represented</td>
<td>• Winner of the <em>Investissements d’Avenir</em> award: SATT PACA-Corsica</td>
</tr>
<tr>
<td>• RIS Index: 168th and last EU region; essentially public DERD but not available for Corsica only (figure include PACA region); few patents (10.8/Mpop); 8 times less than the national average</td>
<td>• <strong>FRANCHE-COMTÉ REGION</strong></td>
</tr>
<tr>
<td>• Limited network of innovation stakeholders, lacking in critical mass (Corsican Fund for Innovation; Corsica’s Territorial Incubator, recognised as an “Allègre incubator” by the Ministry of research, RDT)</td>
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</tbody>
</table>

| **FRANCHE-COMTÉ REGION**                                                    | • Industrial tradition: France’s most industrialised region               |
| • France’s only region, along with Basse-Normandie, to have suffered a severe economic decline over the past few years | • Importance of the cross-border phenomenon                               |
| • Few high-technology services and weakness of public R&D: one of the regions with the least resources in relation to the population; 77% of the DERD is due to companies employing more than 1,000 staff | • Private R&D is strongly represented (86% of total staff, mostly in the plastic processing and automotive sectors) |
| • Lack of innovation in SMEs: few patents (perceived as a constraint, no incentive to register or use patents); insufficient internal organisation; limited collaboration with universities | • Presence of major corporate players (Alstom, PSA, General Electric, Solvay) |
| • Aid is fairly well recognised but inadequate; banks and financial institutions are fearful; difficult access to venture capital | • Close links between the FEMTO-ST laboratory (University of Franche-Comté) and industrial companies |
| • Education/Human Resources: difficulties in the recruitment of skilled labour; young graduates are moving away from the industrial sector and turning to the tertiary sector; shortage of technical profiles | • Winner of the *Investissements d’Avenir* award: Equipex (1)              |
| • Relationship with Switzerland: competition in terms of labour and education | • **Strategic sectors:** Automotive, Plastic processing, Micro-mechanics, Wood, Agri-food (priority sectors of CPER - State-Region project contracts) |
Ensure that public intervention in terms of innovation focuses on managing interfaces between the stakeholders of the system rather than working directly with them (develop partnerships, interaction networks, knowledge transmission channels).

- Put the human factor at the heart of the innovation dissemination and support process
- Create the education-research-transfer and development continuum
- Coordinate a network of stakeholders to stimulate and detect innovative projects and focus on the external market
- Support, accompany and enhance innovative projects

**THEMATIC PRIORITIES OF THE SRI:**
- Renewable energy sources, energy control
- Aeronautics and materials
- Promotion of natural resources
- ICT
- Tourism

The SRI aims at ensuring that the innovation culture is shared by all companies.

### STRATEGIC ISSUES AND DOMAINS
(Promising Fields, Future-Oriented Sectors, Etc.)

<table>
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<th>KEY PROPOSALS</th>
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</table>
| - Implementation of engineer training courses corresponding with Corsica’s comparative advantages (geology, marine engineering, composite materials)  
- Identification of professional practices for the use of innovative products or techniques, in conjunction with professionals (building federations, CAPEB, etc.)  
- Reinforced agreements between the research organisations present in Corsica  
- Creation of a unit designed to help set up national (ANR), European (PCRDT) and international research projects  
- Creation of a seed capital fund  
- Implementation of a training plan for chambers of commerce and industry and business support structures (detection of innovation requirements, analysis and matching) |
| - Put the human factor at the heart of the innovation dissemination and support process  
- Create the education-research-transfer and development continuum  
- Coordinate a network of stakeholders to stimulate and detect innovative projects and focus on the external market  
- Support, accompany and enhance innovative projects |

### Creation of an “Innovation Expert”: a guide for the nebulous world of innovation, approved by all companies surveyed
- Innovation cheque book
- Work experience aid
- Shared engineer
- Innovation diagnosis
### WEAKNESSES

**GUATEMala**

- Very low GDP/capita; employment rate slowly approaching the EU average
- Very high proportion of micro businesses
- Small weight of the tertiary sector; predominance of the public sector
- Small share of medium and high-technology sectors; absence of major industrial companies capable of driving the economy; few business creations in the high-technology domain
- Essentially public R&D; small number of R&D staff: 0.49% of the labour force (832 FTE)
- Insufficient number of higher education graduates within companies
- The SRI stakeholders are not organised into networks and the partnership culture is limited; weak links between research players and businesses; private consulting is almost non-existent
- Limited financial resources available (OSEO Innovation is the only public structure); risk capital insufficiently focused on venture capital and innovation
- Insufficient external openness in terms of business development, scientific or technological partnership

**FRENCH GUIANA**

- Exponential demographics with a very young population (230,000, 43.3% under 20) requiring additional basic infrastructures
- Existing sectors need structuring (agriculture, fishing, wood craft, quarries, mines, tourism, energy)
- Very poor local industrial fabric essentially made up of micro businesses, with low innovation capacity: Agriculture; Construction; Tourism; Aerospace; Gold (craft in decline); Forestry; Fishing (poorly structured)
- Production companies (micro businesses) focused on the local market due to transport difficulties, with low innovation capacity
- Often low-skilled labour (37% of baccalauréat holders per generation); low business productivity and competitiveness,
- Small number of researchers (outside the PUG); significant turnover in research teams; weakness of research infrastructures and innovation governance as well as links between public research and private companies, absence of private research, etc.)
- Very low technology transfer rate and few innovation projects; insufficient promotion and use of research results; the overall level of research is higher than in neighbouring countries but the lack of economic development renders this research inefficient.

### STRENGTHS

- Significant increase in population and employment rate
- Productivity above EU average and slightly lower than other French regions (except French Guiana);
- Good investment momentum in the manufacturing domain, with a good business creation rate
- Public research potential (INRA, CIRAD) based on world-class centres of excellence; universities are open to a Caribbean environment
- Winner of the *Investissements d’Avenir* award: Labex (1)

**FRENCH GUIANA**

- The demographic explosion will facilitate the emergence of an internal market by 2030
- Strategic geographical location: the only French and European region in South America and the Amazon region,
- Abundance and variety of natural resources (forest, mines, fishery resources)
- Very high-technology companies linked to the Guiana Space Centre (CSG) and the presence of subsidiaries of major corporations (construction, electricity, freight)
- Environment conducive to aerospace development
- Importance of Guyane Technopole and the University of Guiana (PUG)
- Regional environment conducive to innovative collaborations (Brazil, Guyana Shield), notably in biotechnologies.
- Winner of the *Investissements d’Avenir* award: Labex (1)
STRATEGIC ISSUES AND DOMAINS
(Promising Fields, Future-Oriented Sectors, Etc.)

- Organisation and structuring of the network of innovation stakeholders
- Human skills development
- Access to information and expertise
- Development of partnerships
- International openness
- Governance: Strategic innovation committee + Operational committee

THEMATIC PRIORITIES OF THE SRI:
(CONFIRMATION OF SRDE PRIORITIES)
Renewable energy
Risks and materials
Biodiversity promotion for food and non-food purposes
ICT
Tourism

- Improve public aid and advice to businesses
- Develop excellence to enhance the appeal and international competitiveness of the territory
- Develop efficient and sustainable territorial governance
- 5 strategic priorities: skills upgrade plan; reinforcement of public bodies’ support for companies; economic enhancement of bio-resources; the attraction of ICT; governance

THEMATIC PRIORITIES OF THE SRI:
SECTORS OF EXCELLENCE TO BE DEVELOPED
Biodiversity (promotion and preservation of the environment, innovation based on the use of natural substances)
Remote technology (remote sensing, telemedicine)

KEY PROPOSALS

- Constitution of an innovation support network
- Human Resources: recruitment of partnership and collaboration coordinators
- Training businesses in the management of innovative projects
- Organisation and professionalisation of the private consulting sector
- Innovation advice cheque book
- Support the creation of innovative companies (incubators)

- Creation of a return incentive scheme for the recruitment of young graduates from Guiana and to provide employers with a young graduates skills file
- Support structures: list, redefine and review the tasks allocated to each structure to improve visibility for project initiators
- Establish a strong Intellectual Property policy by defining a policy for access to resource so as to create a knowledge fund
- Develop the networking of skills by using external experts working for the major local corporations
HAUTE-NORMANDIE REGION

- Industrial tradition: essentially production activities, rarely associated with R&D/design/marketing functions
- The economic fabric is inadequate and lacking in innovation; limited strategic autonomy when dealing with corporations
- Public research poorly structured: HERIs insufficiently federated; limited scientific skills
- SMEs’ aversion to innovation (the OSEO intervention rate is 50% lower than the average national rate)
- Proximity to the Ile-de-France region and attractiveness of Southern regions; competition with other competitiveness clusters and emerging countries
- Innovation system: numerous but extremely specialised stakeholders, with limited resources, a compartmentalised system (CRITT, PFT, CRT); non-specialist partners (industries or chambers of commerce) who are not committed to innovation; lack of coordination / leadership / resources

ÎLE-DE-FRANCE REGION

- Significant geographical disparities within the territories (12% of the population live in ZUS - Sensitive Urban Areas)
- Large number of sectors and predominance of the tertiary sector (75% of jobs)
- Relative weakness of academic research, with a fragmented academic fabric lacking international visibility; declining number of scientific publications, accompanied by a loss of private research jobs
- R&D insufficiently structured and underdeveloped in SMEs
- Unclear innovation support scheme for companies
- Restricted funding of seed capital and venture capital: 0.05% of the GDP compared with 0.3% to 0.5% for London, Oxford or Cambridge, 1%-1.5% for San Francisco; limited use of intermediaries (fund raisers, transfer centre)
- Low level of start-up creation in relation to the research potential

STRENGTHS

- Extensive private research driven by a few large companies
- PRES (Universities of Caen, Rouen and Le Havre, ENSICAEN and INSA)
- Mobilisation of public stakeholders (Region, State, OSEO, EU) based on six grands réseaux de recherche (GRR, major research networks)
- Proximity to the Ile-de-France region (markets, decision-making and competence centres)
- Winner of the Investissements d’Avenir award: Equipex and Labex (2)

- DERD level (3.2% of the GDP) in keeping with the “Lisbon” European objective
- One of the EU’s top 5 technological and scientific regions
- Europe’s largest and the world’s 2nd largest centre (behind Tokyo) in terms of location of head offices of the world’s 500 largest companies
- EU’s 2nd most attractive region behind Greater London
- Strong presence of integrators on the territory and significant support from public authorities for the 6 priority technological sectors identified in the ERDF OP and 2007-2013 CPER (Complex systems and software, Life sciences, Automotive, Aerospace, Creative industries, Eco-industries)
- Winner of the Investissements d’Avenir award for all calls for projects: Labex and Equipex (+70), IRT, IDEX, IEED, SATT, UH, etc.
Summary of French Regions’ Regional Innovation Strategies

**STRATEGIC ISSUES AND DOMAINS**
(Promising Fields, Future-Oriented Sectors, Etc.)

- Develop market derived innovation ("ascending") by encouraging the development of research-related innovation and collaborations between laboratories and businesses
- Priority given to the promotion of non-technological innovation and exchanges between universities – schools – companies (human skills, equipment, working areas) also at an international level
- "Demystify" innovation among companies by providing assistance adapted to the "psychology" of entrepreneurs
- Help companies through the different stages of innovation

**THEMATIC PRIORITIES OF THE SRI:**
6 “technological clusters”:
- Vehicles of the future
- Traceability and authentication solutions
- Health and well-being
- Innovative materials and related technologies
- Promotion of local renewable sources of energy
- Optimisation of production processes

A key domain:
Energy efficiency, which concerns 4 clusters (vehicles, materials, renewable energy, production processes)

**KEY PROPOSALS**

- Reinforcement of SEINARI in the leadership and coordination of the regional innovation network:
- “Objectives and resources” contract (COM) with each partner (positioning, quantitative targets); support of and training in project management; compliance control and direct intervention
- Implementation of an observatory to monitor assisted companies and initiate actions
- Creation of a "common body" of intervention methods and tools
- Professionalisation of the partners
- Expert project and information management system
- Extended incubation based on SEINARI resources
- Promote "broader innovation" projects in conjunction with HERIs

**CHALLENGES:**
- Reinforce the weaknesses of the ecosystem: seed capital and second-party funds, progressive support of business creation, relationships and exchanges between universities – schools – companies (human skills, equipment, working areas) also at an international level
- Help the territories in difficulty by taking into account the territorial dimension of innovation

3 priorities:
- Simplify technology transfer and the constraints of innovative entrepreneurs in the region
- Turn the Ile-de-France region into a testing ground for innovation policies
- Raise the Ile-de-France region's awareness of major technological, environmental and societal issues

**THEMATIC PRIORITIES OF THE SRI:**
confirmation of the support of the CEPR's 6 priority technological sectors and desire to identify priority cross-sectional innovation themes to be supported, focusing on the social aspects of sustainable development (sustainable hospital, eco-districts, ageing)

**STRATEGIC ISSUES AND DOMAINS**
(Promising Fields, Future-Oriented Sectors, Etc.)

- Mapping of the technology transfer in the Ile-de-France region
- Reinforce the funding of seed capital and second-party funds
- Venture capital: contribution to the Regional Council’s co-investment fund (€6 million from the ERDF)
- Specific innovation support in “In’Europe” territories (PUI)
- Launch of calls for projects for experimentations on targeted territories and to identify common innovative projects between dynamic territories and territories experiencing difficulties

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### LANGUEDOC-ROUSSILLON REGION

- A region characterised by sharp contrasts
- One of France’s poorest regions (GDP/capita), with a very high unemployment rate
- Weak industrial sector and companies lacking in innovation, with a very high number of micro businesses (30% higher than the national average) and a high 5-year bankruptcy rate
- Weakness of private R&D
- Few exchanges between the academic milieu and regional companies
- The SME innovation support system focuses too much on technology, lacks visibility and fails to reach the traditional sectors of the regional economy (trade, services, wine growing, tourism, etc.); multiple unconnected sector-wide networks; absence of governance
- 5 competitiveness clusters insufficiently involved in regional development
- Fragmented territory: no shared strategies or practices (one metropolitan area - Montpellier-Nîmes - hosting knowledge economy entities, in addition to satellite territories: Perpignan, Alès, Mende)
- Stakeholders insufficiently open to the outside.

### LIMOUSIN REGION

- Sparsely populated region (21st position in France and 241st in the EU with a population of 733,000)
- GDP/capita and economic growth lower than the EU regions average
- Low salaries and importance of transfer income: pensions (31%), social benefits (24%), touristic expenditure (13%) and public wages (13%)
- Limited weight of the production of goods and services (18%); activities strongly focused on traditional and competitive sectors
- DERD: 0.88% of the GDP, 67% from the private sector
- Weakness in research on the French scale (21st position): 0.5% of national staff in private research and 0.4% in public research; limited appeal of HER with the exception of the University of Limoges
- Few patents with the exception of electronics
- Innovation system: low level of transfer due to restricted demand, focused on technology; the needs of traditional sectors are only partly covered (wood, mechanics, AFI)
- Funding: private funding on the decline; 18th position in France for CIR (less than 1% of French companies declare R&D expenditure); public funds essentially concentrated on two sectors (electronics, photonics, micro-waves and ceramic materials) and on collaborative research

### WEAKNESSES

- Very attractive region (quality of life)
- One of the highest job creation rates
- Very high business creation rate
- The average added value per company is higher than the national average
- Core of innovative SMEs in the ICT and services or health sectors
- Significant public research (200 laboratories and 5,500 researchers)
- Winner of the Investissements d’Avenir award: Labex and Equipex (11), SATT
- Innovation system: excellent support scheme for the creation of innovative companies (Transferts LR, Synersud, Languedoc Roussillon Incubation, etc.)

### STRENGTHS

- Low cost of living and importance of transfer income: shock absorber in 2 ways (recession and growth)
- Continuous increase in the number of research staff
- Recognised competence in targeted domains: ceramic materials (French public research centre)
- Research capacity in the domain of telecommunications, micro-waves, optronics (XLIM).
- Support system: fairly good network of research-business interface structures
- Funding: leverage effect of public funds for ceramic and electronic sectors. The share of public funding is on the increase (OSEO, FUI, ANR)
- Winner of the Investissements d’Avenir award: Labex (1), IRT M2P
Challenges:
• Stimulate the growth of micro businesses through innovation
• Build closer links between Higher education, public research and the regional economy
• Make the region part of the world innovation networks

3 challenges resulting in 4 strategic priorities:
• Innovation for all
• Focus on “grey matter”
• "Thematic convergence": position Languedoc-Roussillon as the flagship region in terms of
• convergence between certain sectors (ICT with Health, Environment, Agronomy and Tourism; Wine growing with Tourism
• International connections

THEMATIC PRIORITIES OF THE SRI:
"THEMATIC CONVERGENCE":
ICT with Health, Environment, Agronomy, Tourism
Wine growing with Tourism

Combine 2 approaches:
> Innovation through technology → consolidate the value chain in sectors covered by the Elposys and Ceramics competitiveness clusters
> Innovation through usage: take the social demand into account (usage/customers) throughout the innovation process to reach micro to medium-sized businesses actively involved on traditional markets
> Structure governance

THEMATIC PRIORITIES OF THE SRI:
Electronics, Ceramics, Health
+ other sectors: Wood, Personal services, Mechanics, Agri-food, Business services

• Concentrate public funds on two sectors (electronics and ceramics) and partnership-based research
• Improve the impact of the innovation policy of the 2 competitiveness clusters on the regional economy
• Respond to the innovation needs of other traditional sectors and innovative service sectors which are poorly or not at all covered (Wood, Personal services, mechanics, AFI, Business services)
• Establish the conditions for the implementation of technical solutions with an industrial impact and related services to help dependent individuals regain their autonomy

• Continuation of the actions which “are the strength of the Languedoc-Roussillon region”: support the creation of innovative companies, technological innovation (Regional Innovation Fund, network of Synersud incubators, competitiveness clusters, Transferts LR, etc.)
• Mobilisation of the JEREMIE fund to reinforce the equity of recently created and developing companies
• Creation of a Regional Innovation Network involving 58 innovation support structures with a view to improving the detection and support of innovation for any company, anywhere on the territory, for any type of innovation,
• Support of new forms of innovative business networks (e.g.: LEADER, network of intensely developing companies)
• Creation of an ICT and Health “Collaboratory”
• Launch of call for projects to encourage new ICT usages in traditional economic sectors
• Creation of a pilot public research enhancement scheme (sharing and reinforcement of resources to accelerate technology transfer), with an international focus and sharing of resources
• Development of a world-class “innovation marketing and commercialisation” hub

"Objectives contracts" with research organisations
• Put in place an organisation to design, test and sell innovations in traditional sectors, in response to societal problems (environment, ageing, risk management, health)
• Innovation marketing
• Consolidate the value chain for 3 critical points from research to commercialisation: Reinforcement of S&T resources; Research enhancement (detection, transfer); Growth of innovative companies via funding after the seed capital phase, and access to services
• Develop innovation based on usage, in particular via Living’labs, which includes Autonom’lab, involved in the dependence/autonomy project

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While regional innovation strategies have shown that regions should promote their assets and focus on their true strengths, they have also pointed out that the regions’ capacity to innovate and competitiveness depend on a variety of factors and that any narrow-minded vision of specialisation should be excluded.

Regional innovation strategies currently provide the willing regions with the means to further commit to a territorial specialisation process, as part of a regional differentiation approach based on the detection and promotion of sectors, promising fields or niches of excellence where the region has a proven comparative advantage. This is what lies behind the notion of “smart specialisation strategy” promoted by the European Commission for the future.

However, a specialisation cannot be mechanically imposed from the top down; it must be pertinent in relation to a given territory. The diversity of French territories and their assets calls for different responses, as specialising means first and foremost trying to improve territorial strengths and assets, without obliterating diversity and initiative which will result in future strengths and respond to people’s needs.

The spirit of Regional innovation strategies is to find the best possible combination of the specific characteristics of the territory and its strategy. From this perspective, Regional innovation strategies now ensure that French regions are one step ahead so that they can progressively commit, as recommended by the European Commission for the future, to a strategy of “smart specialisation” in key sectors or themes where the territory has a proven comparative advantage.
LORRAINE REGION

- Ageing population
- High unemployment rate (10%), notably in young people, and deterioration higher than the national average
- Industry in the process of restructuring: 17% of the added value (7th position in France) in the metallurgy, automotive, textile, chemicals, wood and paper sectors
- Limited weight of private R&D (less than 1,400 researchers) due to the structure of the industrial fabric specialising in low-technology sectors
- Poor promotion of public research
- Businesses find it difficult to access research results (75% of Lorraine companies claim they do not know how to access research results and funding)
- Innovation system: fragmented network of technological intermediaries (CDT, CRT, CTI, etc.), with numerous but poorly coordinated technology transfer stakeholders, with limited visibility and complementarity.

MARTINIQUE

- Insular constraints: highly dependent on the outside, excess supply and transport costs, restricted internal market and closed economy
- Low employment rate compared with the mainland (39%) and high unemployment (in particular in young people), net migration loss and ageing population
- Impact of the crisis: deterioration of the labour market and decrease in investment
- Predominance of the service sector (79% of jobs / 72% of the added value); new and underdeveloped industrial sector (7% of jobs / 8% of the added value), mostly focused on agri-food (predominance of sugar cane)
- Significant weight of micro businesses (2/3); SMEs are reluctant to innovate as they are often subsidiaries of companies with R&D centres on the mainland
- Low level of qualified labour force (25% with a baccalauréat or higher qualification, compared with 36.5% on the mainland); labour market has little demand for qualifications; low management-to-staff ratio
- Low DERD (0.28%), mostly based on public investment; private investment almost non existent (CIS survey not conducted for overseas départements);
- Few patents (3.8 patents/Mpop compared with 90 in the EU and 133 in France)
- Absence of academic courses in S&T domains and low return rate of Martinique students educated outside Martinique
- Limited research staff (230 FTE or 0.13% of the labour force), lower than the EU average (0.97%); no participation in large-scale research projects
- Mostly public research, few transfer and development structures, weak private research and insufficient public-private cooperation

STRENGTHS

- Strategic positioning on major lines of communication
- Importance of the cross-border phenomenon
- DERD: 1.09% of the GDP (14th position in FR)
- Companies have the capacity to innovate (10th position in France for ANR support in 2007)
- High-level scientific production with many recognised units in “hard” sciences (ranked 4th in France for Engineering Sciences, Chemistry, Physics, Information and Communication Science and Technology, Earth Sciences and Mathematics)
- Ongoing creation of a common development unit at the PRES of the University of Lorraine
- Winner of the Investissements d’Avenir award: Equipex and Labex (2)

- Increasing level of qualification despite a global deficit, and increasing number of students
- Innovation potential in domains of excellence: biodiversity, agri-environment and agro-processing, HSS, health, natural hazards and fishery and aquaculture resources
- Development of joint ventures in the services domain (ICT, fishing, environment)
- Strength of the agronomy and agri-food sectors with good interaction between stakeholders in these domains thanks to the continuum of structures upstream and downstream of the innovation process
- Presence of numerous public research institutions: EPST (INRA, CEMAGREF, IRD), EPIC (BRGM, CIRAD, IFREMER), EPA (Météo France), UAG, CHUI, other (ONF, PNRM, ORS, etc.)
- Research is based on 5 thematic centres (Agronomy and environment, HSS, Hazards and sustainable development, Health, Fishery) but does not apply the sharing approaches developed in metropolitan regions (PRES, RTRA, CTRS, Carnot Institute)
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- 9 sector-wide technologies with innovation potential (agricultural technologies, AA processing, environmental technologies, wood processing, Seismic buildings, Mechanical engineering / repair, Chemicals and plastic processing, Medical technologies, Management of natural hazards)
STRATEGIC ISSUES AND DOMAINS (Promising Fields, Future-Oriented Sectors, Etc.)

Two major levers: Collaboration and Structuring.
- Reinforce the partnership dynamic by encouraging collaborative projects between companies and research centres.
- Increase the number of innovative companies (SRI detection+ structuring)

THEMATIC PRIORITIES OF THE SRI: “FUTURE-ORIENTED SECTORS”
Preservation and use of bio-renewable resources
- Circular economy (recycling)
- Functional materials
- Health technologies
- Computer science and technology

KEY PROPOSALS

- Structuring of a transfer and development unit within the future University of Lorraine, acting as an interface with companies (project maturation, support, etc.)
- Develop the global engineering of complex collaborative projects
- Creation of industrial experimentation and joint design areas: innovation platforms (funding of initial investments: material and immaterial resources)
- Creation of an innovation observatory for monitoring and evaluation purposes

3 priorities:
- Develop innovative clusters (Agri-food, Health – virology)
- Put in place an innovation toolkit
- Support and promote a pragmatic approach to innovation

THEMATIC PRIORITIES OF THE SRI:
Biodiversity, Agro-environment and Agro-processing
- HSS
- Health
- Natural hazards
- Fishery and aquaculture resources

- Encourage joint ventures as part of a cluster logic
- Develop the range of development and transfer support services
- Networking of support stakeholders
- Mapping of regional skills and expertise
- Creation of a business innovation observatory
- Professionalisation of support structures
MIDI-PYRÉNÉES REGION

- Public and private research potential underused by SMEs and undervalued
- The network of technological partnerships mostly involves major groups from high-technology sectors.
- SMEs largely unaware of innovation management and innovative project management.
- Limited participation of regional companies in European projects.
- Attractive image which however fails to convince foreign students and researchers due to the lack of adapted reception facilities
- Insufficiently legible innovation system
- Lack of seed capital

NORD-PAS-DE-CALAIS REGION

- Difficult legacy and image problem
- The industrial fabric lacks dynamism and has yet to switch from the status of production workshop to product design centre
- Unemployment rate 3 pts higher than the France average
- DERD: 0.7% of the GDP (ranked 14th in France)
- Significant lack of innovation in SMEs, limited number of projects and innovative companies
- 5-year SME bankruptcy rate 50% higher than the national average
- The region attracts foreign investment, in particular in low-technology activities (production, assembling, logistics)
- Large number of public research staff (ranked 12th in France) but efficiency is an issue (2% of the national total of R&D projects; lack of EPST/EPIC; private R&D almost non existent
- Significant training offer but the territory fails to take advantage of skills
- The existing transfer system does not enhance public R&D
- Innovation system lacks efficiency and coordination
- Difficulties in financing major innovative projects

STRENGTHS

- Growth rate higher than the national average, 16,000 companies, which includes major international corporations, employ more than 10 staff
- High DERD: 4% of the regional GDP
- Significant weight of private research: 2/3 of R&D staff
- Excellent initial education as well as higher education and research
- Dynamic research driven by large public laboratories and groups in technology-intensive areas of activity (aerospace, agri-food, health)
- Structuring of initiatives involving the State and the Region (Aerospace Valley, Cancer-Bio-Santé, Agrimip Innovation)
- Support scheme covering all innovation stages
- Extensive funding offer
- Region integrated into European RDI networks
- Structuring and unifying of projects across the territory (Aerospace Campus, Cancéropôle, NanoInnov, Agrobiopôle, Castres-Mazamet and Tarbes technopoles, Mecanic Vallée and Nogaro Mécanopol e, etc.)
- Winner of the Investissements d’Avenir award: Equipex and Labex (7), IRT AESE, SATT Midi-Pyrénées

WEAKNESSES

- Public and private research potential underused by SMEs and undervalued
- The network of technological partnerships mostly involves major groups from high-technology sectors.
- SMEs largely unaware of innovation management and innovative project management.
- Limited participation of regional companies in European projects.
- Attractive image which however fails to convince foreign students and researchers due to the lack of adapted reception facilities
- Insufficiently legible innovation system
- Lack of seed capital

- Large number of public researchers and higher education students (150,000)
- Strategic geographical location in Europe
- Business creation rate higher than the national average
- Innovation systems: there are support, transfer and development structures (70 entities) which cover the entire spectrum (awareness, emergence, support of initiators and financing
- Winner of the Investissements d’Avenir award: Equipex and Labex (6), IRT, Railenium, SATT Lille Nord of France Valo
5-year strategy:
- Recover from the crisis
- Reinforce innovation support
- Increase openness to Europe and the world
- Reinforce territorial cohesion and SME development aid

THEMATIC PRIORITIES OF THE SRI:
7 priority sectors identified in the diagnosis
- Materials, aerostructures and mechanics
- Space industry
- Airborne systems
- Bio-health
- Agri-food industries
- Information and communication technologies
- Eco-industries (Water, energy, environment)

6 areas of action to consolidate strategic priorities:
- Support the creation of innovative companies
- Radically change the practices of regional SMEs by relying on strategic analysis and human capital
- Attract technology-intensive investments
- Innovate via and for services
- Improve the financing of innovation
- Reinforce the public and private research potential as well as promotion and transfer practices

THEMATIC PRIORITIES OF THE SRI:
- Rail transport (including intermodal, logistical aspects and smart transport systems)
- Commerce of the future (including logistical and technological aspects)
- Health – Nutrition – Food (including aquaculture products, food safety and security)

+ 4 strategic domains: Automotive; Advanced materials (biosourced, textile, composite materials); Building and eco-construction; Mechanics

"New sectors": Energy and power electronics; Treatment of waste - sediment - contaminated sites and soil; Images and digital creation; E-Health

- Implementation of stable SRI governance jointly steered by the State and the Region
- Structuring of the innovation system: creation of a secretary-general position responsible for coordinating innovation in the region; RDT reinforcement; support of structuring projects (competitiveness clusters, Oncopôle, TWB, etc.); development of local initiative Platforms in terms of innovation
- Involvement of industrialists and businesses (SMEs) in the implementation of SRI actions via "mission statements"
- Implementation of aid systems for the strategic development and integration of skills into innovative SMEs
- Business funding during pre-creation phases, with the deployment of a new Seed capital fund to complete the financing cycle.
- Unification of the development function of the different laboratories within the PRES

- Implementation of a financing tool for non-technological innovation: the Equity Loan for the development of Innovation
- Nouvelles Vagues platform for the promotion of aquatic and aquaculture products and by-products
- Launch of the Objectif PME (Objective SME) programme for the development of 2,000 regional SMEs over 3 years
- Development of a national and international economic communication strategy to attract investment (promotion and prospecting tools)
**WEAKNESSES**

**PAYS-DE-LA-LOIRE REGION**

- Weak in research in light of the region’s economic weight
- Numerous SMEs (97% of the region’s entrepreneurial fabric in 2006) with low R&D investment capacity
- Weakness of private R&D
- Impact of the crisis on key sectors (automotive, electronics, wood)
- Innovation system: complementarity between stakeholders must be improved within a dense system; development structures are fragmented and focused on the management of contracts rather than the promotion of the scientific offer and detection; absence of technical platforms in certain domains (AFI, IT, biotherapies, etc.); undersized private consulting offer; not structured and with a lack of focus on innovation; failure to implement the post-incubation function in all technopoles
- Funding: the flow of projects is greater than the investment capacity in the region; lack of seed capital and venture capital; upstream and post-incubation phases are poorly covered

**PICARDIE REGION**

- Poorly qualified population: 16% of baccalauréat +2 years of higher education compared with 22% for the national average
- Picardie remains behind for most education-related indicators (access to baccalauréat, students leaving without a diploma, etc.)
- Business bankruptcy rate (25.5%) twice as high as the France average, with a sharp increase in 2008
- Weakness in public research in relation to the region’s economic weight: Ranked 26th in France for DERD/capita
- Research system separate from the principal national schemes; insufficient links between public research and businesses
- Poor innovation and entrepreneurship culture
- Few breakthrough innovations: 12% of the projects are financed by OSEO (national average: 21% in 2005)
- Overall inefficiency of the innovation support system: few companies visited (700 in 2005 compared with a national average of 900, for an equivalent number of FTEs); few PTRs prescribed (25 in 2005 compared with a national average of 68); limited project feedback
- Difficulties in promoting laboratory projects: insufficient detection, limited assistance in technological maturation and marketing, weak links with the regional sectors/hubs/SPL; incubator: Ranked 23rd in France in terms of jobs created (2.4 compared with a national average of 4.8)
- Lack of coordination and steering of the innovation system: insufficient governance and structures operated as “silos”

**STRENGTHS**

**PAYS-DE-LA-LOIRE REGION**

- GDP: Ranked 5th in France (2007) with a strong increase over the 2000-2007 period (industry, services)
- High employment rate in 2006
- High number of graduates working in S&T (ranked 8th in France)
- Large number (300) of companies involved in a competitiveness cluster
- Portfolio of innovative SMEs representing 31% of the private R&D expenditure and 35% of researchers in companies
- The Automotive and Mechanics/materials sectors are well structured while other sectors are in the process of structuring (Biotherapies, Ecotechnologies, IT); traditional sectors must accelerate their innovation dynamics (AFI, housing / construction, vegetation, fashion); other sectors are heterogeneous with regard to the markets covered and must seize transversal opportunities (electronics, wood, children market)
- Recent increase in research staff (+ 13% over the 2002-2006 period)
- Good level of HER in number of students (6th position in France); development of partnerships (universities of Nantes, Angers, Le Mans and Ecole Centrale de Nantes); cutting-edge courses relating to local sectors (Masters in automotive design, Polymer materials engineers, University diploma in molecular genetics).
- Business support systems of excellence (DINAMIC Entreprises: guiding companies through the basics: internal efficiency, innovation and development, commercialisation).
- Well developed public support system (19 structures + 600 ETPs); good network of innovation support systems (RDT, CRT, technical centres, platforms, competitiveness clusters, Incubator)
- Winner of the Investissements d’Avenir award: Equipex and Labex (4), IEED PIVERT

**PICARDIE REGION**

- Strengths in terms of public R&D with young teams of recognised academics (biomechanics, biomedical engineering, process engineering, automation and IT, materials and acoustic mechanics, solid-state and sugar chemistry, etc.)
- Nationwide technical centres and EPICs (INERIS, CVG, INRA)
- Innovative economic sectors relying on significant private R&D: 77 % of regional staff (1,700 out of 2,500 FTE)
- Innovation networks based on inter-regional competitiveness clusters (IAR and I-Trans) and hubs
- Increase in funds dedicated to innovation (ERDF, OSEO)
- Winner of the Investissements d’Avenir award: Equipex and Labex (4), IEED PIVERT
The priority is to support businesses, considered within their own environment, to help them control their innovation processes while encouraging collaborative innovation. This results in 6 objectives:

• Increase the innovation capacity of SMEs
• Reinforce the competitiveness of regional sectors through innovation
• Reinforce regional research and mobilise it for innovation purposes
• Develop a high level of competence within companies
• Create an environment conducive to innovation within companies
• Optimise the governance of the regional innovation system

THEMATIC PRIORITIES OF THE SRI:
Mechanics/materials
Biotherapies
Ecotechnologies / energy
IT
Electronics
Automotive
Agri-food
Housing / construction
Plants
Fashion
Wood
Children oriented market

• Reinforcement of the DINAMIC tool with the creation of new modules (“revival”, “collaboration/extended enterprise”) and a better focus on design, marketing, Human Resources, etc.
• Creation of new regional innovation platforms for collaborative projects across the territory and for all SMEs
• Mobilisation of RDT in 3 directions: concerted prospection strategy (roadmaps for each sector, use of private players); more professional interventions (CRCI training plan, common reference systems); operational coordination of the actions
• Share certain development functions
• Extend the post-incubation function to all incubators
• Development of “upstream” funding tools (seed capital)
• Help structure the private consulting offer, notably for non-technological skills
• Governance: strategic/operational + 5-year monitoring chart

THEMATIC PRIORITIES OF THE SRI:
Mechanics, materials and fibres
Agro-resources and green chemistry
Transport, intermodality and advanced logistics
Sustainable buildings
Autonomy of individuals and health
Risk control and the environment

• Focus on a few sectors to raise the region’s profile using selection criteria (weight in terms of jobs; convergence with the region’s political priorities; sectors for which innovation is a key competitiveness factor; differentiation factor)
• Stimulate innovation in emerging sectors
• Identify more projects as part of a more coordinated regional scheme
• Reinforced governance with the creation of the ARI

• RDT revival: implementation of objective-based agreements (COM) specifying the mutual obligations of fund raisers and financiers; training of fund raisers; integration of technical lycées within the RDT
• Steering of the innovation system: monthly consolidation of prospection plans and summary of needs (charts implemented by the ARI)
• Implementation of a shared R&D project maturation system to increase the volume of worthwhile projects generated by public laboratories, with the creation of a maturation support scheme
• Implementation of a Robotic Technology Transfer Centre based on the networking of stakeholders (Universities, Schools, Technical centres, etc.), for the benefit of automotive, aeronautical and rail industries
• Reinforce the presence of the Picardie region in European projects (“Innovation Europe” action)
**WEAKNESSES**

**POITOU-CHARENTES REGION**

- Population: 1.72 million (ranked 15th in France)
- GDP/capita: €23,881 compared with a national average of €28,721
- Micro to medium-sized businesses (93%) lacking in innovation
- Deficient in key innovation functions for SMEs: mostly subcontracting SMEs, not very proactive and with limited awareness in terms of innovation; innovation essentially coming from suppliers or clients; limited cooperation with public research centres
- Regional sectors insufficiently coordinated: transport (nautical tourism, rail, aerospace, automotive); agri-food; wood; imaging; eco-industry
- Limited potential of high-level jobs, with a 10% management-to-staff ratio against a national average of 19%
- The academic offer is of little benefit to the regional economy; poor level of qualification: baccalauréat +2 years of higher education (ranked 20th in France); brain drain: most graduates work outside the region (80% of postgraduate students leave the region within 3 years of obtaining their degree)
- Weak DERD: 0.83% of the GDP (2006), ranked 18th in France (national average: 2.1%) and 141st in the EU; patents: ranked 16th in France (2007); 60% of companies have no intellectual property protection policy; public R&D: ranked 14th in France
- Innovation system: little known and underused support systems, with segmented structures; opaque and fragmented support system insufficiently used by companies; aid offers little incentive; numerous technology transfer structures but insufficiently focused on the regional economic fabric

**PACA (PROVENCE-ALPES-CÔTE D’AZUR) REGION**

- An economic network of micro to medium-sized businesses with insufficient growth
- Limited weight of the industrial sector while services represent 80% of the jobs and added value
- Absence of specialisation, hence limited international visibility
- Well positioned research system (ranked 6th in France in terms of DERD; 75th in the RIS ranking but development is insufficient
- Education: poor graduation rate; marked specialisation in HSS; lack of coordination between educational offer and business requirements; lack of investment in continuing education
- The innovation support and assistance system is being structured but remains unclear and difficult to access for companies; the range of services is inadequate, with a strong focus on technology and little consideration of non-technological aspects (funding, HR, access to market, IPL); extensive private offer (1,350 consultancy firms), albeit poorly structured and lacking in professionalism; lack of coordination between stakeholders
- Lack of seed capital (€150,000 and over €500,000); rare for usage and service related innovations; complicated procedures

**STRENGTHS**

- Business creation rate higher than the France average
- High potential in engineering sciences
- Quality university courses backed by diverse research potential (Engineering sciences, water, soil and coastal areas, chemistry and biochemistry, HSS, etc.)
- Winner of the Investissements d’Avenir award: Equipex (1)

**ATTRACTIONS**

- Versatile profile (absence of specialisation) with transversal competences making it possible to withstand exogenous shocks
- Presence of major structuring projects (ITER)
- Networking of competitiveness clusters (9) and PRIDES (29) in domains beyond technological innovation (export, use of ICT, Human Resources, corporate social and environmental responsibility)
- Winner of the Investissements d’Avenir award: Equipex and Labex (10), IEED, SATT PACA-Corsica, POLMIT UH
Summary of French regions’ regional innovation strategies

**STRATEGIC ISSUES AND DOMAINS**

(Promising Fields, Future-Oriented Sectors, Etc.)

- Consolidate the network of innovation stakeholders, aiming for the regional coordination of the members of the innovation chain, complementary interventions with companies and a “one-stop shop”
- Acquire strategic tools encouraging innovation in all its forms: progressive innovation or “service packages”
- 5 thematic aspects: business innovation support (skills, management, strategy); innovation culture; inter-company collaboration – transfer structures and research centres; development of the human capital; information control
- Governance: strategic (CRUSE) and operational (CoPI)

**THEMATIC PRIORITIES OF THE SRI:**

Mechanics and materials
Transport
Chemistry
Eco-industries, wood and agri-food
Imaging

**REINFORCE INNOVATION BASED ON PRIDES AND COMPETITIVENESS CLUSTERS**

- Assist businesses in their innovation approach, taking into account new innovation trends (shifting R&D focus towards the user)
- Promote societal and territorial innovation
- Mobilise public and private stakeholders vis-à-vis shared priorities as governance is a key issue

**THEMATIC PRIORITIES OF THE SRI:**

Affirmation of 2 themes:
- “Creative Economy”
- “Sustainable Mediterranean”

Broken down into 5 Strategic Areas of Activity (DAS)
Health
Digital content industry
Safety security risk
Sustainable housing
Smart mobility

**KEY PROPOSALS**

- Innovation “Service package” for companies: global assistance programme from upstream phases to operation
- “One-stop shop”
- Creation of a Regional Innovation Network (steered by the DRRT + Regional Council) and contracts with support stakeholders (Objectives and Resources Contract)
- Training of innovative companies (commercialisation, marketing, etc.)
- Implementation of a regional market of dormant patents to be made available to SMEs
- Training of a group of regional focal points in the European Commission with a view to influencing European policies with an effect on innovation from the earliest possible stage
- Assistance in the recruitment of a deputy managing director to promote innovation approaches in SMEs employing less than 25 staff

- Definition of targeted market segments within the Strategic Areas of Activity (DAS) as part of a “smart specialisation strategy” logic recommended by the European Commission for the 2014-2020 period
- Structuring of a regional coordination network (RRI) to render the offer of the networked regional operators more professional
- Creation of “Creativity workshops” (multi-disciplinary creativity think-tanks)
- Promotion of the Regional Institute for environmental awareness
- Tourist innovation: creation of a centre of excellence on tourism (R&D, training, forward planning)
- Creation of an ORION database to monitor the regional strategy,
- Coordination of a regional PACA Innovation site to unify SRI stakeholders and programmes, forming a focal point for Invest in PACA sites (attractiveness-promotion), Intelligence–économique-PACA, and CCINET for the international stage
### WEAKNESSES

#### REUNION ISLAND

- Young population (35% under 20) but the over 60 category is steadily increasing
- GDP/capita 30% lower than the national average since 1998
- Predominance of services (81%), Agriculture (2%), Industry and Construction (17%)
- Low employment rate (43% compared with 63% France average)
- Vast network of micro businesses (85% including 66% of self-employed professionals with no employees) with poor innovation culture
- Weakness of the education system (only 19% of the population has a higher education qualification) and continuing education (3%)
- Essentially public R&D (1,400 FTE, 3 times less than the national average) and almost non existent private R&D (mostly micro businesses)
- Complex and unclear innovation system; significant needs in terms of support and monitoring of innovative projects; numerous structures (CRIIT, CRT, ARVAM, etc.), insufficiently structured and lacking in professionalism
- Funding: lack of transparency; difficulties during start-up / feasibility phase as well as pre-launch phase

#### RHÔNE-ALPES REGION

- Traditional industrial sectors confronted with the competition of low-cost countries (automotive, plastic processing)
- High innovation potential but limited dynamism compared with the most successful European regions
- Research centres produce little innovation
- Lack of coordination between support systems and innovation stakeholders spread across the different urban areas; limited synergy between research laboratories, Universities, companies and territorial development stakeholders
- Network of SMEs reluctant to commit to an innovation approach
- Few success stories, with not many companies experiencing significant development (the majority of them employ around 10 staff)
- Funding: structured, high-density network but project support between the prototyping phase and the commercial launch is insufficient (public support does not last long enough and there are not enough private investors during the pre-launch phase).

### STRENGTHS

#### REUNION ISLAND

- Public and private research staff: 1,400 FTE (Post office and telecom, IT, R&D: 289)
- Presence of public research organisations: CIRAD, IRD, IFREMER, BRGM branch, CRVOI (emerging diseases)
- Significant results compared with other overseas départements (innovation output index: 0.32; registered patents: 10/year; registered designs: 57/year; registered trademarks: 214/year)
- Winner of the Investissements d’Avenir award: IEED

#### RHÔNE-ALPES REGION

- 3rd most innovative European region (RIS 2006) and ranked 7th in the EU for S&T potential
- 2nd French region for DERD (2.59%), publications, with identified strengths (chemistry, physics, engineering sciences) and R&D staff (11.5% of the national total)
- Industrial power based on traditional sectors with world leaders
- Significant urban network linking 8 urban areas and powerful academic sector with major research laboratories (CNRS, CEA, etc.).
- Dense ecosystem made up of more than one hundred structures (ARDI, Universities, platforms, technical and research centres, PRES, 3 RTRAs, 3 RTRSs, 10 groups of Carnot certified laboratories, GRAVIT and LST development structures)
- Strong presence of major world-renowned research and skills centres
- Extremely developed network culture between businesses and research centres: 14 competitiveness clusters, 3 of which are international (Minalogic – nano technologies and embedded software, Lyon Biopôle – health protection, Axelera – chemistry and environment) and 8 Rhône-Alpes Clusters
- Winner of the Investissements d’Avenir award: Equipex and Labex (28), IRT (2), IEED
STRATEGIC ISSUES AND DOMAINS
(Promising Fields, Future-Oriented Sectors, Etc.)

- Raise the level of qualification and fight against illiteracy
- Network the structures and tools
- Give companies the means to innovate
- Assist projects upstream and downstream
- Integrated approach to spatial planning
- Raise the profile of the Reunion Island in terms of innovation, as part of a coherent and sustainable process

THEMATIC PRIORITIES OF THE SRI:
definition of DAS (“Strategic Areas of Activity”) and sectors likely to drive future development
- Agro nutrition in a tropical milieu
- Fishing
- Health
- ICT (Information and communication technologies)
- Energy - Environment
- Sustainable Tourism
- Training engineering
- Personal services

2 essential sectors for territorial cohesion and to drive development for DASs, with innovation potential:
- Agriculture
- Construction

KEY PROPOSALS

- Business innovation support (“expert advice”)
- Launch of creativity competitions to stimulate innovation and entrepreneurship
- Development of the “training engineering” sector
- Improve the professionalism of network support and coordination stakeholders
- Implementation of seed aid

- Improve the synergy between innovation from research and innovation from the market and businesses
- Offer appropriate funding to cross development thresholds
- Extend the concept of innovation to encompass “soft” innovations (organisational, marketing, creativity and design, managerial and social)
- Increase the visibility of joint ventures (structuring projects, multi-disciplinary technological platforms, etc.) to encourage transversal activity and cross-fertilisation
- Mobilise public authorities (public contracts, regulations, demonstration) to boost innovative approaches and projects

THEMATIC PRIORITIES OF THE SRI:
5 major scientific fields with the ambition to turn the region into a testing ground for green growth and ecotechnologies:
- Micro and nano technologies
- Life sciences and biotechnologies
- Green chemistry and the environment
- Engineering and renewable energy
- Humanities and social sciences

- Develop structures to support patent registrations and business creations
- Mobilise the ARDI, competitiveness and business clusters to improve the identification of business needs, notably via a network of “development through innovation” advisors coordinated by ARDI Synergie Réseaux
- Ensure that the knowledge supply matches the demand through convergence of research themes and business needs, giving priority to regional companies
- Development of collective actions combining the research sector and businesses based on the SATT
- To cover all stages, undertake actions designed to raise researchers’ awareness of entrepreneurship, innovative project initiators’ awareness of financial culture, and financiers’ awareness of the innovation cycle, in particular for seed capital
- Structure the selection of projects
AFI: Agri-food industry
ARI: Agence régionale d’innovation (Regional innovation agency)
CIR: Crédit impôt recherche (Research Tax Credit)
CIS: Community Innovation Survey
CRT: Centre de Ressources Technologiques
   (Technological Resources Centre)
DERD: Domestic Expenditure on Research & Development
   (Dépense intérieure pour la recherche & développement - DIRD)
EPIC: Public industrial and commercial institution
EPST: Public scientific and technological institution
EQUIPEX: Equipment of excellence
HERI: Higher education and research institution
IEED: Instituts d’excellence dans le domaine des énergies décarbonées
   (Institutes of excellence in the domain of carbon-free energy)
IDEX: Initiative of excellence
IPL: Intellectual property law
IRT: Institut de recherche technologique
   (Technological Research Institute)
JEREMIE: Joint European Resources for Micro to Medium Enterprises
KIS: Knowledge-intensive services
LABEX: Laboratory of excellence
PFT: Plateforme technologique (Technological Platform)
PTR: Prestation Technologique Réseau (Technological Network Services)
PRES: Pôle de recherche et d’enseignement supérieur
   (Centre of Research and Higher Education)
RDT: Réseau de Développement Technologique
   (Technological Development Network)
RIS: Regional Innovation Scoreboard
RTRA: Réseau thématique de recherche avancée
   (Thematic Advanced Research Network)
RTRS: Réseau thématique de recherche et de soins
   (Thematic Healthcare Research Network)
SATT: Société d’Accélération du Transfert de Technologies
   (Technology Transfer Acceleration Company)
UH: University Hospitals
The synthesis has been conducted by the Interministerial Delegation for Territorial Development and Regional Attractiveness acting in concert with the regions and supported technically by the Services and Payment Agency.

**KNOWING European programmes** is a collection initiated by the Europ’Act European technical support and coordination programme. This collection is designed to provide the stakeholders of the European cohesion policy in France with elements to reflect upon with a view to reinforcing and improving the monitoring and steering of European programmes. It includes several types of support such as survey summaries, analytical tools and conceptual frameworks.

**Useful links**

- For information on European funds in France, go to:

- For information on Europ’Act and the KNOWING European funds collection, go to:
  http://www.europ-act.eu
  email: europact@datar.gouv.fr

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