ESPON

AMCER

ADVANCED MONITORING AND COORDINATION OF EU R&D POLICIES AT REGIONAL LEVEL

Targeted Analysis 2013/2/18

Regional report - PROVENCE ALPES COTES D'AZUR
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This basic report exists only in an electronic version.

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Regional report - PROVENCE ALPES COTES D'AZUR

Contents

Synthesis of the territorial and R&D system

PACA is among the most important regions in France regarding economy and population, although the region Île de France is by far the most important and dominating region within France. The regional GDP per capita is below the French but above the European mean. PACA is mostly oriented towards services.

PACA´s economy exhibits some intra-regional disparities as indicated through the coefficient of variation of several indicators stated in Tab. 9. In PACA relatively huge differences can be observed in terms of economy and population. The vast proportion of the region´s population, economic activities, and employment are concentrated "around to two urban areas: in the west, around the urban areas of Avignon, Marseille, Aix-en-Provence and Toulon, and in the east along the coast of the Cote d'Azur. There is a big difference between these two areas and the rest of the territory of the region, which has a low population density, is alpine and is endowed with a great variety of protected natural areas" (Por 2004b). The biggest conurbations are Marseille-Aix-en-Provence, Nice, and Toulon. Due to structural changes, in general, the unemployment is also more pronounced in the urban areas (cf. Por 2004b, 2004c, 2004d).

Intra-regional socio-economic disparities in PACA (selected Indicators)

Coefficient of variation of GDP per capita 2008 (in %)	Coefficient of variation of the yearly average GDP per capita growth rate 1998-08 (in %)	Coefficient of variation of the unemployment rate 2009 (in %)	Coefficient of variation of the population dynamics 2000-09 (in %)
11.20	12.39	14.86	24.58

Remark: disparity calculations based on NUTS-3 level data

(Source: own creation and calculations; based on data from EUROSTAT 2011)

In general, most parts of the region do not have a special industrial or scientific heritage. Its industry consists of both traditional and technologically sophisticated sectors. There are well-known locally concentrated potentials for research and innovation due to a relatively broad public research infrastructure as well as the presence of large extra-regional and foreign enterprises from medium-high and high-tech sectors. Major region´s research and innovation spots are Marseille and the Sophia Antipolis science park, which is located near Nice. Nonetheless, generally, the region faces low innovation content among the regional production system, resulting from a gap between research and the overall economic sector. Regarding various RTDI indicators in comparison to the national level, in general, the region achieves below average values. Compared to the European level, however, the region often obtains above average results.

PACA's current core R&D sectors are food research and processing, marine science and technologies, ICT, biotechnology and life sciences, aerospace, pharmacy, new materials as well as energy and gas. The RTDI sector in PACA is business-oriented but also very much influenced by public actors.

The region´s innovativeness in relation to the other French regions, measured by the number of patents applied at the EPO, ranks in the 3rd place. In European terms the region achieves below average values. In 2007, the employment in R&D (FTE) was 6.9% of the overall French R&D personnel. The R&D personnel (FTE) per 1,000 employees amount to 14.1. This figure is below the French (14.6) but above the EU-27 (11.0) average. Regarding the business orientation of the R&D expenditures and the R&D personnel (FTE) (58.0%, 50.1%), the region has lower values than both France (63.0%, 57.0%) and the EU-27 (63.7%, 52.1%) (cf. EUROSTAT 2011).

In 2007, PACA´s per capita spending on R&D ranks in the upper third compared to the other French regions. The region´s R&D intensity accounts for 1.93%, thus being slightly below the national average (2.07%) but above the EU-27 average (1.85%). PACA´s R&D productivity amounts to 0.22, thus being slightly below both the French (0.23) the EU-27 average (0.27) (cf. EUROSTAT 2011).

Impact evaluation

Main findings

The following section analyses the research profile of the region by considering the capability to attract research funding in the Seventh Framework Program and the characteristics of the network generated by the programs. Moreover, we also consider the employment profile of the Region in the period 2004-2009, by paying particular attention to knowledge intensive and research dynamic sectors, as well as the patents produced in the region in the period 2002-2007.

As specified in the methodological section, it is not possible to assess the impact of European funding on the region. Nevertheless, programs, patenting and employment represents different and complementary stages in which research activity is developed and exploited. Thus, by using this data, it is possible to i) assess the coherence existing at the regional level among these different phases and ii) identify the most promising sectors.

Overall, the PACA region is less attractive of FP 7 funds, when compared to the national and European average, both in terms of number of projects and the amount of funds attracted. The Alpes-Maritimes and the Bouches-du-Rhobne are the most attractive areas. The participants are mostly Research (48%) and Private for profit organizations (31%) as well as Higher Education Institutions (19%). The regional actors are particularly attractive in the themes “ICT” and “Space”. Most partners are located in Germany (15,4%), France (12,7%) and United Kingdom (11,5%). The most important organizations in the regional FP7 network are the CNRS, the University of Marseille II and Inserm.

The region is mostly specialized in medium knowledge intensive sectors, which sum up 54% of the employed, and which have grown by 22 thousands units in the considered period (+11%). The region is more specialized in High knowledge sectors than Europe and France, these sectors are very important (24% of the employees) and they have remarkably grown (+10 thousands, +12%); low knowledge intensive sectors have also grown (+7 thousands). Among High knowledge sectors, the largest sectors also have grown the most: “Financial services” (14,5 % of the regional employees, +7’144 in the period) and “Education and knowledge creation (3,3%, + 4’490).

The patenting activity is remarkable in Electrical Engineering, due to the presence of some intensive patenting organizations.

In sum, the regional research potential is high in some fields and, in terms of knowledge exploitation, the employment profile is strongly oriented to knowledge intensive sectors. Some fields emerge to be very important and promising all across the spectrum of activity considered, suggesting room for interaction. First, “Information and communication technology” is highly attractive for funds, a remarkable share of people are employed in IT (3,2%), and many patents have been registered in “computer technology” (152), “IT methods and management” (32), “digital communication” (72). Second, the field of “Space” (in FP7), and the employment sectors of Aerospace point out an important field of specialization.

General statement of the regional participation in the FP7

Headquarter effect

The headquarter effect analysis revealed 181 ingoing participations in the region, and 38 outgoing participations. No headquarter effect was identified for 60% of regional participations. Most of the ingoing participations were subtracted from Ile de France (133 participations). In terms of outgoing participations, a total of 17 were added to Languedoc-Roussillon.

The majority of ingoing and outgoing participations came from Research Organisations (87% in both cases). Other types of actors are not significantly affected by the headquarter effect.

Rate of participation of the region in the FP 7

Regional actors in PACA accounted for a total of 450 participations in FP7, 118 coordinations and 168mln€ in EC funding (6.6%, 8.2% and 6.4% respectively of the national total). The weight of the region in total national FP7 funding (6.4%) is equal to its weight in the national gross domestic expenditure on R&D (6.5%).

During the 2007 – 2011 period, PACA received a yearly average of 37€mln year in FP7 financing, representing approximately 1.3% of the region's yearly R&D effort (2.7bn€ in R&D).

Overall, the rate of participation, the leadership rate[1] and the contribution received are inferior to the European and national averages (Table 1).

Table 1 –Participation in the FP 7 : comparison with country and European average

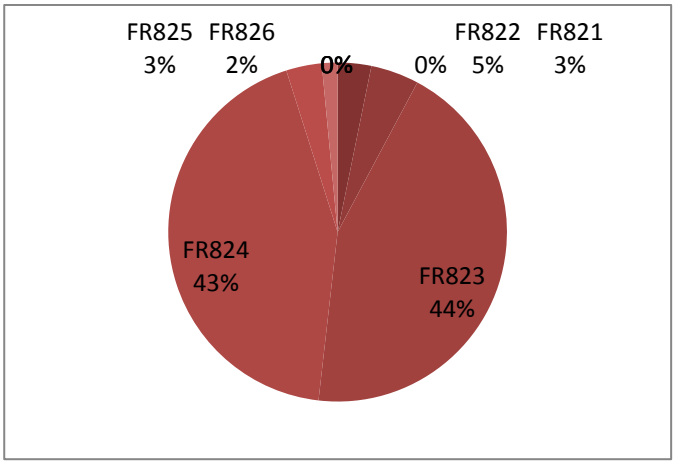
	PACA	France	EUROPE
leadership rate	26%	21%	19%
collaborations per 100.000 population	9.2	14.4	13.9
coordination per 100.000 population	2.4	3.0	2.6
€ contribution per inhabitant	34.4	41.4	44.4
average funding per project	374213	390228	318255

Distribution of funding at infra-regional level

The majority of regional participations and coordinations are located in Alpes-Maritimes (47% and 46% respectively), followed by Bouches-du-Rhône (40% and 48%). As seen in the following table, the infra-regional distribution of FP7 funding is roughly equal to that of participations and coordinations. Alpes-Maritimes and Bouches-du-Rhône account for 87% of FP7 funding in the region.

[1] It represents an estimation of the strength of the regional actors, it is given by the ratio between the number of projects in which the regional actors play the role of coordinator and the number of projects in which the regional actors are in the position of partner.

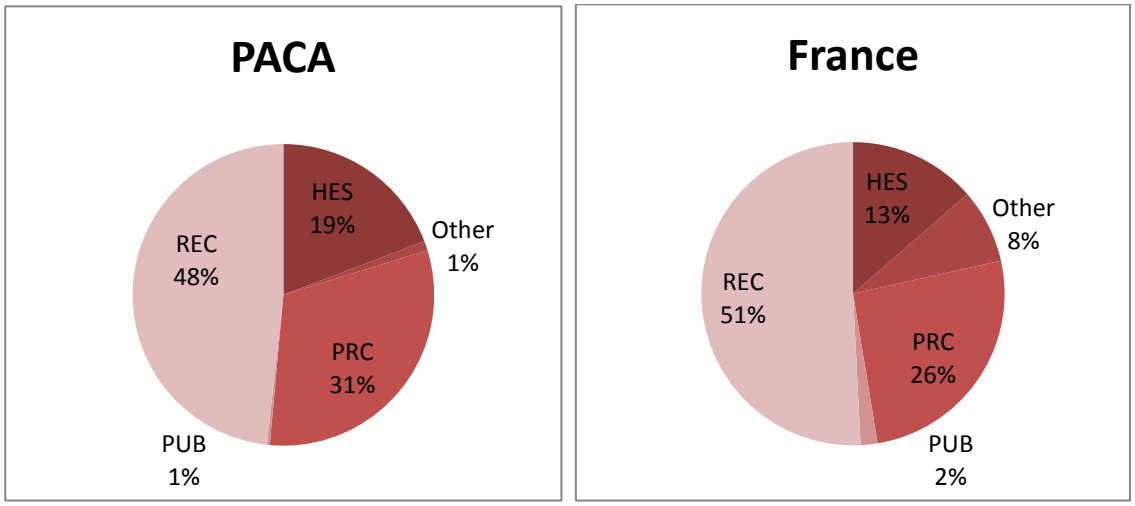
Figure 1: EC contribution distribution within the region



Distribution of funding by participant type

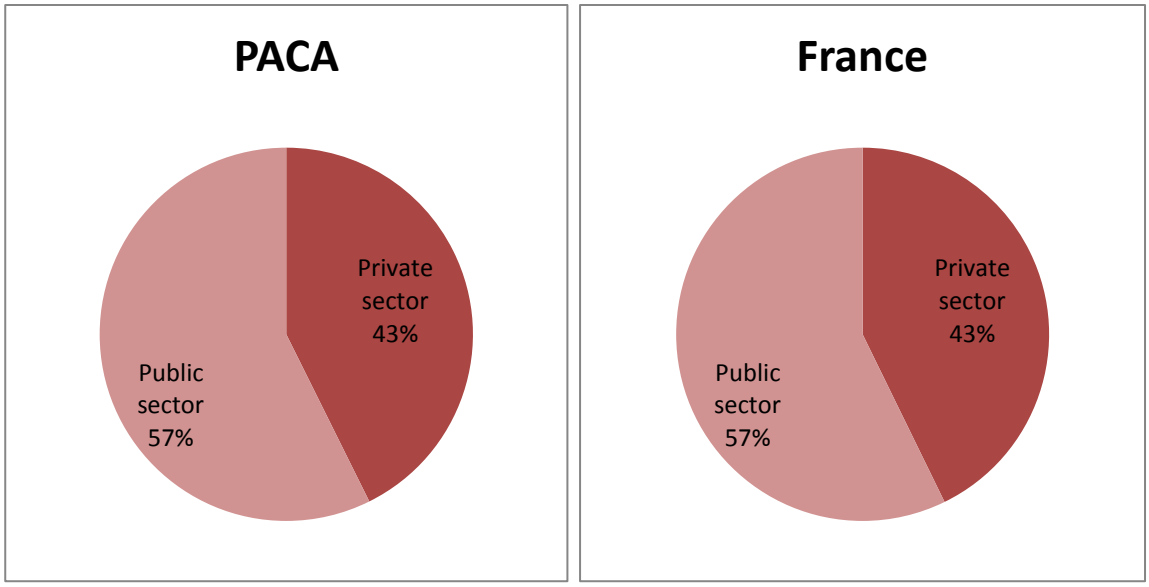
The structure of participation is very similar between the regional and national level as illustrated by the following figures. The share of Higher of Secondary Education Establishments (HES) is slightly higher in PACA (19%) than in the rest of France (13%).

Figure 2: Participation typology: a comparison between regional and national level



At the regional level, the distribution of participations between private (commercial and non profit) and public organisations (commercial and non profit) is balanced (48% vs. 52%). At the national level, private organisations have a slightly lower share of participations than public organisations (46% vs. 54%). The following figure presents the distribution of FP7 funding among both groups of actors.

Figure 3: Distribution of participations according to legal type: a comparison between regional and national level

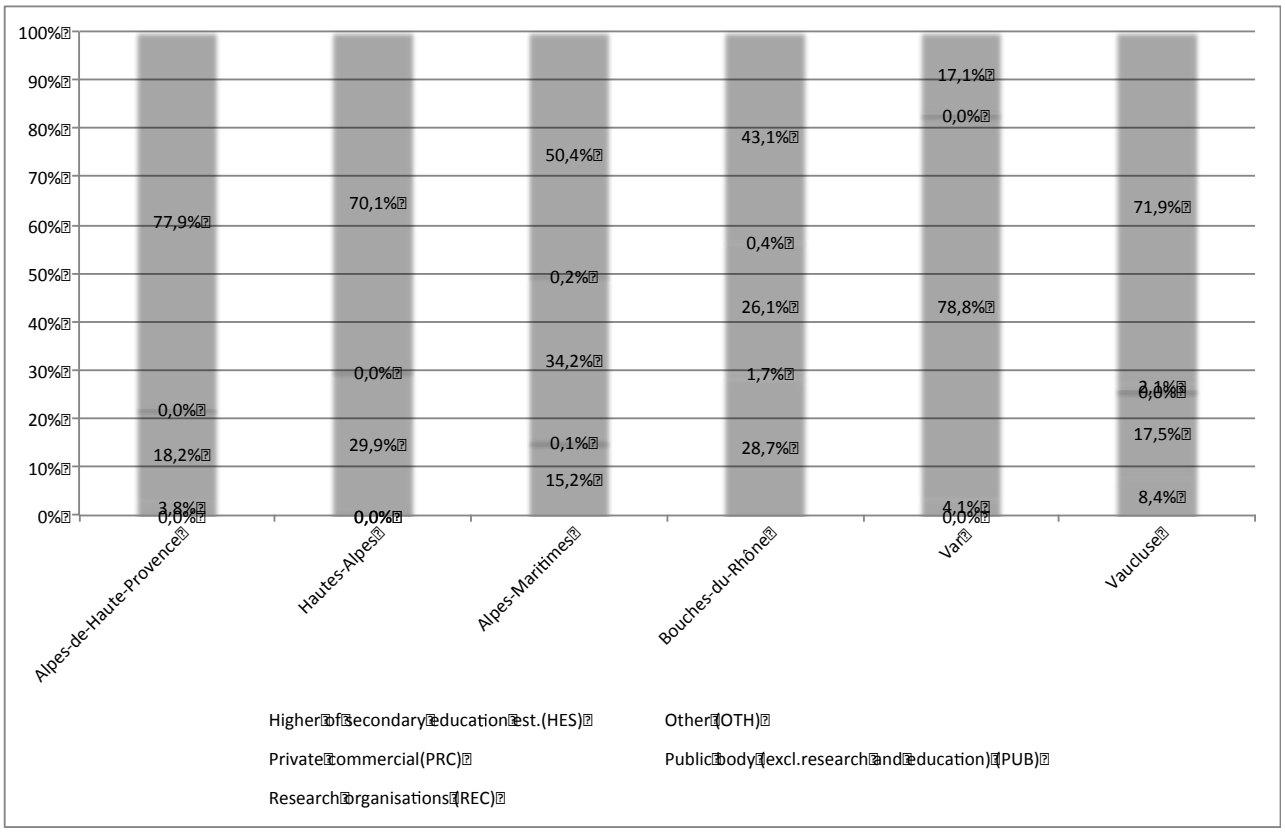


In terms of FP7 funding, Research Organisations tend to outperform other types of participants. At the regional level, this group accounted for only 42% of participations, while receiving 48% of the total FP7 regional funding. Private Commercial Organisations on the other hand account for 36% of participations, while benefiting from 31% of the total regional FP7 funding.

Distribution of funding by participant type at infra-regional level

The distribution of FP7 funding by participant type at the infra-regional level varies considerably. The majority of funding in Alpes-de-Haute-Provence, Vaucluse, and Hautes-Alpes (78%, 72% and 70% respectively) went to Higher of Secondary Education Establishments; while in Alpes-Maritimes and Bouches-du-Rhone, funding is more evenly distributed among Higher of Secondary Education Establishments (50% and 43%), Private Commercial Organisations (34% and 26%), and Research Organisations (15% and 28%).

Figure 4: Distribution of FP7 funding at the infra-regional level by type of participant

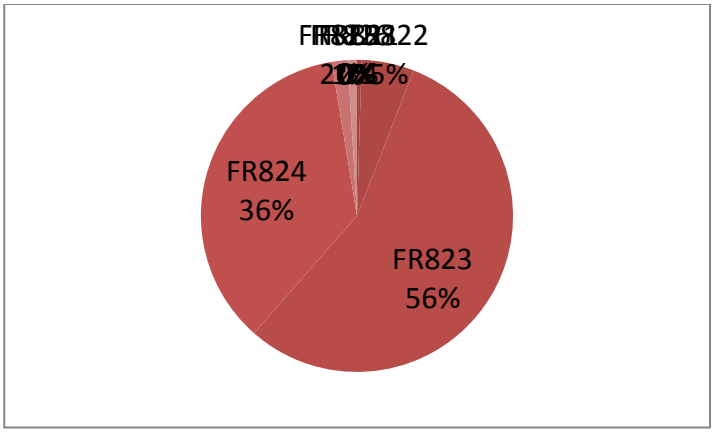


SMES' participation in FP7

During the 2007-2011 period, SMEs in PACA accounted for 127 participations in FP7 projects and 42mln€ in funding (11% and 14% of the national total respectively). This is considerably higher than the regional share of overall participations in France (6% - see above). All SME participations were generated by private commercial SMEs (100%).

The following figure presents the infra-regional distribution of SME funding in FP7. SMEs in Alpes-Maritimes and Bouches-du-Rhône account for 92% total SME funding in the region (56% and 36% respectively).

Figure 5: EC contribution for SMEs within the region



Distribution of funding by programme and by theme

COOPERATION programs represent the largest share of funding (105mil) and projects (301), followed by IDEAS (27 mil, 17 projects), PEOPLE - Marie Curie actions (17 mil, 74 projects,) and CAPACITIES (14 mil and 48 projects). In terms of thematic specialization within the COOPERATION program, the themes attracting more funding are *Information and communication technologies* (42%) and *Health* (19%). The relative weight of each thematic area largely reflects the amount of funding pre-allocated by the European Union to each Theme. The comparison with country and European attractiveness of funds per inhabitant provides a better insight as to the regional scientific specialization[2]: Provence Alpes Cotes d'Azur is more attractive in Information Communication Technology.

A more detailed description of the thematic specialization in the FP 7 is presented in section 2.4.

Table 2 – Thematic distribution of projects and funding

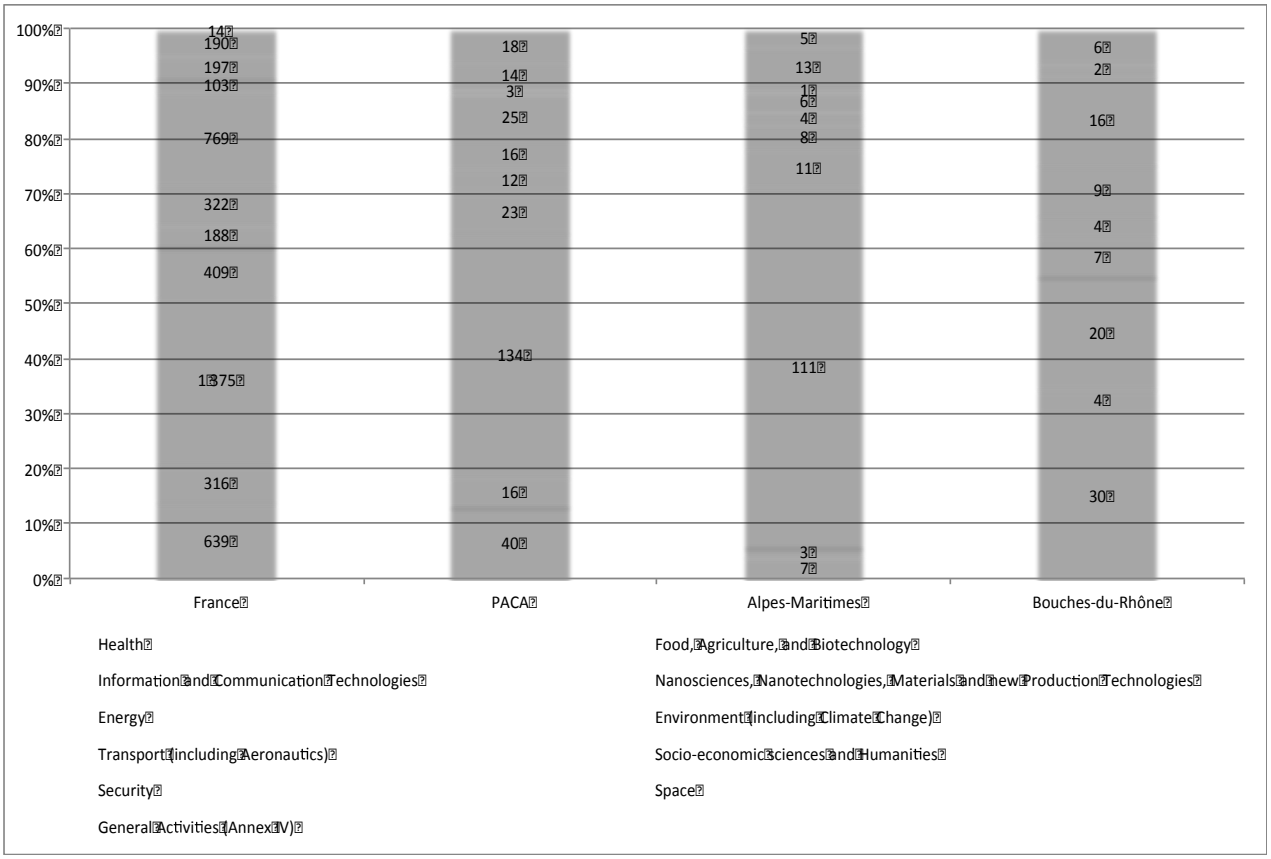
				REGION		Attractiveness compared (contribution)	
num	PROG SPEC	Theme	nbr	EC contribution		COUNTRY	EU
1	COOPERATION	Health	40	19'577'441	19%	0.87	0.74
2	COOPERATION	Food, Agriculture, and Biotechnology	16	3'502'920	3%	0.52	0.41
3	COOPERATION	Information and Communication Technologies	134	44'084'025	42%	1.19	0.93
4	COOPERATION	Nanosciences, Nanotechnologies, Materials and new Production Technologies	23	9'703'537	9%	0.95	0.63
5	COOPERATION	Energy	12	5'278'873	5%	1.03	0.62
6	COOPERATION	Environment (including Climate Change)	16	4'198'881	4%	0.69	0.41
7	COOPERATION	Transport (including Aeronautics)	25	4'342'688	4%	0.24	0.30
8	COOPERATION	Socio-economic sciences and Humanities	3	721'343	1%	0.50	0.26
9	COOPERATION	Security	14	4'791'319	5%	0.81	0.93
10	COOPERATION	Space	18	8'917'299	8%	0.98	2.20
11	COOPERATION	General Activities (Annex IV)			0%	0.00	0.00
	COOPERATION	TOTAL	301	105'118'326		0.78	0.73
12	IDEAS	European Research Council	17	27'880'367			
13	PEOPLE	Marie-Curie Actions	74	17'762'556			
14	CAPACITIES	Research Infrastructures	15	8'805'490	61%	0.74	0.75
15	CAPACITIES	Research for the benefit of SMEs	11	1'667'977	11%	0.57	0.28
16	CAPACITIES	Regions of Knowledge	4	893'235	6%	2.29	1.63
17	CAPACITIES	Research Potential	2	559'459	4%	0.94	0.30
18	CAPACITIES	Science in Society	2	322'483	2%	0.50	0.22
19	CAPACITIES	Coherent development of research policies	1	206'253	1%	1.62	1.05
20	CAPACITIES	Activities of International Cooperation	13	2'087'293	14%	4.23	2.95
	CAPACITIES	TOTAL	48	14'542'189		0.85	0.65
21	Euratom	Fusion Energy					
22	Euratom	Nuclear Fission and Radiation Protection	10	3'092'302			
			799	***288'056'255***			

The following figure presents the distribution of participations at the infra-regional level, by FP7 theme (only for COOPERATION); for the top two infra-regional territories. Alpes-Maritimes has a significantly higher level of participations in the field of Information and Communication Technologies in comparison to

[2] A ratio above or below 1 points out a higher/lower attractiveness.

the national and regional averages. Bouches-du-Rhone, displays a high level of specialisation in the Health sub-theme when compared to the regional and national averages.

Figure 6: Distribution of infra-regional participations by COOPERATION sub-theme (top two infra-regional participants)



Networking: collaboration in the FP 7

Main partner countries of the region

Regional actors tend to cooperate mostly with other organizations outside the region. Even though, when compared to other regions the local and national orientation of the collaboration is much stronger: partners in the region counts around 19%, nationals 23%, whereas 53% are located in other European regions (compared to an average of 80% of collaboration with European partners). The most important countries in terms of collaborations are Germany, France, Italy and UK; whereas if single regions are considered, the most important are Ile de France and Bayern (Table).

Table 3 – Spatial distribution of collaborations

Partner countries	n	% of total
DE	613	15.4%
FR	507	12.7%
UK	460	11.5%
IT	449	11.3%
ES	318	8.0%
NL	218	5.5%
BE	212	5.3%

Partner region	n	% of total
Ile de France	285	7%
Bayern	145	4%
Baden-Württemberg	137	3%
Comunidad de Madrid	112	3%
Lazio	105	3%
Vlaams Gewest	102	3%
South East England	97	2%

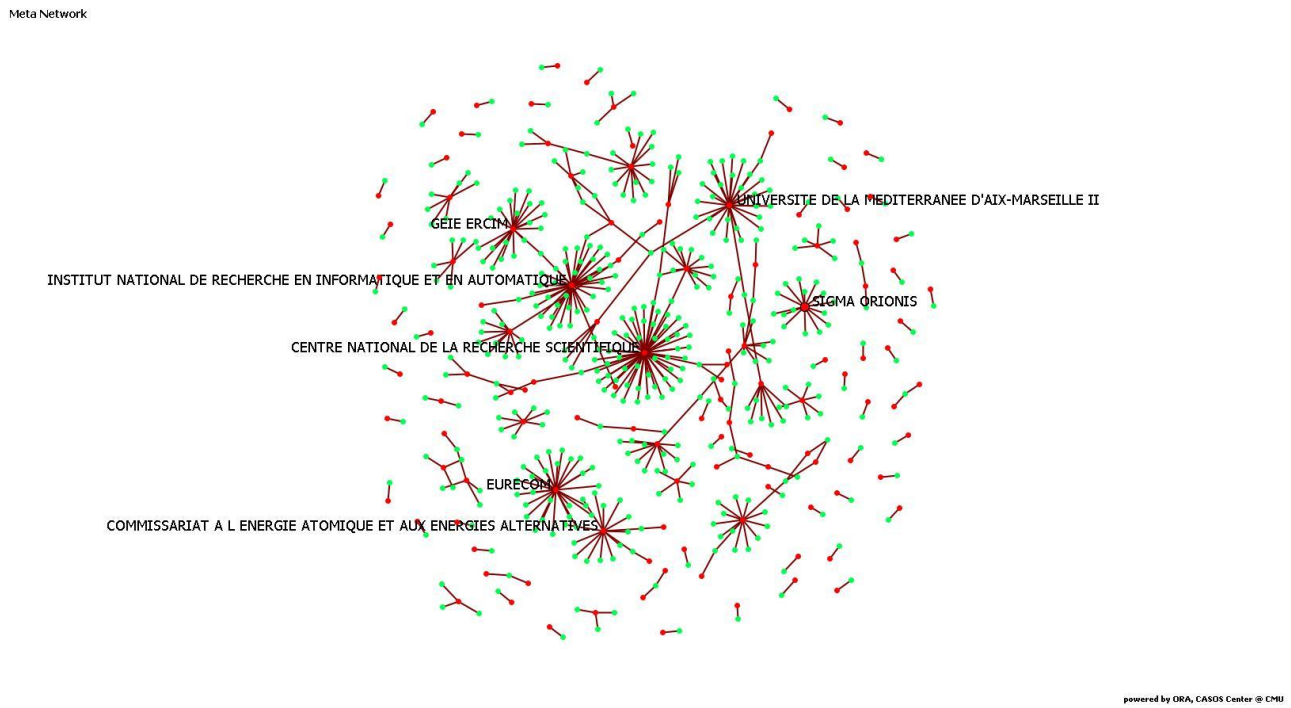
SE	154	3.9%
CH	138	3.5%
EL	138	3.5%
AT	95	2.4%
FI	87	2.2%
NO	76	1.9%
DK	64	1.6%
HU	63	1.6%

Attiki	96	2%
London	95	2%
Nordrhein- Westfalen	93	2%
Catalonia	88	2%
Lombardia	87	2%
Région de Bruxelles capital	71	2%
Etelä-Suomi	71	2%
East of England	63	2%

Network of the regional collaborations in the FP7

Figure 1 visually represents the network of regional collaborations in the FP 7. The names of the most important actors are underlined. The network appears rather dense and well connected, when compared to other regional networks of similar dimension. A few actors are in a central position: CNRS, Université de la Mediterranee d'Aix-Marseille II and Institute Nationale de Recherche en informatique et en Automatique.

Figure 7–FP 7 network and its main features



Measure	Value
number of nodes (organizations)	119
number of egdes (cooperations)	160
Density	0.022
Components of 1 node (isolates)	69
Components of 2 nodes (dyadic isolates)	7
Components of 3 or more nodes	8
Characteristic path length	1.978
Clustering coefficient	0.388
Network levels (diameter)	4

Network fragmentation	0.987
Krackhardt connectedness	0.013
Krackhardt efficiency	-1.232

Main regional actors involved in FP7 networks

The next chart shows which organizations are repeatedly top-ranked in a series of centrality measures[3]. The value shown is the percentage of measures for which it was ranked in the top three. The following table represents three key measures to approximate the importance of the actors in the network[4].

Figure 8 –More central organizations in the regional FP7 network

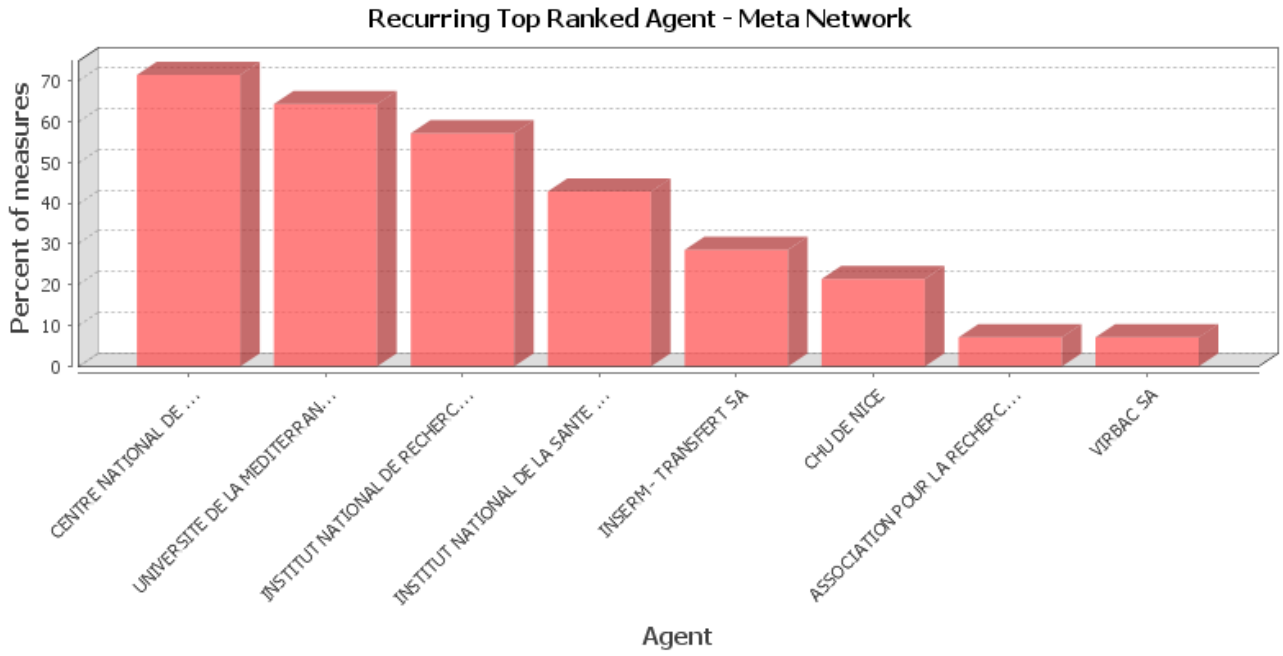


Table 4 – Centrality measures: top actors in the FP 7

Rank	HUB centrality		Betweenness centrality		Total degree centrality	
1	CNRS	1.41	CHU DE NICE	24	CNRS	60
2	INSERM	0.07	INSERM	21	INSERM	40
3	INSERM - TRANSFERT SA	0.03	UNIVERSITE DE LA MEDITERRANEE D'AIX-MARSEILLE II	15	UNIVERSITE DE LA MEDITERRANEE D'AIX-MARSEILLE II	33
4	TAGSYS	0.03	CNRS	8	EURECOM	26
5	TOPLINK INNOVATION	0.03	ASSOCIATION POUR LA RECHERCHE ET LE DEVELOPPEMENT DES METHODES ET PROCESSUS INDUSTRIELS - ARMINES	2.5	GEIE ERCIM	21

[3] Total degree centrality, In-degree centrality, Out-degree centrality, Eigenvector centrality, Eigenvector centrality per component, Closeness centrality, In-Closeness centrality, Betweenness centrality, Hub centrality, Authority centrality, Information centrality, Clique membership count, Simmelian ties, Clustering coefficient.

[4] For a definition of these measure see the methodological section.

6	PHARMAXON SAS	0.03	INSERM - TRANSFERT SA	2	ASSOCIATION POUR LA RECHERCHE ET LE DEVELOPPEMENT DES METHODES ET PROCESSUS INDUSTRIELS - ARMINES	17
7	INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET EN AUTOMATIQUE	0	PLAN BLEU POUR L'ENVIRONNEMENT ET LE DEVELOPPEMENT EN MEDITERRANNEE	2	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	17
8	GEIE ERCIM	0	INNO TSD SA	1	INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)	16
9	CHU DE NICE	0	GENESIS S. A.	1	SIGMA ORIONIS	15
10	ACTIVEEON	0	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	1	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	14

Main actors in the region in terms of leading collaboration

The three main actors in terms of leading collaboration are the CNRS, the UNIVERSITE DE LA MEDITERRANEE D'AIX-MARSEILLE II and the GEIE ERCIM. The most regionally oriented of the three organizations appears in the CNRS.

Table 5 – Top three organizations for projects led and participation as partner

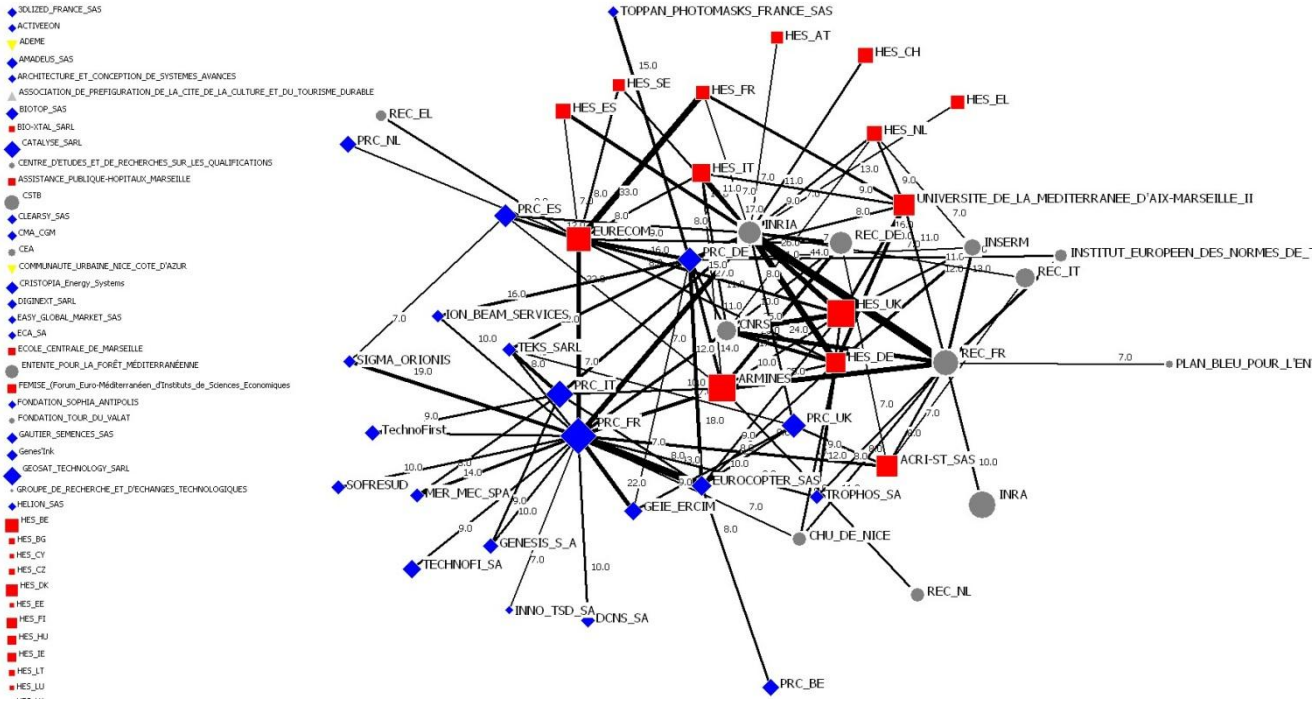
	focus on the top three coordinators			location of partners		
Type	leader	n° as leader	as partner	region	country	EU
REC	CNRS	28	26	3	4	23
HES	UNIVERSITE DE LA MEDITERRANEE D'AIX-MARSEILLE II	15	14		4	37
PRC	GEIE ERCIM	13	7	1	10	59

	focus on the top three partners			location of leaders		
Type	leader	n° as partner	as leader	region	country	EU
REC	INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET EN AUTOMATIQUE	30	6		7	23
REC	CNRS	26	28	1	2	23
HES	EURECOM	25	1		8	17

The following Social Network Analysis reveals the links between the main research players in the region and their partners in Europe. European partners are not displayed individually, but have instead been regrouped by type of organisation and country of origin. The shape of the nodes indicates the type of organisation represented (circles = research organisations, squares = higher education establishments, rhombus = private commercial organisations, triangles = other). The figure only displays the most important collaboration patterns, while excluding collaborations that are to weak to be significant5. The size of the

[5] This has been determined using a minimun value of frequency of collaborations (>6).

nodes indicates the importance of the player in terms of centrality (number of participations linking them to other partners); and the width of lines represents the intensity of collaboration between the partners represented in the figure.



Outputs – employment and patenting in the region

Employment

In this section we examine the distribution of employment in the region across sectors with special attention on identifying sectors where the region has a particular specialisation and/or where there are trends of growth and decline in employment. Figure 9 makes a basic breakdown of employment into sectors that can be classified as 'high', 'medium' and 'low' knowledge and technology intensive using the Eurostat and OECD's classification of sectors into technology and knowledge intensive groups (see annex 1). Further, Table 6 shows figures on employment growth and relative specialisation with respect to France and Europe for each of these broad groupings of sectors.

Figure 9 - Share of regional employment 2009

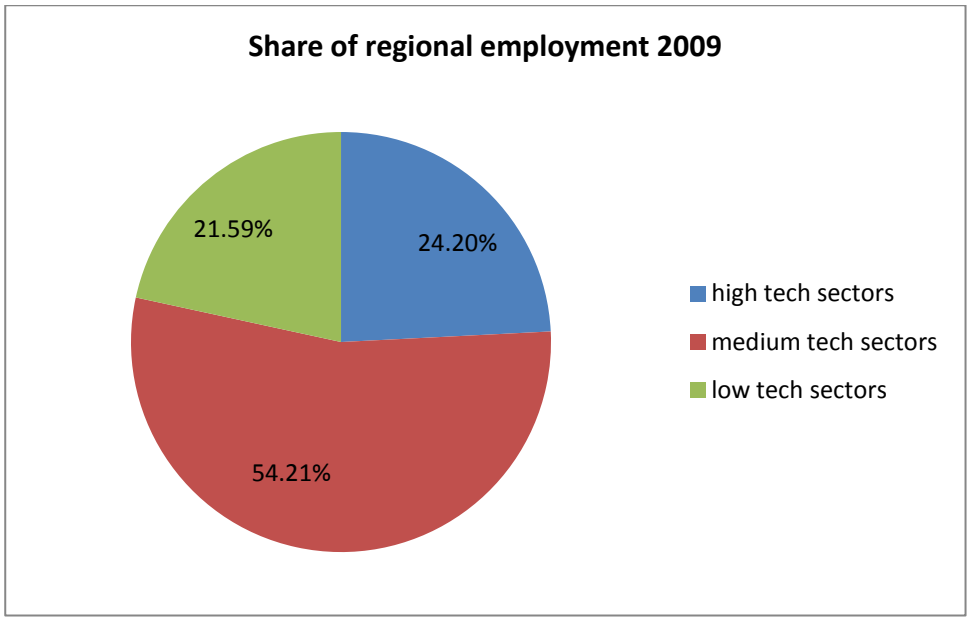


Table 6 –Employment and specialization (2009)

	Share of regional employment 2009	Variation in the share of employment 2009-2004[6]	Employment 2009 - 2004	Specialization with respect to Europe (2009)[7]	Specialization with respect to FRANCE (2009)[8]
high tech sectors	24.20%	11.95%	10221	1.47	1.09
medium tech sectors	54.21%	11.66%	22388	0.90	0.91
low tech sectors	21.59%	9.34%	7297	0.92	1.20

Employment in the region is dominated by medium tech sectors (54%), with low and high technology sectors accounting for 22% and 24% of employment respectively. In terms of trends, employment in low, medium and high tech sectors has grown. The specialisation figures tell the most interesting story because they show how the region is positioned relative to France and Europe. Here we see that the region is relatively more specialised in high tech sectors with respect to both France and Europe. On the contrary, in medium tech sectors the region is less specialised than Europe and France. Finally, in low tech sectors the region is less specialised than Europe but more than France. In Table7 this analysis is continued sector-by-sector.

[6] The variation in the share employments has been calculated as: (n° employees in the region in 2009 – n° employees in the region in 2004)/ (n° employees in the region in the year 2004)

[7] Specialization index with respect to Europe shows whether the region concentrates more or less employment in a certain sector(s) than the European average being 1 this average.

[8] *Ibid* with respect to France

Table 7 – Employment specialization by sector and Knowledge intensity (2009)

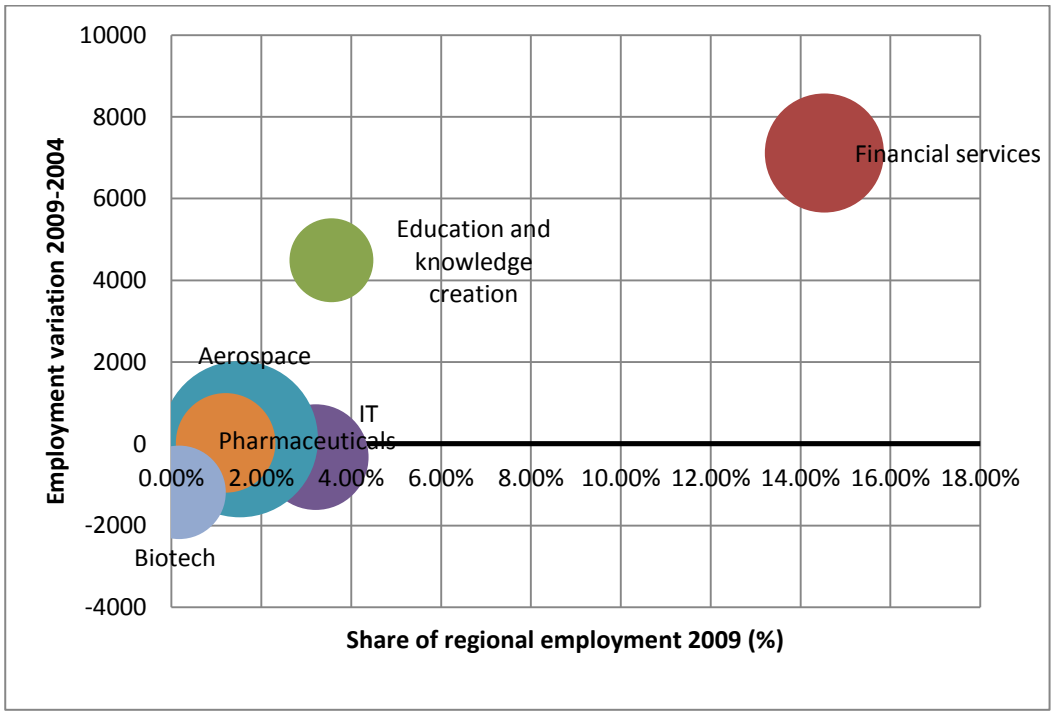
	Share of regional employment 2009	Employment 2009 - 2004	Specialization with respect to Europe (2009)	Specialization with respect to FR(2009)	Technology and Knowledge intensity
Financial services	14.53%	7114	1.35	1.06	HIGH TECHNOLOGY AND KNOWLEDGE INTENSITY
Education and knowledge creation	3.56%	4490	0.67	1.19	
IT	3.21%	-330	1.06	1.43	
Aerospace	1.52%	113	2.32	1.14	
Pharmaceuticals	1.20%	25	0.94	0.67	
Biotech	0.17%	-1191	0.83	1.71	
Transportation and logistics	13.52%	4054	1.38	1.51	MEDIUM TECHNOLOGY AND KNOWLEDGE INTENSITY
Business services	11.02%	21804	0.93	0.99	
Construction materials	7.16%	3454	0.53	1.14	
Processed food	5.61%	-457	0.67	0.71	
Telecom	3.32%	-4799	0.86	1.04	
Entertainment	2.50%	3129	1.18	1.16	
Construction	2.42%	-1322	1.65	1.97	
Metal manufacturing	2.23%	-869	0.32	0.44	
Building fixtures, equipment and services	1.79%	-120	0.45	0.80	
Automotive	0.92%	1698	0.21	0.22	
Medical devices	0.70%	199	0.77	1.01	
Plastics	0.65%	176	0.4	0.48	
Heavy Machinery	0.49%	-869	0.34	0.45	
Production technology	0.45%	-1751	0.14	0.33	
Instruments	0.41%	-129	0.6	0.60	
Chemical products	0.36%	-66	0.48	0.81	
Maritime	0.27%	-551	0.28	0.43	
Lighting and electrical equipment	0.22%	-604	0.27	0.33	
Power generation and transmission	0.09%	-536	0.17	0.31	
Sporting, recreational and children's goods	0.08%	-53	0.22	0.49	
Tourism and hospitality	8.87%	2246	1.56	2.10	LOW TECHNOLOGY AND KNOWLEDGE INTENSITY
Distribution	3.94%	-307	0.96	1.24	
Media and publishing	2.74%	2822	0.72	0.87	
Farming and animal husbandry	1.73%	3957	0.60	1.34	
Agricultural products	1.60%	-905	0.74	1.21	
Paper products	0.80%	-474	0.31	0.45	
Oil and gas	0.65%	453	1.11	2.71	
Furniture	0.39%	61	0.21	0.58	
Apparel	0.33%	-251	0.12	0.49	
Textiles	0.28%	-74	0.14	0.32	

Jewellery and precious metals	0.10%	-29	0.35	0.61	
Stone quarries	0.10%	35	0.60	1.26	
Footwear	0.04%	8	0.06	0.31	
Leather products	0.03%	-38	0.13	0.14	
Tobacco	0.00%	-207			

The detail of the previous table can be also found in the following figures, in which we can see the absolute employment growth (y axis), the relative weight on the regional total employed (x axis) and the regional specialization with respects to Europe (the size of the bubbles).

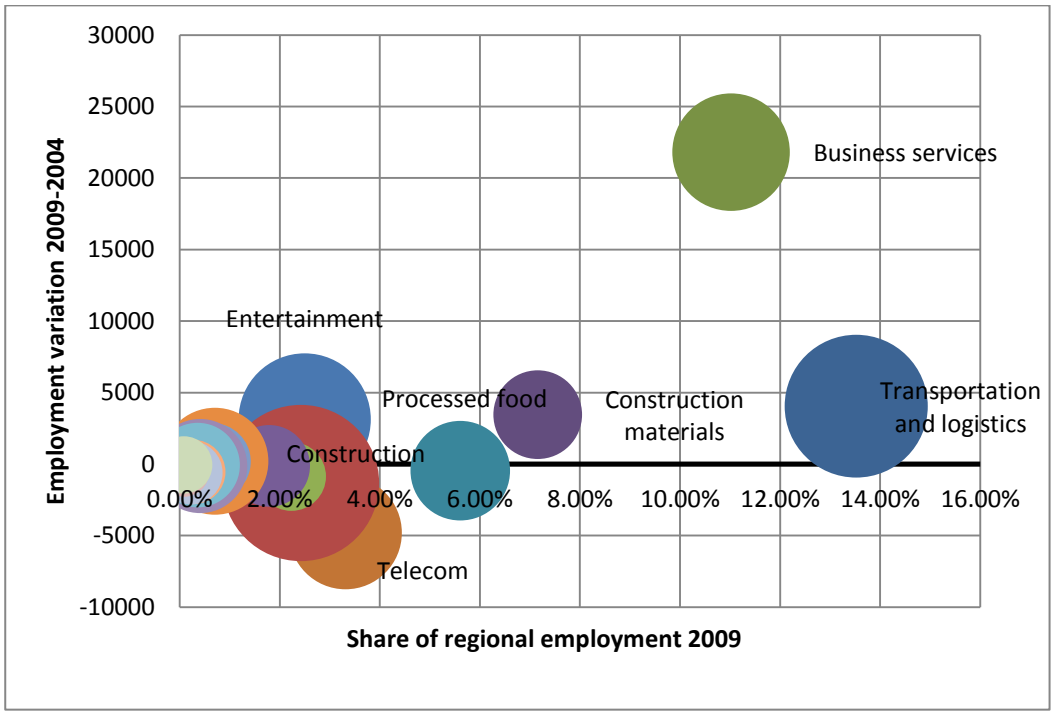
Figure 9 shows that "Financial Services" is growing and the region is quite specialised.

Figure 9 – High tech and knowledge sectors: evolution 2004- 2009



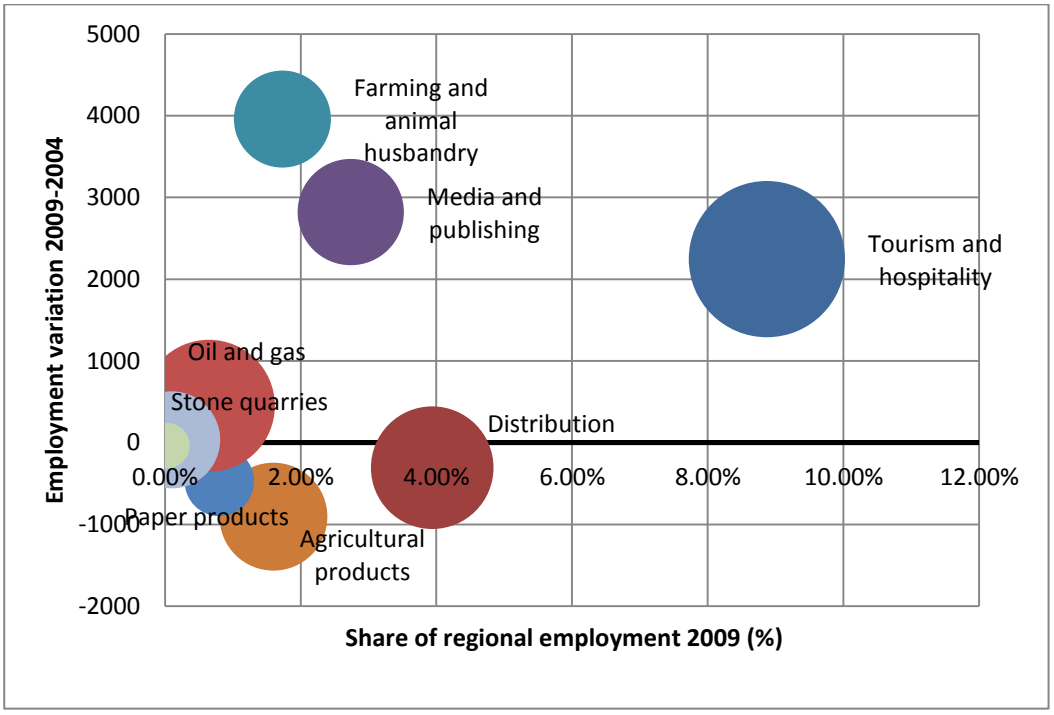
With regards to medium tech sectors "Business services" is a growing and accounts a high number of employees in the region. There are also other sectors in which the region is specialised -"Transportation and logistics"- that accounts an important part of regional employment but has grown little in the period 2004-2009. It also shows some declining sectors, for example "Telecom" and "Construction".

Figure 10 – Medium tech and knowledge sectors: evolution 2004- 2009



With regards to low tech, growing sectors in which the region is not highly specialised are "Farming and animal husbandry" and "Media and publishing"; the region is quite specialised, "Tourism and hospitality", a sector that is also growing. "Agricultural products" is declining.

Figure 11 – Low tech and knowledge sectors: evolution 2004- 2009



Patents

Table 8 and figures 12 and 13 show the degree of specialization by sector of patenting, for EPO applications from 2002 to 2007. Patents are regrouped by domain and sub-field. Fractional counting is used for distributing patents across fields.

PACA region clearly emerge as specialized in Electrical Engineering, whereas in the other sector the patenting activity is rather modest. Table 10 shows that this specialization is due to few important actors: SAP, Texas Instruments, Gemplus card international.

Table 8 – patents by domain and sub-field

dm	lib_domaines	n	lib_fields	n° patents	field weight*	country weight**	specialisation index ***
1	Electrical engineering	1	Electrical machinery, apparatus, energy	6,60	1,13%	0,17%	0,21
1	Electrical engineering	2	Audio-visual technology	8,37	1,44%	0,56%	0,71
1	Electrical engineering	3	Telecommunications	65,32	11,22%	2,09%	2,62
1	Electrical engineering	4	Digital communication	76,46	13,14%	3,57%	4,48
1	Electrical engineering	5	Basic communication processes	17,58	3,02%	3,10%	3,89
1	Electrical engineering	6	Computer technology	152,05	26,13%	4,59%	5,75
1	Electrical engineering	7	IT methods for management	32,17	5,53%	9,80%	12,29
1	Electrical engineering	8	Semiconductors	5,08	0,87%	0,46%	0,57
2	Instruments	9	Optics	2,50	0,43%	0,21%	0,26
2	Instruments	10	Measurement	5,40	0,93%	0,17%	0,22
2	Instruments	11	Analysis of biological materials	10,07	1,73%	2,55%	3,20
2	Instruments	12	Control	12,83	2,21%	0,96%	1,20
2	Instruments	13	Medical technology	19,00	3,26%	0,67%	0,84
3	Chemistry	14	Organic fine chemistry	11,12	1,91%	0,43%	0,54
3	Chemistry	15	Biotechnology	10,22	1,76%	1,60%	2,01
3	Chemistry	16	Pharmaceuticals	26,92	4,62%	1,15%	1,44
3	Chemistry	17	Macromolecular chemistry, polymers	6,54	1,12%	1,08%	1,35
3	Chemistry	18	Food chemistry	3,72	0,64%	0,52%	0,65
3	Chemistry	19	Basic materials chemistry	7,92	1,36%	0,88%	1,11
3	Chemistry	20	Materials, metallurgy	13,27	2,28%	1,45%	1,82
3	Chemistry	21	Surface technology, coating	3,51	0,60%	0,51%	0,64
3	Chemistry	22	Micro-structural and nano-technology	0,00	0,00%	0,00%	0,00
3	Chemistry	23	Chemical engineering	7,24	1,24%	0,48%	0,61
3	Chemistry	24	Environmental technology	5,23	0,90%	0,36%	0,45
4	Mechanical engineering	25	Handling	8,67	1,49%	0,28%	0,35
4	Mechanical engineering	26	Machine tools	3,20	0,55%	0,20%	0,25
4	Mechanical engineering	27	Engines, pumps, turbines	3,00	0,52%	0,08%	0,11
4	Mechanical engineering	28	Textile and paper machines	4,00	0,69%	0,54%	0,68
4	Mechanical engineering	29	Other special machines	4,88	0,84%	0,17%	0,21
4	Mechanical engineering	30	Thermal processes and apparatus	1,67	0,29%	0,14%	0,18
4	Mechanical engineering	31	Mechanical elements	2,25	0,39%	0,06%	0,08
4	Mechanical engineering	32	Transport	16,97	2,92%	0,18%	0,23
5	Other fields	33	Furniture, games	4,60	0,79%	0,18%	0,22
5	Other fields	34	Other consumer goods	9,20	1,58%	0,38%	0,47
5	Other fields	35	Civil engineering	14,45	2,48%	0,32%	0,40

* ratio: (n° of patents of the region in field x) / (total patents of the region)

** ratio: (n° of patents of the region in field x) / (n° of patents of the country in field x)

*** ratio: (patenting weight of field x in the region) / (patenting weight of field x in the country)

Figure 12 – Patenting by domain: total share

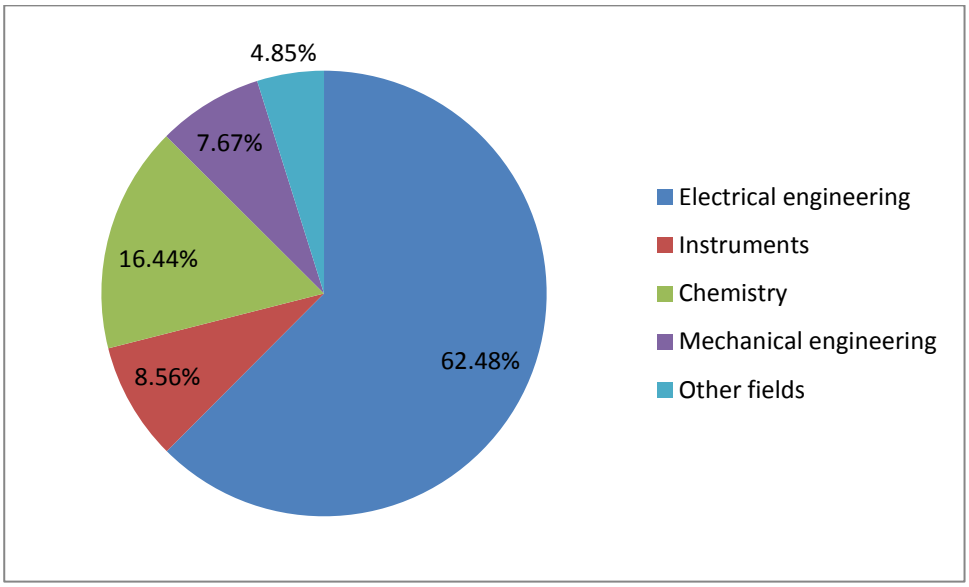


Figure 13 - Patenting by domain: specialization

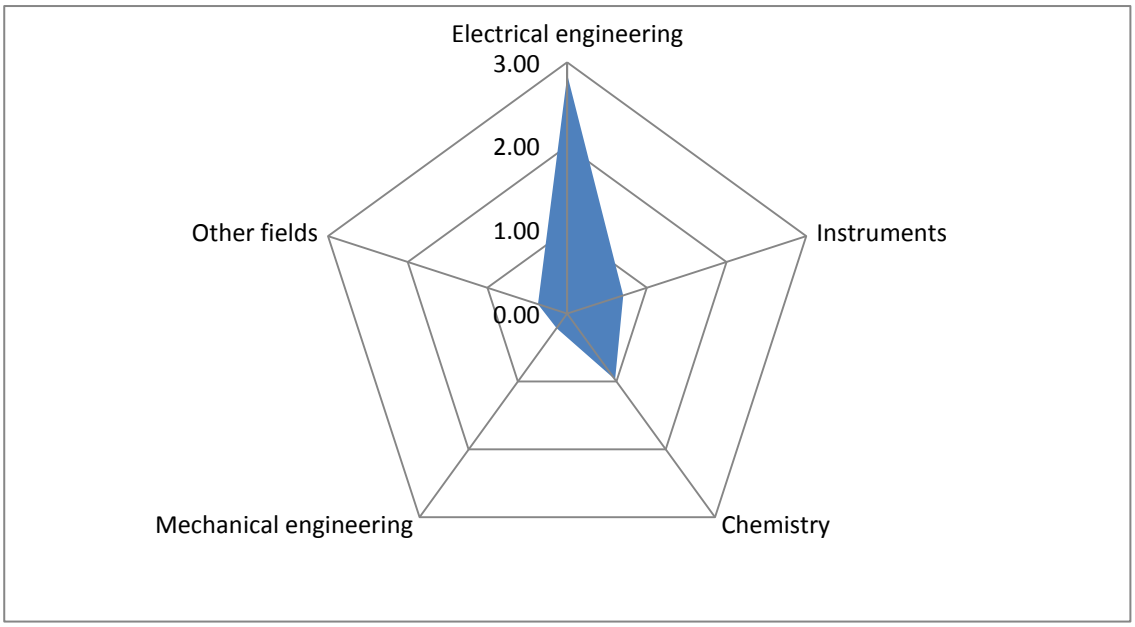


Table 9 shows the most important patenting subjects.

Table 9 – Most important applicants

name	count
SAP AG	60
GEMPLUS CARD INT	57
TEXAS INSTRUMENTS FRANCE	50
TEXAS INSTRUMENTS INC	49
HEWLETT PACKARD DEVELOPMENT CO	37
INFINEON TECHNOLOGIES AG	20
AMADEUS SAS	18
HITACHI LTD	16
ACCENTURE GLOBAL SERVICES GMBH	14
ROHM AND HAAS FRANCE SAS	11

Annex 1 - Regional Research and technological specialisation in FP7

Context

FP7 allocates a total of EUR 32 413 million to the Cooperation specific programme. This funding is mainly aimed at supporting cooperation between universities, industry, research centres and public authorities through collaborative research projects. As of October 2011, 3 725 projects were funded through the FP7 cooperation programme representing a total of 14.5€bn.

The FP7 cooperation programme covers 11 themes (Cf. Box 1) which themselves cover a number of research areas. For the purposes of this study, 188 research areas have been selected in order to perform a regional specialization analysis of each theme.

Box 1 The 11 themes of the FP7 cooperation programme (and the number of research areas for each of them)

- Health (13 research areas)
- Food, Agriculture, and Biotechnology (17 research areas)
- Information and Communication Technologies (12 research areas)
- Nanosciences, Nanotechnologies, Materials and new Production Technologies (16 research areas)
- Energy (8 research areas)
- Environment (including Climate Change) (9 research areas)
- Transport
    - Aeronautics (17 research areas)
    - Surface transport (15 research areas)
- Socio-economic sciences and Humanities (18 research areas)
- Space (5 research areas)
- Security (7 research areas)

Methodological aspects

The specialization analysis aims to establish regional profiles based on thematic participation in the cooperation programme of FP7. The principle of the specialization analysis is to compare, within a theme, the budget breakdown into research areas between the European, national and regional levels.

The perimeter of the analysis only concerns research activities. In order to improve the relevance of the specialization analysis, cross-cutting activities, support actions to improve international collaborations, to promote SMEs or for NCP activities are not taken into account.

The specialization analysis is conditioned by the creation of a clean and reliable regional monitoring tool which takes into account headquarter effects. This was done during as part of the second component of the AMCER, which allowed validating the FP participations of each of the nine regions covered by the project.

The specialization analysis has been carried out for each theme of the cooperation programme. As an underlying hypothesis, we consider there is no asymmetry of information within a theme. This means that we consider national and regional stakeholders to be equally informed about all the research areas and funding opportunities covered in the theme.

In order to avoid the appearance of a mass effect of some research areas against others, the share (weight) of the area within the theme is not considered in the specialization profile. Instead, the European profile is considered as the baseline (Base 100) for regional and national comparisons. The specialization profile is

established by measuring the spread between the EU baseline and national or regional EC funding distribution among the research areas.

In other words, this methodology allows identifying which research areas are over-represented and under-represented among all research areas. This provides information regarding the preferences of national and regional research communities in terms of priority research areas. It should be taken into account however, that the analysis does not consider the possible existing competition between European, national and regional funding opportunities at the stakeholder level.

Remarks on the specialisation indexes

The analysis does not constitute a performance indicator. Instead, it presents the differences in terms of distribution of funding among research areas at the national and regional level, compared to the FP standard, and regardless of the total funding weight of each research area. A comparison between the national profile and the EU profile illustrates the national and regional specialization trends. A comparison can also be carried out between national and regional specialization profiles, allowing to know if the regional specialization profile follows the national profile. The difference between profiles can be unlighted by national or regional experts aware of the territorial.

In order to identify areas of specialization, readers must identify the specialization index provided for each research area. If the 'specialisation index' is above the European 100 base, it can be stated that the region or country is specialized in that particular research area. On the other hand, if the specialization index stands below 100, the area is underrepresented and there is no indication of specialization in this area.

For each theme covered by the FP7 cooperation programme, the three following sets of information are provided:

i) The overall EU budget distribution by research area
ii) The specialisation profile at the national and regional level, providing a picture of specialisation trends for the two levels. A comparison between the two levels can give information on regional specialisation trends (and highlight strategic initiatives taken at regional level).
iii) The ranking of research areas at the national and regional levels, according their specialisation scores. The table ranks the research areas according to their specialization score (in base 100) at the national and regional level (left and right column respectively). If the score is above 100, the area is over

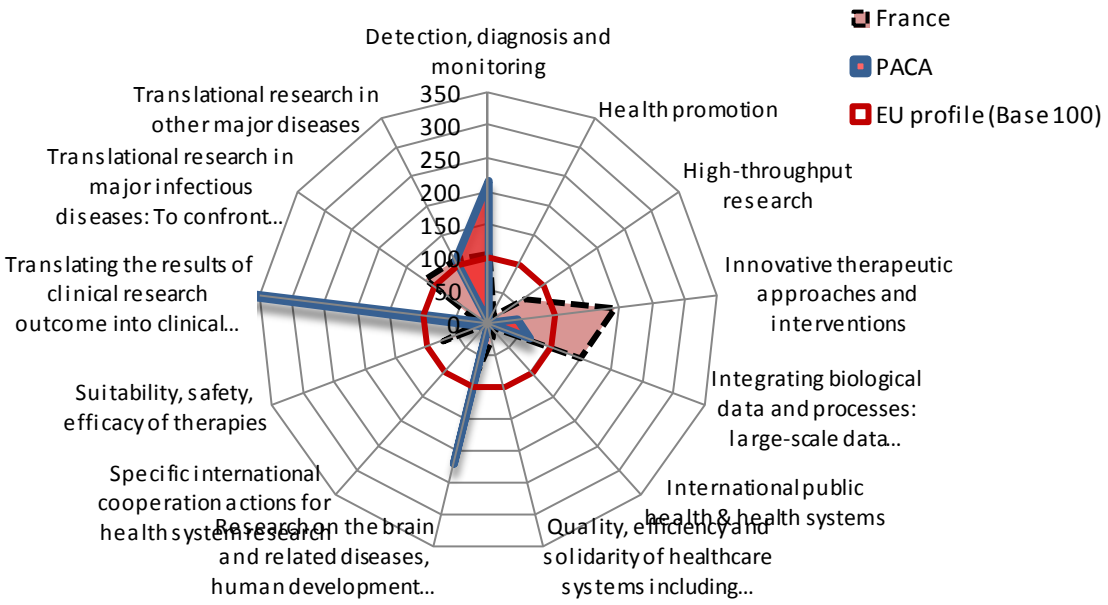
Health

Table 1 Budget breakdown in research areas at the FP cooperation specific-programme level

Rk	Research area	%
1	Translational research in other major diseases	21.6%
2	Translational research in major infectious diseases: To confront major threats to public health	19.1%
3	Integrating biological data and processes: large-scale data gathering, systems biology	17.6%
4	Innovative therapeutic approaches and interventions	10.0%
5	Research on the brain and related diseases, human development and ageing	8.3%
6	Detection, diagnosis and monitoring	6.7%
7	High-throughput research	4.0%
8	Translating the results of clinical research outcome into clinical practice including better use of medicines, and	2.9%

	appropriate use of behavioural and organisational interventions and new health therapies and technologies	
9	International public health & health systems	2.6%
10	Quality, efficiency and solidarity of healthcare systems including transitional health systems	2.6%
11	Health promotion	2.1%
12	Suitability, safety, efficacy of therapies	1.3%
13	Specific international cooperation actions for health system research	1.1%

Figure 7 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)



The following table ranks the research areas according to their specialization score (in base 100) at the national and regional level (left and right column respectively). If the score is above 100, the area is over represented in comparison to the European standard, providing an indication on the specialization trend of the country or the region.

Table 2 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Innovative therapeutic approaches and interventions	192	1	Translating the results of clinical research outcome into clinical practice including better use of medicines, and appropriate use of behavioural and organisational interventions and new health therapies and technologies	939
2	Integrating biological data and processes: large-scale data gathering, systems biology	148	2	Research on the brain and related diseases, human development and ageing	221
3	Translational research in major infectious diseases: To confront major threats to public health	118	3	Detection, diagnosis and monitoring	216
4	Translational research in major infectious diseases: To confront major threats to public health	109	4	Translational research in major infectious diseases: To confront major threats to public health	107
5	Detection, diagnosis and monitoring	106	5	Integrating biological data and processes: large-scale	67

6	Suitability, safety, efficacy of therapies	75
7	Research on the brain and related diseases, human development and ageing	74
8	High-throughput research	65
9	Quality, efficiency and solidarity of healthcare systems including transitional health systems	21
10	Translating the results of clinical research outcome into clinical practice including better use of medicines, and appropriate use of behavioural and organisational interventions and new health therapies and technologies	16
11	Health promotion	14
12	INTERNATIONAL PUBLIC HEALTH & HEALTH SYSTEMS	8

	data gathering, systems biology	
6	Innovative therapeutic approaches and interventions	44
7	Suitability, safety, efficacy of therapies	14

Food, Agriculture, and Biotechnology

Table 3 Budget breakdown in research areas

Rk	Research area	%
1	Increased sustainability of all production systems (agriculture, forestry, fisheries and aquaculture); plant health and crop protection	18.4%
2	Socio-economic research and support to policies	9.8%
3	Nutrition	8.8%
4	Optimised animal health production and welfare across agriculture, fisheries and aquaculture	8.8%
5	Marine and fresh-water biotechnology (blue biotechnology)	8.1%
6	Food processing	7.1%
7	Food quality and safety	6.4%
8	Novel sources of biomass and bioproducts	6.3%
9	Enabling Research	6.0%
10	Industrial biotechnology: novel high added-value bio-products and bio-processes	5.4%
11	Environmental impacts and total food chain	4.2%
12	Consumers	3.3%
13	Environmental biotechnology	3.0%
14	Emerging trends in biotechnology	2.3%
15	The Ocean of Tomorrow	1.5%
16	Biorefinery	0.5%
17	Energy Efficiency in Agriculture	0.1%

Figure 8 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

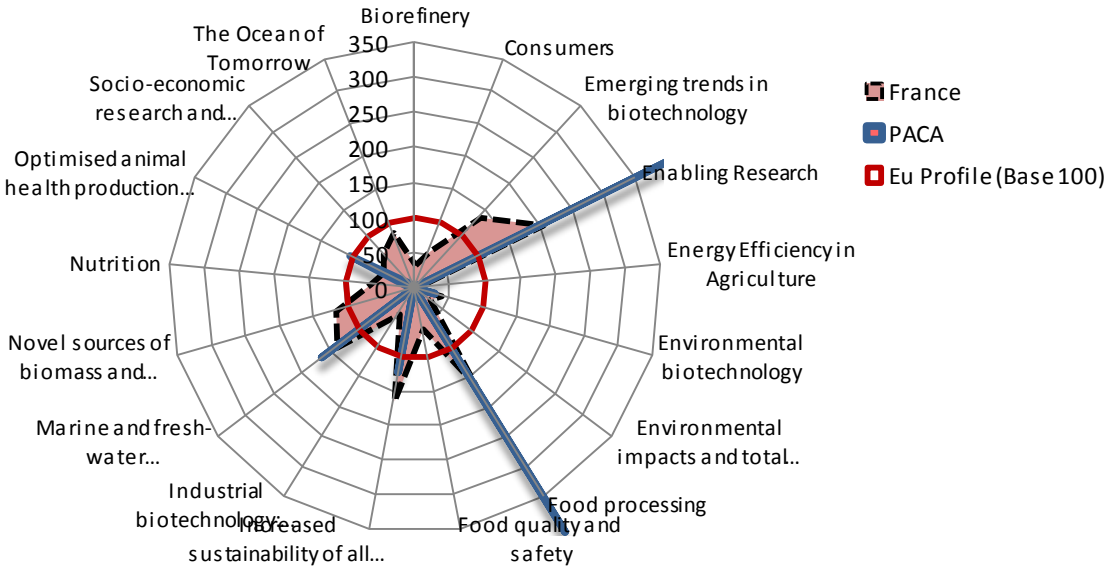


Table 4 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Enabling Research	203	1	Food processing	408
2	Increased sustainability of all production systems (agriculture, forestry, fisheries and aquaculture); plant health and crop protection	163	2	Enabling Research	405
3	Food processing	163	3	Marine and fresh-water biotechnology (blue biotechnology)	164
4	Marine and fresh-water biotechnology (blue biotechnology)	139	4	Increased sustainability of all production systems (agriculture, forestry, fisheries and aquaculture); plant health and crop protection	122
5	Emerging trends in biotechnology	137	5	Optimised animal health production and welfare across agriculture, fisheries and aquaculture	101
6	Novel sources of biomass and bioproducts	117	6	Environmental biotechnology	31
7	The Ocean of Tomorrow	86	7	Socio-economic research and support to policies	7
8	Socio-economic research and support to policies	67	8	Nutrition	6
9	Nutrition	64			
10	Food quality and safety	59			
11	Consumers	57			
12	Optimised animal health production and welfare across agriculture, fisheries and aquaculture	51			
13	Industrial biotechnology: novel high added-value bio-	43			

	products and bio-processes	
14	Environmental biotechnology	39
15	Biorefinery	34
16	Environmental impacts and total food chain	26

Information and Communication Technologies

Table 5 Budget breakdown in research areas

Rk	Research area	%
1	Pervasive and Trustworthy network and service infrastructures	26.4%
2	Components, systems, engineering	21.6%
3	Towards sustainable and personalised healthcare	9.2%
4	Cognitive systems, interaction, robotics	9.0%
5	Digital libraries and content	8.8%
6	ICT for mobility, environmental sustainability and energy efficiency	8.5%
7	Future and emerging technologies	8.3%
8	ICT for Independent Living, Inclusion and Governance	3.1%
9	Smart Factories/virtual factories	2.4%
10	Future Internet experimental facility and experimentally-driven research	1.1%
11	ICT for the Fully Electric Vehicle	1.0%
12	Exa-scale computing, software and simulation	0.4%

Figure 9 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

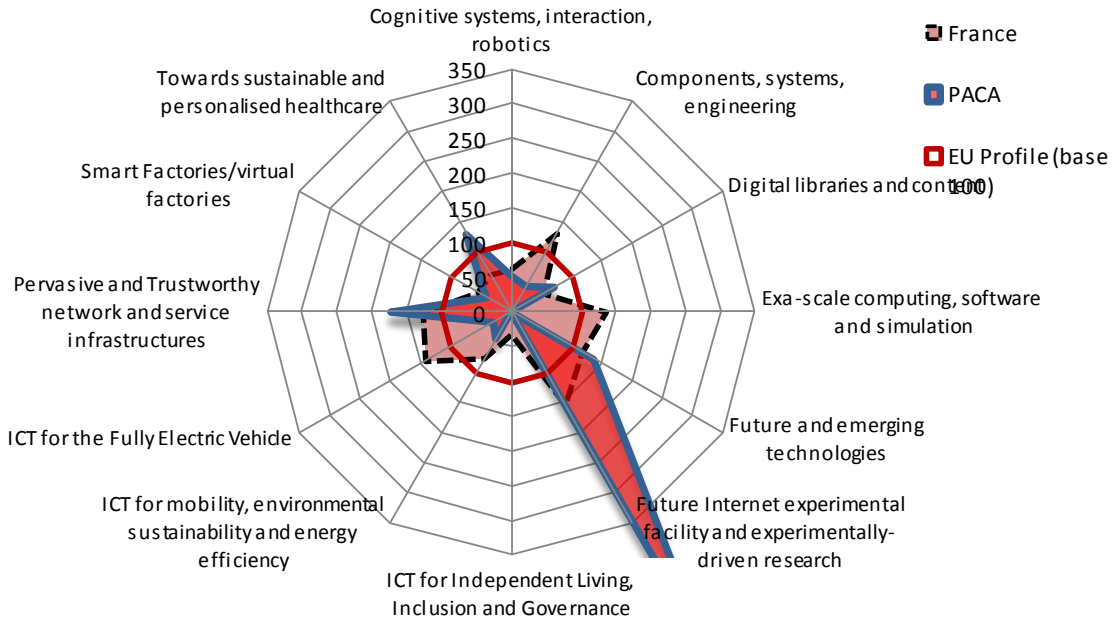


Table 6 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Future and emerging technologies	154	1	Future Internet experimental facility and experimentally-driven research	551
2	ICT for mobility, environmental sustainability and energy efficiency	142	2	Pervasive and Trustworthy network and service infrastructures	172
3	Digital libraries and content	136	3	Future and emerging technologies	137
4	Cognitive systems, interaction, robotics	131	4	Towards sustainable and personalised healthcare	129
5	ICT for the Fully Electric Vehicle	126	5	Digital libraries and content	71
6	Exa-scale computing, software and simulation	117	6	Cognitive systems, interaction, robotics	52
7	Towards sustainable and personalised healthcare	100	7	ICT for mobility, environmental sustainability and energy efficiency	44
8	ICT for Independent Living, Inclusion and Governance	77	8	Components, systems, engineering	43
9	Smart Factories/virtual factories	62	9	Smart Factories/virtual factories	41
10	Pervasive and Trustworthy network and service infrastructures	56	10	ICT for the Fully Electric Vehicle	30
11	Components, systems, engineering	53			
12	Future Internet experimental facility and experimentally-driven research	32			

Nanosciences, Nanotechnologies, Materials and new Production Technologies

Table 7 Budget breakdown in research areas

Rk	Sub theme	Research area	%
1	Nanosciences	Nanotechnology for benefiting environment, energy and health	12.9%
2	New production	Adaptive production systems	12.1%
3	Nanosciences	Maximising the contribution of Nanotechnology on sustainable development	9.4%
4	Materials	Innovative materials for advanced applications	8.5%
5	New production	Rapid transfer and integration of new technologies into the design and operation of manufacturing processes	7.8%
6	Materials	Using engineering to develop high performance knowledge-based materials	7.6%
7	New production	Exploitation of the convergence of technologies	7.6%
8	New production	Development and validation of new industrial models and strategies	6.0%
9	Materials	Enabling R&D in Nanostructured materials	5.8%
10	Materials	Advances in chemical technologies and materials processing	5.7%
11	Materials	Structuring actions/new materials	4.6%
12	Nanosciences	Ensuring the safety of Nanotechnology	4.1%
13	New production	Networked production	3.7%
14	Integration	Substantial innovation in the European medical industry: development of nanotechnology-based systems for in-vivo diagnosis and therapy (in coordination with topic HEALTH-2007-2.4.1-7 and HEALTH-2007-1.2-3 in Theme 1 Health)	2.6%
15	Integration	Smart materials for applications in the sectors of construction and of machinery and production equipment	0.8%
16	Integration	Sustainable new products and markets through bioproduction of green forest-based chemicals and materials	0.7%

Figure 10 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

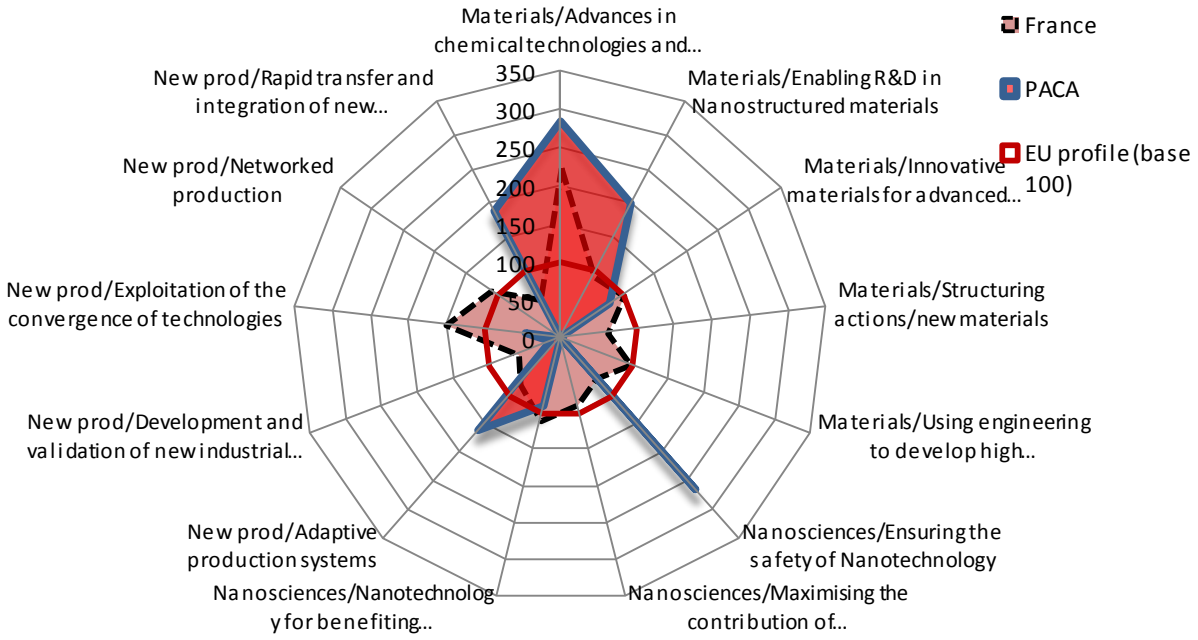


Table 8 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Materials/Advances in chemical technologies and materials processing	225	1	Materials/Advances in chemical technologies and materials processing	284
2	New prod/Exploitation of the convergence of technologies	151	2	Nanosciences/Ensuring the safety of Nanotechnology	267
3	New prod/Networked production	111	3	Materials/Enabling R&D in Nanostructured materials	199
4	Nanosciences/Nanotechnology for benefiting environment, energy and health	111	4	New prod/Rapid transfer and integration of new technologies into the design and operation of manufacturing processes	187
5	Materials/Innovative materials for advanced applications	99	5	New prod/Adaptive production systems	163
6	Materials/Using engineering to develop high performance knowledge-based materials	97	6	Nanosciences/Nanotechnology for benefiting environment, energy and health	93
7	Materials/Enabling R&D in Nanostructured materials	92	7	Materials/Innovative materials for advanced applications	78
8	Nanosciences/Maximising the contribution of Nanotechnology on sustainable development	89	8	New prod/Exploitation of the convergence of technologies	46
9	New prod/Adaptive production systems	81	9	New prod/Development and validation of new industrial models and strategies	14
10	Nanosciences/Ensuring the safety of Nanotechnology	69			
11	Materials/Structuring actions/new materials	61			
12	New prod/Development and validation of new industrial models and strategies	59			
13	New prod/Rapid transfer and integration of new technologies into the design and operation of manufacturing processes	58			

Energy

Table 9 Budget breakdown in research areas

Rk	Research area	%
1	Renewable electricity generation	31.5%
2	Renewable fuel production	21.0%
3	Smart energy networks	13.7%
4	Energy efficiency and savings	13.3%
5	CO2 capture and storage technologies for zero emission power generation	9.4%
6	Clean coal technologies	5.9%
7	Hydrogen and fuel cells	3.1%
8	Knowledge for energy policy making	2.1%

Figure 11 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

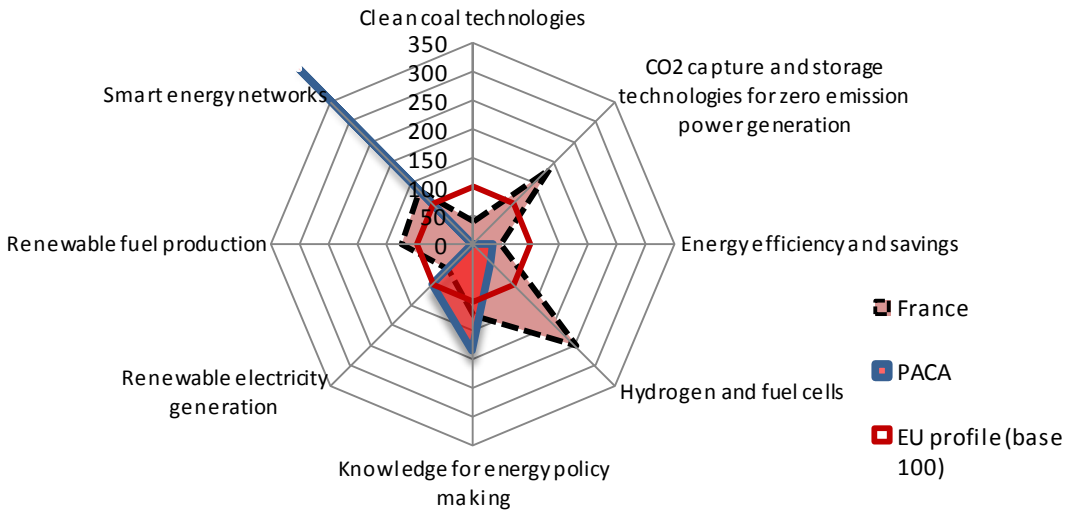


Table 10 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Hydrogen and fuel cells	250	1	Smart energy networks	429
2	CO2 capture and storage technologies for zero emission power generation	185	2	Knowledge for energy policy making	184
3	Smart energy networks	132	3	Renewable electricity generation	98
4	Knowledge for energy policy making	124	4	Hydrogen and fuel cells	46
5	Renewable fuel production	124	5	Energy efficiency and savings	36
6	Renewable electricity generation	62			
7	Energy efficiency and savings	47			
8	Clean coal technologies	40			

Environment (including Climate Change)

Table 11 Budget breakdown in research areas

Rk	Sub theme	Research area	%
1	Climate change, pollution, and risks	Pressures on environment and climate	19.5%
2	Sustainable management of resources	Conservation and sustainable management of natural and man-made resources and biodiversity	17.4%
3	Environmental technologies	Environmental technologies for observation, simulation, prevention, mitigation, adaptation, remediation and restoration of the natural and man-made environment	17.1%
4	Climate change, pollution, and risks	Environment and Health	10.4%
5	Earth observation and assessment tools for sustainable development	Earth and ocean observation systems and monitoring methods for the environment and sustainable development	9.7%

6	Sustainable management of resources	Management of marine environments	9.0%
7	Climate change, pollution, and risks	Natural hazards	7.0%
8	Earth observation and assessment tools for sustainable development	Forecasting methods and assessment tools for sustainable development taking into account differing scales of observation	6.8%
9	Environmental technologies	Protection, conservation and enhancement of cultural heritage, including human habitat	3.2%

Figure 12 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

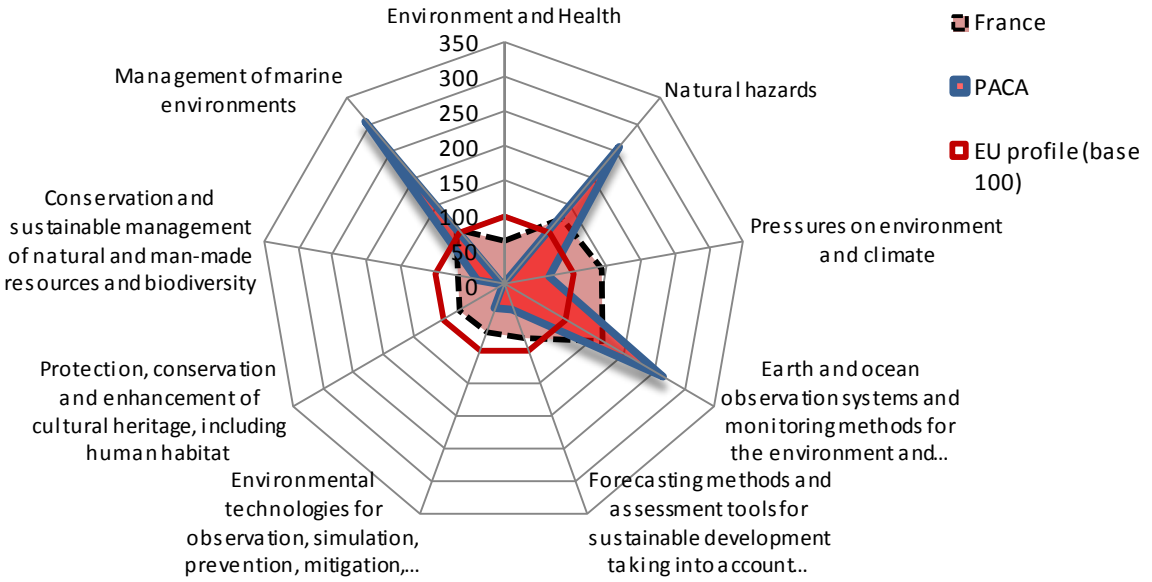


Table 12 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Earth and ocean observation systems and monitoring methods for the environment and sustainable development	161	1	Management of marine environments	308
2	Pressures on environment and climate	140	2	Earth and ocean observation systems and monitoring methods for the environment and sustainable development	266
3	Natural hazards	127	3	Natural hazards	260
4	Management of marine environments	106	4	Pressures on environment and climate	68
5	Forecasting methods and assessment tools for sustainable development taking into account differing scales of observation	81	5	Forecasting methods and assessment tools for sustainable development taking into account differing scales of observation	38
6	Protection, conservation and enhancement of cultural heritage, including human habitat	74	6	Conservation and sustainable management of natural and man-made resources and biodiversity	37
7	Environmental technologies for observation, simulation, prevention, mitigation, adaptation, remediation and restoration of the natural and man-made environment	72	7	Environmental technologies for observation, simulation, prevention, mitigation, adaptation, remediation and restoration of the natural and man-made environment	36

8	Conservation and sustainable management of natural and man-made resources and biodiversity	67
9	Environment and Health	65

Transport (Aeronautics)

Table 13 Budget breakdown in research areas

Rk	Research area	%
1	Propulsion	21.9%
2	Aerostructures	15.1%
3	Design Systems and Tools	8.8%
4	Systems and Equipment	8.6%
5	Production	7.0%
6	Flight Physics	6.5%
7	Avionics	4.2%
8	Maintenance	3.9%
9	Novel Air Transport Vehicles	3.9%
10	Airports	3.8%
11	Human Factors	3.5%
12	Green Air Transport Operations	3.3%
13	Guidance and Control	2.6%
14	Systems	2.3%
15	Personal air transport systems	2.0%
16	Lift	1.7%
17	Interior space	1.0%

Figure 13 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

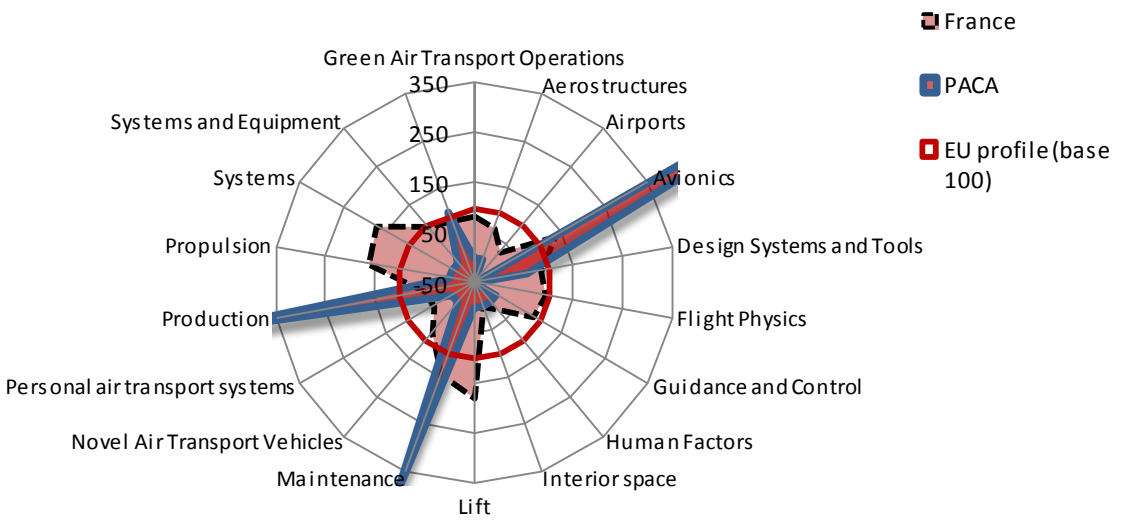


Table 14 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index	Rk	Région Provence Alpes Cote d'Azur	Index
1	Lift	179	1	Avionics	1062
2	Systems	175	2	Production	494
3	Propulsion	164	3	Maintenance	394
4	Maintenance	144	4	Design Systems and Tools	57
5	Avionics	135			
6	Systems and Equipment	97			
7	Flight Physics	93			
8	Guidance and Control	85			
9	Design Systems and Tools	84			
10	Green Air Transport Operations	83			
11	Novel Air Transport Vehicles	81			
12	Aerostructures	66			
13	Production	50			
14	Personal air transport systems	43			
15	Airports	30			
16	Human Factors	18			

Transport (Surface transport)

Table 15 Budget breakdown in research areas

Rk	Research area	%
1	The greening of products and operations	24.0%
2	Integrated safety and security for surface transport systems	21.2%
3	Competitive surface transport products and services	12.1%
4	Innovative strategies for clean urban transport (CIVITAS Plus II)	10.8%
5	Logistics and intermodal transport	7.7%
6	New transport and mobility concepts	7.4%
7	Interoperability and Safety	4.1%
8	Environment-friendly and efficient industrial processes	3.0%
9	Maritime and inland waterway transport	2.9%
10	High quality public transport	2.7%
11	Policy support	1.6%
12	Integrated electric auxiliaries and on-board systems	1.0%
13	Socio-economic issues	0.8%
14	Electrical machines	0.4%
15	Optimised thermal engine development and integration	0.4%

Figure 14 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

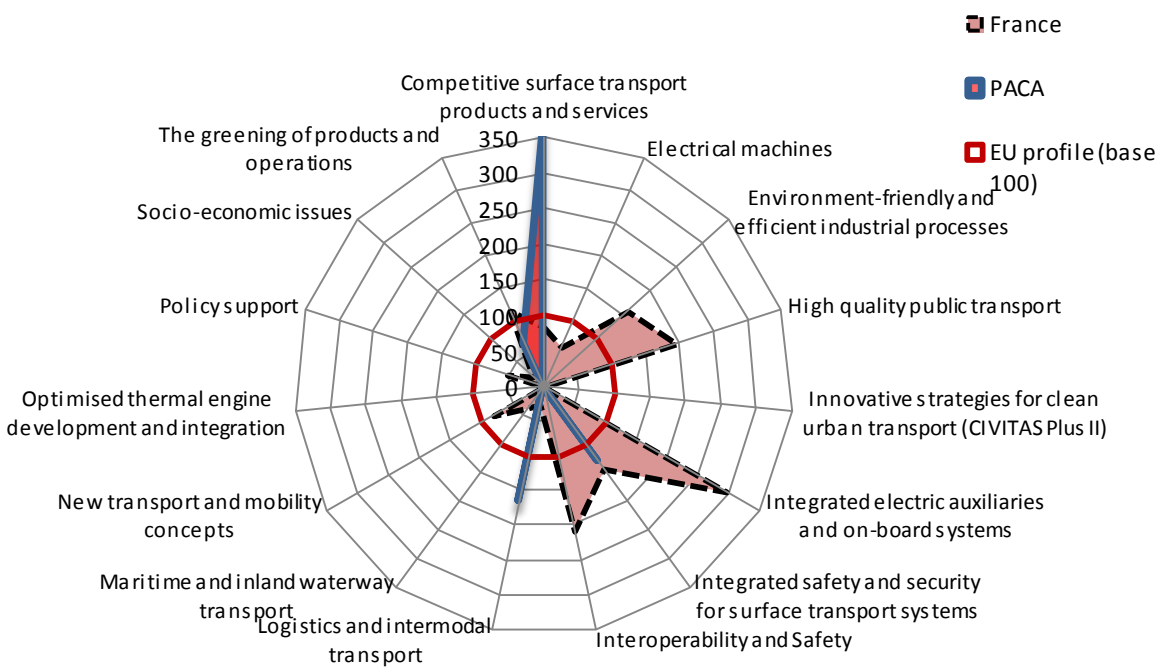


Table 16 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Integrated electric auxiliaries and on-board systems	295	1	Competitive surface transport products and services	363
2	Interoperability and Safety	207	2	Logistics and intermodal transport	164
3	High quality public transport	195	3	Integrated safety and security for surface transport systems	129
4	Environment-friendly and efficient industrial processes	158	4	The greening of products and operations	67
5	Integrated safety and security for surface transport systems	143			
6	The greening of products and operations	117			
7	Competitive surface transport products and services	84			
8	New transport and mobility concepts	81			
9	Electrical machines	61			
10	Policy support	54			
11	Maritime and inland waterway transport	36			
12	Logistics and intermodal transport	26			
13	Socio-economic issues	21			
14	Innovative strategies for clean urban transport (CIVITAS Plus II)	0			

15	Optimised thermal engine development and integration	0

Socio-economic sciences and Humanities

Table 17 Budget breakdown in research areas

Rk	Research area	%
1	Socio-economic development trajectories	16.1%
2	Participation and Citizenship in Europe	9.0%
3	Interactions and interdependences between world regions and their implications	9.0%
4	Societal trends and lifestyles	8.2%
5	Diversities and Commonalities in Europe	7.8%
6	Changing role of knowledge throughout the economy	6.5%
7	Regional, territorial and social cohesion	6.5%
8	Conflicts, peace and human rights	6.1%
9	Structural changes in the European knowledge economy and society	5.9%
10	Cultural interactions in an international perspective	5.2%
11	Demographic changes	3.7%
12	Foresight activities	3.7%
13	Strengthening policy coherence and coordination in Europe	3.0%
14	Europe's changing role in the world	2.8%
15	Developing better indicators for policy	2.5%
16	Provision of underlying official statistics	1.7%
17	Use of indicators and related approaches for the evaluation of research policies and programmes	1.2%
18	Current use of indicators in policy	1.1%

Figure 15 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

Table 18 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Use of indicators and related approaches for the evaluation of research policies and programmes	363	1	Foresight activities	1449
2	Foresight activities	183	2	Changing role of knowledge throughout the economy	715
3	Strengthening policy coherence and coordination in Europe	163			
4	Socio-economic development trajectories	148			
5	Interactions and interdependences between world regions and their implications	139			
6	Europe's changing role in the world	130			
7	Demographic changes	117			
8	Cultural interactions in an international perspective	111			
9	Diversities and Commonalities in Europe	103			
10	Changing role of knowledge throughout the economy	97			
11	Structural changes in the European knowledge economy and society	85			

12	Conflicts, peace and human rights	62
13	Regional, territorial and social cohesion	45
14	Societal trends and lifestyles	41
15	Participation and Citizenship in Europe	40
16	Developing better indicators for policy	37

Space

Table 19 Budget breakdown in research areas

Rk	Research area	%
1	(Pre-)operational validation of GMES services and products	56.2%
2	Research to support space science and exploration	14.9%
3	Research to support space transportation and key technologies	13.9%
4	Continuity of GMES services in the areas of Marine and Atmosphere	8.0%
5	Research into reducing the vulnerability of space assets	7.0%

Figure 16 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

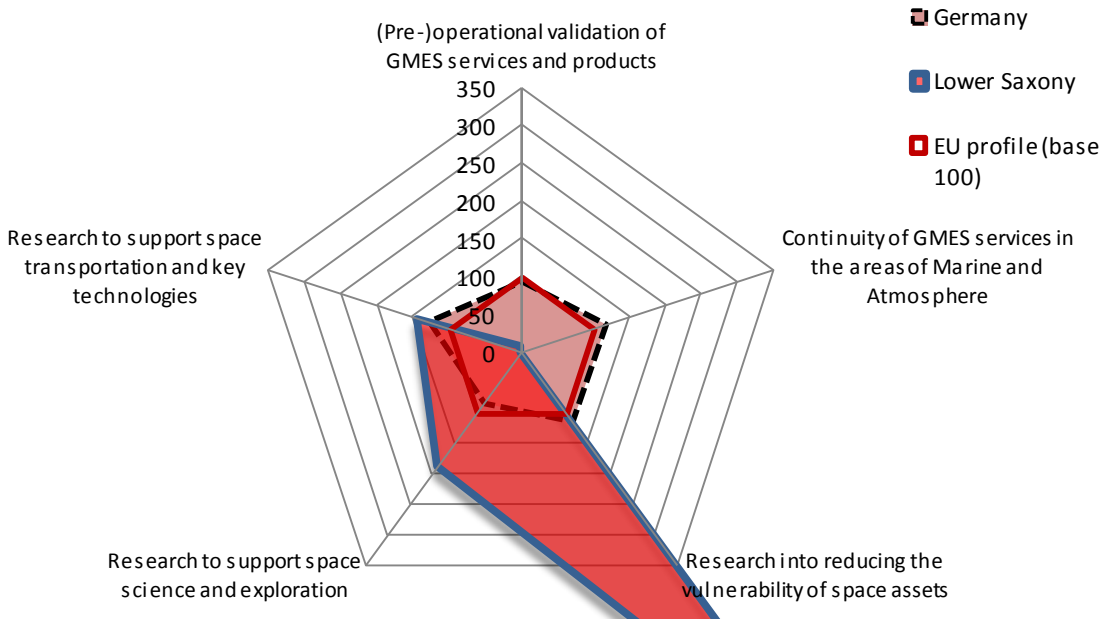


Table 20 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Research to support space transportation and key technologies	135	1	Continuity of GMES services in the areas of Marine and Atmosphere	238

2	(Pre-)operational validation of GMES services and products	104	2	(Pre-)operational validation of GMES services and products	139
3	Continuity of GMES services in the areas of Marine and Atmosphere	93	3	Research to support space transportation and key technologies	20
4	Research into reducing the vulnerability of space assets	85			
5	Research to support space science and exploration	63			

Security

Table 21 Budget breakdown in research areas

Rk	Research area	%
1	Intelligent surveillance and enhancing border security	23.3%
2	Restoring security and safety in case of crisis	22.2%
3	Increasing the Security of citizens	19.4%
4	Increasing the Security of infrastructures and utilities	17.9%
5	Security and society	8.6%
6	Security Research coordination and structuring	4.3%
7	Security systems integration, interconnectivity and Interoperability	4.2%

Figure 17 Specialisation profiles of France and Région Provence Alpes Cote d'Azur (PACA)

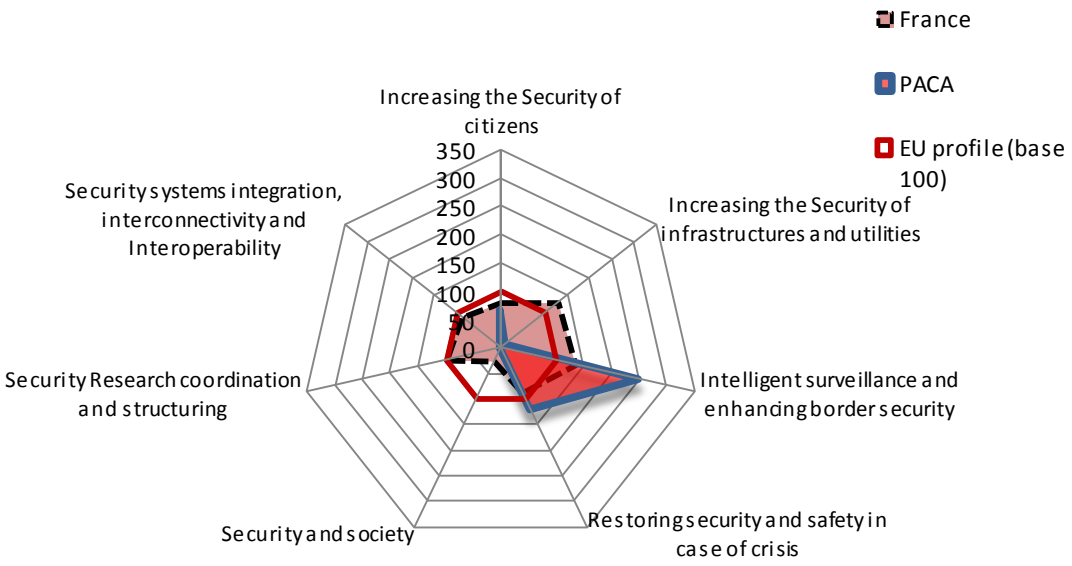


Table 22 Specialisation ranking for France and Région Provence Alpes Cote d'Azur (PACA)

Rk	France	Index base 100	Rk	Région Provence Alpes Cote d'Azur (PACA)	Index base 100
1	Intelligent surveillance and enhancing border	135	1	Intelligent surveillance and enhancing border	248

	security			security	
2	Increasing the Security of infrastructures and utilities	129	2	Restoring security and safety in case of crisis	121
3	Security Research coordination and structuring	97	3	Increasing the Security of citizens	68
4	Restoring security and safety in case of crisis	88	4	Increasing the Security of infrastructures and utilities	11
5	Security systems integration, interconnectivity and Interoperability	87	5	Security and society	0
6	Increasing the Security of citizens	81	6	Security Research coordination and structuring	0
7	Security and society	26	7	Security systems integration, interconnectivity and Interoperability	0

Annex 2 – FP7 participation scoreboard

This section covers all the indicators produced for the FP7 after validation of the list of participations and contains the following parts:

i. Headquarter analysis

ii. Main regional indicators

iii. Intraregional indicators

iv. International cooperation

Headquarter analysis

This section presents the results of the headquarter effect analysis for the focussed region. The following table presents number of modified participations of the region, after elimination of the existing headquarter effect. The total number of participations in the region is estimated by adding the total number of participations with no headquarter effect, to the ingoing participations (participations previously attributed to an outside region[9], but now attributed to the focussed region).

Table 23 Overall result of the Headquarter analysis

Type of participation	*Nbr of participations*
(1) Nbr of participation with no headquarter effect	269
(2) Nbr of ingoing participations	181
(3) Nbr of outgoing participations	38
Total nbr of participations (1)+(2)	450

The following table presents a breakdown of the previous table by geographical origin of participations. The second and third columns indicate the NUTS II territory from which the participation is added or subtracted. In the case of incoming participations, the focussed region[10] gains a participation, while the impacted region loses one. The opposite is true of outgoing participations.

Table 24 Participation localisation detail (ingoing participations, outgoing participations and static participations)

Participation flow	*Regions with participations to substract*	*Regions with participation to add*	*Number of participation concerned*	*Total*	*%*
In	FR10	FR821	10		
In	DE21	FR822	1		
In	FR10	FR822	13		
In	FR10	FR823	75		
In	FR51	FR823	1		
In	FR71	FR823	1	181	40,2%

[9] Impacted region.

[10] The region being analysed in the current scoreboard.

In	FR10	FR824	58		
In	FR42	FR824	1		
In	FR71	FR824	5		
In	ITF4	FR824	3		
In	FR10	FR825	5		
In	FR10	FR826	8		
out		BF	1		
out		FR10	3		
out		FR43	1		
out		FR51	1		
out		FR62	6		
out		FR71	1		
out		FR81	17		
out		LA	1		
out		MA	1		
out		NC	1		
out		SC	1		
out		TH	2		
out		UKE3	1		
out		ZA	1	38	12,4%
no Headquarter effect			269	269	59,8%
Total (after correction)				**450**	**100,0%**

The following table presents the distribution of participations (ingoing, outgoing, no headquarter effect) by participant typology (HES, OTH, PRC, PUB, REC).

Table 25 Typology of Ingoing, Outgoing and Static participations

Organisation type	Ingoing participations		Outgoing participations		Static participations	
Higher of secondary education est.(HES)	6	3,3%		0,0%	77	28,6%
Other (OTH)	4	2,2%		0,0%	5	1,9%
Private commercial(PRC)	12	6,6%	7	13,5%	151	56,1%
Public body (excl.research and education) (PUB)	1	0,6%		0,0%	3	1,1%
Research organisations (REC)	158	87,3%	45	86,5%	33	12,3%
Total	181	100,0%	52	100,0%	269	100,0%

Regional indicators

This section presents a set of indicators allowing to compare and characterise the participation of the region in FP7, in light of national indicators. It also presents the distribution of EC funding at an infra-regional level (N-1 if the focus region is considered as N).

PACA in the FP7

The following table gives an overview of the weight of the region at national level in terms of number of participations, number of coordinations and volume of funding received. It allows to compare regional figures (and their weight at the national level), to national figures (and their weight at the European level).

Table 26 Share of the region at national level

	PACA	FR	FP	% in PACA in FR	% in FR in FP
Nbr of participations in projects	450	6788	69719	6,6%	9,7%
Nbr of coordinations	118	1433	12929	8,2%	11,1%
EC contribution (mlnEUR)	168,4	2 648,9	22 188,4	6,4%	11,9%

Participant Typology

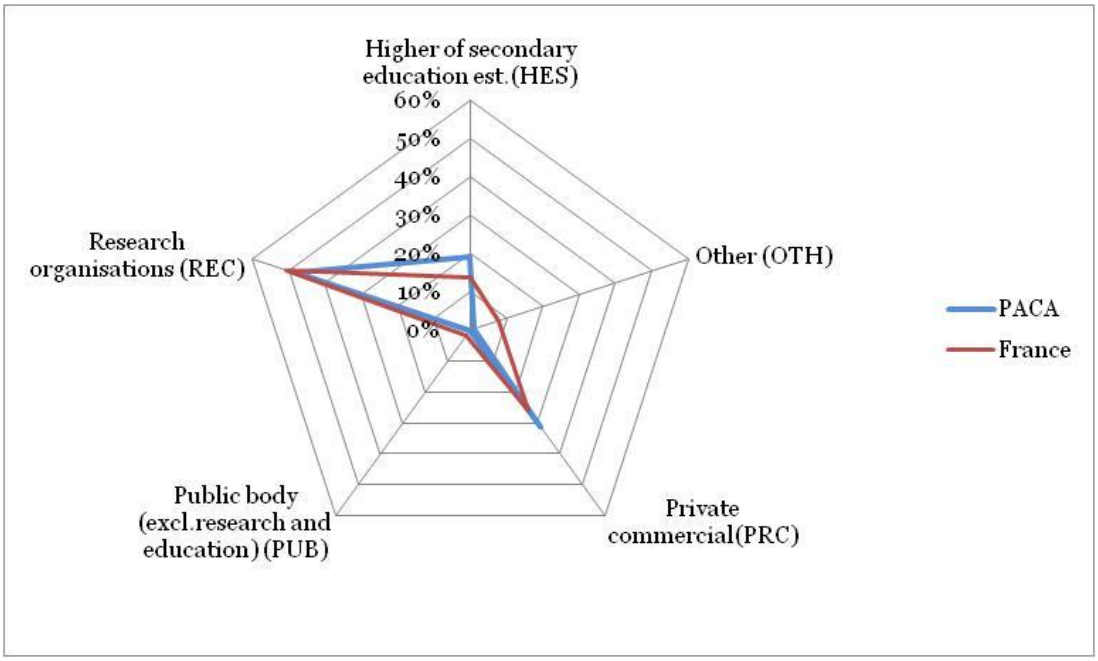
The following table presents the distribution of participations, coordinations and EC contributions according to the different types of participants. A comparison of the distribution of participants between the regional and national level allows to identify the particularities of the focussed region.

Table 27 Participation typology-comparison between regional and national level

	PACA				FRANCE			
	Nbr of participations in projects	Nbr of coordinations	EC contribution (mln)	%	Nbr of participations in projects	Nbr of coordinations	EC contribution (mln)	%
Higher of secondary education est.(HES)	83	28	32,39	19,2%	1121	317	361,24	13,6%
Other (OTH)	9		1,75	1,0%	227	24	208,21	7,9%
Private commercial(PRC)	163	34	52,59	31,2%	2334	212	686,06	25,9%
Public body (excl.research and education) (PUB)	4	1	0,48	0,3%	253	27	47,57	1,8%
Research organisations (REC)	191	55	81,18	48,2%	2853	853	1345,79	50,8%
Total	**450**	**118**	**168,40**	**100%**	**6788**	**1433**	**2648,87**	**100%**

The following diagram compares the weight of the different types of participants in the region to the national average.

Figure 18 Participation typology-graphical comparison between national and regional profile (acc. EC contrib. distribution)



The table below presents the distribution of participants by legal type (private/public).

Table 28 Distribution of participations according the legal type-comparison between regional and national level

		PACA		France	
	Private organisations	nbr	EC contrib (mlnEUR)	nbr	EC contrib (mlnEUR)
Private	PRC	163	52,59	2367	694,19
	PNP	55	19,25	730	438,48
	total private	218	71,84	3097	1132,67
Public	Commercial	7	0,99	125	31,07
	PNP	225	95,57	3566	1485,12
	total public	232	96,56	3691	1516,20
	TOTAL	**450**	**168,40**	**6788**	**2648,87**

SME participation

This section aims to give an overview on the participation of SMEs in the FP7. The following table presents the levels of participation of SMEs at the infra-regional, regional, national and European level.

Table 29 Number of funded SME

	Total PACA	Total France	Total FP	FR821	FR822	FR823	FR824	FR825	FR826
Nbr of participations in projects	127	1 077	11 545	1	8	75	36	5	2
EC contribution (mlnEUR)	42,3	289,2	2 873,6	0,2	2,3	23,5	15,2	0,7	0,4

The table below presents the distribution of SME participations according to their legal status (private profit and non-profit organisations).

Table 30 Distribution of SME among private profit and private non profit organisations

	PACA		France	
	Nbr	Ec Contrib (mlnEUR)	Nbr	Ec Contrib (mlnEUR)
PRC	126	42,08	1008	273,42
PNP	1	0,21	69	15,74
TOTAL	**127**	**42,28**	**1077**	**289,17**

Regional participation among themes and activities of the programme

This section aims at providing information regarding the specialisation of the regions according to participations across FP7 themes. The level of specialisation of the region can be measured by comparing the levels of participation for each theme to the national and European averages.

Table 31 Participations among FP7 themes and activities-comparison of the distribution at Programme level, national level and regional level

			FP		France		PACA	
N°	**PROG SPEC**	**Theme**	**nbr**	**EC contrib (mlnEUR)**	**nbr**	**EC contrib (mlnEUR)**	**nbr**	**EC contrib (mlnEUR)**
1	COOPERATION	Health	6 580	38 311,7	639	293,7	40	19,6
2	COOPERATION	Food, Agriculture, and Biotechnology	3 611	12 817,9	316	87,0	16	3,5
3	COOPERATION	Information and Communication Technologies	13 492	58 405,4	1 375	481,6	134	44,1
4	COOPERATION	Nanosciences, Nanotechnologies, Materials and new Production Technologies	4 881	23 146,4	409	132,6	23	9,7
5	COOPERATION	Energy	2 378	11 337,3	188	66,4	12	5,3
6	COOPERATION	Environment (including Climate Change)	4 592	17 622,4	322	79,4	16	4,2
7	COOPERATION	Transport (including Aeronautics)	5 445	33 527,7	769	231,2	25	4,3
8	COOPERATION	Socio-economic sciences and Humanities	1 515	3 354,2	103	18,8	3	0,7
9	COOPERATION	Security	1 590	8 610,5	197	76,5	14	4,8
10	COOPERATION	Space	1 449	8 715,6	190	118,0	18	8,9
11	COOPERATION	General Activities (Annex IV)	148	518,7	14	165,9		0,0
12	IDEAS	European Research Council	2 269	3 639,4	286	406,5	17	27,9

13	PEOPLE	Marie-Curie Actions	9 470	10 482,6	977	220,1	74	17,8
14	CAPACITIES	Research Infrastructures	3 921	24 495,1	364	154,8	15	8,8
15	CAPACITIES	Research for the benefit of SMEs	4 485	5 835,4	249	37,9	11	1,7
16	CAPACITIES	Regions of Knowledge	588	807,7	47	5,1	4	0,9
17	CAPACITIES	Research Potential	239	263,1	11	7,7	2	0,6
18	CAPACITIES	Science in Society	1 125	1 997,3	70	8,4	2	0,3
19	CAPACITIES	Coherent development of research policies	100	107,9	9	1,7	1	0,2
20	CAPACITIES	Activities of International Cooperation	584	1 038,1	50	6,4	13	2,1
21	Euratom	Fusion Energy	64	129,6	5	0,9		0,0
22	Euratom	Nuclear Fission and Radiation Protection	1 236	4 136,2	198	48,2	10	3,1
		TOTAL	**69 762**	**269 300**	**6 788**	**2 649**	**45 0**	**168**

Intraregional indicators

This section presents an overview the participation of infra-regional territories in FP7.

The following table presents a general overview of the distribution of participations, coordinations and EC contribution within the region (at Nuts n-1). The higher concentration of participation within specific territories usually reflects the presence of a stronger number of research organisations.

Table 32 distribution of the funded participations and EC contribution within the territory

	FR821	%	FR822	%	FR823	%	FR824	%	FR825	%	FR826	%	Total PACA	%
Nbr of participations in projects	11	2,4%	22	4,9%	211	46,9%	181	40,2%	13	2,9%	12	2,7%	450	100%
Nbr of coordinations	4	3,5%	1	0,8 %	54	45,8%	57	48,3%	2	1,7%	0	0%	118	100%
EC contribution (€Mln)	5,395	3,2%	7,803	4,6%	74,021	44,0%	72,987	43,3%	5,696	3,4%	2,494	1,5%	168	100%

The following table gives presents a break-down of infra-regional participations according to participant types (HES, OTH, PRC, PUB, REC).

Table 33 Intra regional participations and participation profile according the activity type

	FR821 Alpes de Haute Provence			
Participant type	Nbr of participations in projects	Nbr of coordinations	EC contribution (mlnEUR)	%
HES			0,0	0,0%
OTH	1		0,2	3,8%
PRC	3		1,0	18,2%
PUB			0,0	0,0%
REC	7	4	4,2	77,9%
Total	11	4	5,4	100,0%
	FR822 Hautes Alpes			
Participant type	Nbr of participations in projects	Nbr of coordinations	EC contribution (mlnEUR)	%
HES			0,0	0,0%
OTH			0,0	0,0%
PRC	8		2,3	29,9%
PUB			0,0	0,0%
REC	14	1	5,5	70,1%
Total	22	1	7,8	100,0%
	FR823 Alpes Maritimes			
Participant type	Nbr of participations in projects	Nbr of coordinations	EC contribution (mlnEUR)	%
HES	32		11,2	15,2%
OTH	2	2	0,1	0,1%
PRC	85	28	25,3	34,2%
PUB	2		0,1	0,2%
REC	90	24	37,3	50,4%
Total	211	54	74,0	100,0%
	FR824 Bouches du Rhone			
Participant type	Nbr of participations in projects	Nbr of coordinations	EC contribution (mlnEUR)	%
HES	50	26	20,9	28,7%
OTH	5	5	1,3	1,7%
PRC	56		19,0	26,1%
PUB	1	1	0,3	0,4%
REC	69	25	31,4	43,1%
Total	181	57	73,0	100,0%
	FR825 Var			
Participant type	Nbr of participations in projects	Nbr of coordinations	EC contribution (mlnEUR)	%
HES			0,0	0,0%
OTH	1		0,2	4,1%
PRC	9	1	4,5	78,8%
PUB			0,0	0,0%
REC	3	1	1,0	17,1%
Total	13	2	5,7	100,0%
	FR826 Vaucluse			
Participant type	Nbr of participations in projects	Nbr of coordinations	EC contribution (mlnEUR)	%
HES	1		0,2	8,4%
OTH	2		0,4	17,5%
PRC			0,0	0,0%
PUB	1		0,1	2,1%
REC	8		1,8	71,9%
Total	12	0	2,5	100,0%

The following table presents the distribution of infra-regional participations by FP7 themes.

Table 34 Participations among FP7 themes and activities at intra regional level (Nuts n-1)

			FR821		FR822		FR823		FR824		FR825		FR826	
Num	PROG SPEC	Theme	nbr	EC contr	nbr	EC contr	nbr	EC contr	nbr	EC contr	nbr	EC contr	nbr	EC contr
1	COOP	Health	3	0,9		0,0	7	1,8	30	16,9		0,00		0,00
2	COOP	Food, Agriculture and Fisheries, and Biotechnology	3	1,0		0,0	3	0,6	4	0,8	1	0,02	5	1,15
3	COOP	Information and Communication Technologies	1	0,4		0,0	111	36,7	20	6,7	1	0,09	1	0,21
4	COOP	Nanosciences, Nanotechnologies, Materials and new Production Technologies - NMP		0,0	5	1,7	11	3,1	7	4,9		0,00		0,00
5	COOP	Energy		0,0		0,0	8	2,4	4	2,9	1	0,54		0,00
6	COOP	Environment (including Climate Change)		0,0	1	0,0	4	1,8	9	1,6		0,00	1	0,20
7	COOP	Transport (including Aeronautics)		0,0	2	0,6	6	0,8	16	2,7	1	0,15		0,00
8	COOP	Socio-economic sciences and Humanities		0,0		0,0	1	0,2	2	0,5		0,00		0,00
9	COOP	Space		0,0		0,0	13	4,4		0,0		0,00	1	0,43
10	COOP	Security		0,0	1	0,9	5	1,5	6	2,2	5	4,23	1	0,05
11	COOP	General Activities		0,0		0,0		0,0		0,0		0,00		0,00
12	CAPACITIES	Research Infrastructures		0,0		0,0	8	11,4	9	16,5		0,00		0,00
13	CAPACITIES	Research for the benefit of SMEs	2	0,2	4	1,3	19	6,3	47	9,6	1	0,22	1	0,12
14	CAPACITIES	Regions of Knowledge	1	2,7		0,0	6	1,9	7	3,9	1	0,22		0,00
15	CAPACITIES	Research Potential		0,0		0,0	4	0,6	5	0,8	1	0,00	1	0,20
16	CAPACITIES	Science in Society		0,0		0,0	1	0,1	2	0,6	1	0,23		0,00
17	CAPACITIES	Support for the coherent development of research policies		0,0		0,0		0,0	1	0,4		0,00	1	0,13
18	CAPACITIES	Activities of International Cooperation		0,0	1	0,3		0,0	1	0,0		0,00		0,00
20	PEOPLE	Marie-Curie Actions	1	0,2		0,0		0,0		0,0		0,00		0,00
21	IDEA	European Research Council		0,0		0,0	4	0,4	9	1,7		0,00		0,00
22	EURATOM	Fusion Energy		0,0		0,0		0,0		0,0		0,00		0,00
23	EURATOM	Nuclear Fission and Radiation Protection		0,0	8	3,0		0,0	2	0,1		0,00		0,00
		TOTAL	***11***	***5***	***22***	***7,8***	***211***	***74,0***	***181***	***73,0***	***13***	***5,7***	***12***	***2***

International cooperation

This section aims at giving an overview of the main partners and collaboration themes of the focussed region at the European level. The following indicators have been calculated on the basis of all projects including at least one participant from the focussed region.

The following table presents the partner regions of the focussed region.

Table 35 Partner regions

Partner region	Nb of participations	% of total
Ile de France	285	7%
Bayern	145	4%
Baden-Württemberg	137	3%
Comunidad de Madrid	112	3%
Lazio	105	3%
Vlaams Gewest	102	3%
South East England	97	2%
Attiki	96	2%
London	95	2%
Nordrhein- Westfalen	93	2%
Cataluna	88	2%
Lombardia	87	2%
Région de Bruxelles capital	71	2%
Etelä-Suomi	71	2%
East of England	63	2%

The table below presents the main partner organisations of the focussed region.

Table 36 Partner organisations

Partner organisation	Nb participations	% of total
FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	47	1,2%
CONSIGLIO NAZIONALE DELLE RICERCHE	35	0,9%
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	32	0,8%
DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	27	0,7%
COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	24	0,6%
AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	20	0,5%
KATHOLIEKE UNIVERSITEIT LEUVEN	20	0,5%
MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	18	0,5%
TEKNOLOGIAN TUTKIMUSKESKUS VTT	17	0,4%
NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS	17	0,4%
THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE	16	0,4%
TECHNISCHE UNIVERSITAET DRESDEN	15	0,4%
UNIVERSITY COLLEGE LONDON	15	0,4%
ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE	15	0,4%
KUNGLIGA TEKNISKA HOEGSKOLAN	15	0,4%

The following table provides the most frequent European coordinators of participants from the focussed region in FP7.

Table 37 The main coordinators of regional participants

FREQUENT COORDINATORS	Nb coordinations
FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	11
INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	5
DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	4
CONSIGLIO NAZIONALE DELLE RICERCHE	4
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	4
INNO AG	4
UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6	3
NATIONAL TECHNICAL UNIVERSITY OF ATHENS	3

UNIVERSITY OF NEWCASTLE UPON TYNE	3
TELEFONICA INVESTIGACION Y DESARROLLO SA	3
RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN	3
THALES COMMUNICATIONS & SECURITY SA	3
THALES ALENIA SPACE FRANCE	3
INSTITUT DE RADIOPROTECTION ET DE SURETE NUCLEAIRE	3
BMT GROUP LIMITED	2
TECHNICOLOR R&D PARIS SNC	2

Annex 3 – CIP ICT participation scoreboard

I. FR82 in CIP ICT PSP	FR82	FR	CIP ICT	% of FR82 in FR	% of FR in CIP ICT
Nbr of participations in projects	11	154	2141	7,1%	7,2%
Nbr of coordinations	4	10	128	40,0%	7,8%
EC contribution	721 014	19 991 259	304 167 499	3,6%	6,6%

II. Participant Typology/organisation type	FR82				FR				CIP ICT PSP			
	Nbr of participations in projects	Nbr of coordinations	EC contribution	%	Nbr of participations in projects	Nbr of coordinations	EC contribution	%	Nbr of participations in projects	Nbr of coordinations	EC contribution	%
HES	1	1	122500	17,0%	14	1	2 025 336	10,1%	345	14	48 931 144	16,1%
OTH				0,0%	14	1	1 110 550	5,6%	230	14	33 768 401	11,1%
PRC	9	3	574514	79,7%	78	6	9 100 453	45,5%	835	78	116 503 789	38,3%
PUB				0,0%	26		4 848 061	24,3%	425	26	67 392 659	22,2%
REC	1		24000	3,3%	22	2	2 906 859	14,5%	306	22	37 571 506	12,4%
Total	11	4	721014	100%	154	10	19991259	100%	2141	154	304167499	100%

III. Participant Typology/Public-Private organisations	FR82			FR			CIP ICT PSP		
	Nbr of participations in projects	EC contribution	%	Nbr of participations in projects	EC contribution	%	Nbr of participations in projects	EC contribution	%
Private commercial (PRC)	9	574 514	79,7%	78	9 100 453	45,5%	842	117 814 939	38,7%
Private non Profit (PNP)			0,0%	22	1 754 141	8,8%	442	56 873 668	18,7%
Total Private organisations	9	574514	79,7%	100	10 854 594	54,3%	1 284	174 688 607	57,4%
Public Commercial (PUC)			0,0%	8	1 562 261	7,8%	120	15 166 682	5,0%
Governmental (GOV)	2	146 500	20,3%	46	7 574 404	37,9%	737	114 312 210	37,6%
Total Public organisations	2	146500	20,3%	54	9 136 665	45,7%	857	129 478 892	42,6%
Total	11	721014	100,0%	154	19 991 259	100,0 %	2 141	304 167 499	100,0%

V SME/ legal type									
	FR82			FR			CIP ICT PSP		
Private commercial (PRC)	6	410 304	100,0%	30	4 109 124	91,1%	344	49 185 099	76,9%
Private non Profit (PNP)			0,0%	3	402 025	8,9%	59	14 769 538	23,1%
Total	6	410 304	100,0%	33	4 511 149	100,0%	403	63 954 637	100,0%

Annex 4 – CIP ICT participation scoreboard

I. FR82 in CIP IEE	FR82	FR	CIP IEE	% of FR82 in FR	% of FR in CIP IEE
Nbr of participations in projects	5	143	2443	3,5%	5,9%
Nbr of coordinations	0	17	235	0,0%	7,2%
EC contribution	842 814	15 422 342	241 453 630	5,5%	6,4%

Annex 5 – ERDF participation scoreboard

I general information		
	ERDF allocated	**ERDF comitted**
Total in euros :	302 234 812	135 063 710
Innovation and research axis only (n°1) :	34 000 000	20 626 246
Total projects co-funded :		?
Innovation and research axis only (n°1) :		?

II Distribution of ErDF fundings within areas related to research and innovation	-			
Themes	**FOI codes**	**Measures**	**EC contrib.**	**EC contrib.**
RTDI and linked activities	1	R&TD activities in research centres :	2 000 000	631 830
	2	R&TD infrastructure and centres of competence in a specific technology :	54 000 000	33 666 272
	5	Advanced support services for firms and groups of firms	19 000 000	5 625 201
	7	Investment in firms directly linked to research and innovation (...) :	11 000 000	22 500

	74	Developing human potential in the field of research and innovation, in particular through post-graduate studies (…) :	0	0
Innovation support for SMEs	3	Technology transfer and improvement of cooperation networks (…) :	26 000 000	8 596 518
	4	Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres) :	28 000 000	3 862 406
	6	Assistance to SMEs for the promotion of environmentally-friendly products and production processes (...) :	3 000 000	1 344 713
	9	Other measures to stimulate research and innovation and entrepreneurship in SMEs :	6 000 000	10 091 141
	14	Services and applications for SMEs (e-commerce, education and training, networking, etc.) :	5 000 000	517 213
	15	Other measures for improving access to and efficient use of ICT by SMEs :	1 000 000	1 964 761
ICT and related services	11	Information and communication technologies (...) :	2 000 000	3 874 040
	12	Information and communication technologies (TEN-ICT) :	0	2 021 194
	13	Services and applications for citizens (e-health, e-government, e-learning, e-inclusion, etc.) :	9 000 000	3 644 684
Other	8	Other investment in firms :	5 000 000	9 213 724

IV Impact and output (innovation and research only) :				
Unit	Type of indicators		Amount foreseen	Amount realised
Number	Output	0007 - Nombre d'entreprises soutenues	180,00	5,00
Number	Output	0008 - Nombre d'entreprises créées ou reprises	80,00	0,00
Number	Output	0013 - nombre d'entreprises accompagnées par le réseau régional de l'innovation	N/A	365,00
Number	Output	0014 - nombre de visite d'entreprise par des conseillers en développement technologique	700,00	4,00
Number	Output	0015 - nombre de visiteurs par an des structures chargées de la production et de la diffusion de la culture scientifique et technique	N/A	0,00
Number	Output	0016 - nombre de projets collaboratifs R&D des pôles de compétitivités	120	110
Number	Output	0017 - nombre de projets de pôles de compétitivité hors R&D	N/A	0
-	Impact	0003 - Amélioration de la lisibilité locale de l'enseignement supérieur et de la recherche auprès des entreprises	1,00	0
-	Impact	0005 - DIRD	N/A	1,87
Number	Impact	0012 - nombre d'emploi créés	2040	0

-	Impact	0019 - Evolution partenariat Recherche/entreprise	1	0
Number	Impact	0001 - Nombre de projets de coopérations entreprises-laboratoire	130	0
%	Impact	0002 - Budget ANR annuel en région / budget ANR National	8,3	0
Number	Impact	0004 - Nombre d'utilisateur par plateforme	50	0
N/A	Impact	0006 - assiette globale des projets de R&D soutenus	54	0
Number	Impact	0009 - nombre de programmes d'innovation faisant l'objet d'un succés	140	0
Number	Impact	0010 - Nombre d'entreprises créées à partir de la valorisation de la recherche	60	0
Number	Impact	0011 - nombre d'entreprises passant le cap des 3 ans	70	0
Number	Impact	0018 - nombre de projets collaboratifs dans le cadre du RRI	N/A	0
Number	Core	4 - Number of RTD projects	36	0
Number	Core	40 - Number of projects seeking to promote businesses, entrepreneurship, new technology	N/A	0
Number	Core	5 - Number of cooperation project enterprises-research institutions	103	9
Number	Core	6 - Research jobs created	25000	0

Annex 6 – Cross thematic table

FP 7 - COOPERATION Theme	EC contribution		COUNTRY	EU	EMPLOYMENT sector	% reg. Emp	Empl. Var. 2004-2009	spec. EU	spec. country	PATENT DOMAIN	n	lib_fields	n° patents	field weight*	country weight**	spec. ***
HEALTH	19.577.441	19%	0,87	0,74	Pharma	1,2%	25	0,94	0,67	CHEM	16	Pharma	26,92	4,62%	1,15%	1,44
					Med. devices	0,7%	199	0,77	1,01	Instr.	13	Med. Tech	19,00	3,26%	0,67%	0,84
FOOD	3.502.920	3%	0,52	0,41	Biotech	0,2%	-1191	0,83	1,71	CHEM	15	Biotech	10,22	1,76%	1,60%	2,01
					Processed food	5,6%	-457	0,67	0,71	CHEM	18	Food chem.	3,72	0,64%	0,52%	0,65
					FARMING	1,7%	3957	0,60	1,34							
					Agri PRODUCTS	1,6%	-905	0,74	1,21							

ICT	44.084.025	42%	1,19	0,93	IT	3,2%	-330	1,06	1,43	Elet.Eng	6	Computer tech.	152,05	26,13%	4,59%	5,75
										Elet.Eng	7	IT	32,17	5,53%	9,80%	12,29
					Telecom	3,3%	-4799	0,86	1,04	Elet.Eng	3	Telecomm.	65,32	11,22%	2,09%	2,62
										Elet.Eng	4	Digital com.	76,46	13,14%	3,57%	4,48
										Elet.Eng	5	Basic com.	17,58	3,02%	3,10%	3,89
NANO	9.703.537	9%	0,95	0,63	Metal man.	2,2%	-869	0,32	0,44	CHEM	20	Materials .	13,27	2,28%	1,45%	1,82
					Plastics	0,7%	176	0,40	0,48							
					Construction M.	7,2%	3454	0,53	1,14							
					Lighting & e.e	0,2%	-604	0,27	0,33	Elet.Eng	1	Elec. machinery	6,60	1,13%	0,17%	0,21
										Elet.Eng	2	Audio-visual	8,37	1,44%	0,56%	0,71
										Elet.Eng	8	Semiconductors	5,08	0,87%	0,46%	0,57
					Chemical PR.	0,4%	-66	0,48	0,81	CHEM	17	Macromolecular	6,54	1,12%	1,08%	1,35
										CHEM	14	Organic chem.	11,12	1,91%	0,43%	0,54
										CHEM	19	Basic materials	7,92	1,36%	0,88%	1,11
										CHEM	21	Surface tech.	3,51	0,60%	0,51%	0,64
										CHEM	22	nano-technology				
										CHEM	23	Chemical eng.	7,24	1,24%	0,48%	0,61
ENERGY	5.278.873	5%	1,03	0,62	Oil and gas	0,6%	453	1,11	2,71							
					Power g & t	0,1%	-536	0,17	0,31							
Environment	4.198.881	4%	0,69	0,41						CHEM	24	Envir. Tech.	5,23	0,90%	0,36%	0,45
Transport	4.342.688	4%	0,24	0,30	Transp &logistics	13,5%	4054	1,38	1,51	Mech.Eng	32	Transport	16,97	2,92%	0,18%	0,23
					Automotive	0,9%	1698	0,21	0,22							
					Distribution	3,9%	-307	0,96	1,24							

SOCIO	721.343	1%	0,50	0,26	Financial services	14,5%	7114	1,35	1,06							
					EDU	3,6%	4490	0,67	1,19							
					Business services	11,0%	21804	0,93	0,99							
Security	4.791.319	5%	0,81	0,93												
Space	8.917.299	8%	0,98	2,20	Aerospace	1,5%	113	2,32	1,14							
					FIXTURES	1,8%	-120	0,45	0,80							
					Construction	2,4%	-1322	1,65	1,97	Other	35	Civil eng.	14,45	2,48%	0,32%	0,40
					Prod. TECH	0,4%	-1751	0,14	0,33							
					Entertainment	2,5%	3129	1,18	1,16							
					Heavy Machinery	0,5%	-869	0,34	0,45	Mech.Eng	25	Handling	8,67	1,49%	0,28%	0,35
										Mech.Eng	26	Machine	3,20	0,55%	0,20%	0,25
										Mech.Eng	27	Engines, ..	3,00	0,52%	0,08%	0,11
										Mech.Eng	29	Other machines	4,88	0,84%	0,17%	0,21
										Mech.Eng	31	Mech. elements	2,25	0,39%	0,06%	0,08
					Maritime	0,3%	-551	0,28	0,43	Mech.Eng	30	Thermal	1,67	0,29%	0,14%	0,18
					Instruments	0,4%	-129	0,60	0,60	Instr.	9	Optics	2,50	0,43%	0,21%	0,26
										Instr.	10	Measurement	5,40	0,93%	0,17%	0,22
										Instr.	11	bio. Analysis	10,07	1,73%	2,55%	3,20
										Instr.	12	Control	12,83	2,21%	0,96%	1,20
					Sporting, recreational and children's goods	0,1%	-53	0,22	0,49							
					Textiles	0,3%	-74	0,14	0,32	Mech.Eng	28	Textile	4,00	0,69%	0,54%	0,68

Media and publishing	2,7%	2822	0,72	0,87							
Tourism and hospitality	8,9%	2246		2,10							
Paper products	0,8%	-474	0,31	0,45							
Furniture	0,4%	61	0,21	0,58	Other	33	Furniture	4,60	0,79%	0,18%	0,22
Apparel	0,3%	-251	0,12	0,49							
Jewellery and precious metals	0,1%	-29	0,35	0,61							
Tobacco		-207									
Leather products	0,0%	-38	0,13	0,14							
Footwear	0,0%	8	0,06	0,31							
Stone quarries	0,1%	35	0,60	1,26							
					Other	34	Other	9,20	1,58%	0,38%	0,47

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