Catalonia's participation in calls of the EU 7th Framework Programme for RTD

Period 2007-2009

Generalitat de Catalunya
Departament d'Economia i Coneixement

FUNDACIÓ INSTITUCIÓ CATALANA DE SUPORT A LA RECERCA

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Period 2007-2009

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I. INTRODUCTION

I.1. Background

The EU Framework Programme for Research and Technological Development (henceforth FP) was created in 1984 with two strategic objectives: to strengthen the scientific and technological basis of the European industry and to improve its competitiveness at international level. In order to address these aims, the FPs mainly finance research and technological projects, demonstration and innovation through cross-national collaboration between businesses and research institutions, which were eligible in competitive calls. Currently, six FPs have already been completed (1st FP, 1984-1987; 2nd FP, 1987-1990; 3rd FP, 1991-1994; 4th FP, 1994-1998; 5th FP, 1998-2002; and 6th FP, 2003-2006). The current FP7 will run for a 7-year period between 2007 and 2013 (all previous FP covered 5-year periods). In this respect, the growing importance of R&D in the EU policy, together with the inclusion of new countries to the European Union, has resulted in a significant increase of the FP7 budget (EUR 50,521 million).

In this context, the European R&D should be another channel to increase the volume of investment that is taking place in Catalonia. In line with this, the Government of Catalonia signed the Strategic Agreement to Promote Internationalisation of the Catalan Economy, the Strengthening of its Competitiveness and the Quality of Employment 2008- 2011 and the Catalan Agreement on Research and Innovation (CARI 2008).

The CARI reaffirms its commitment to FP7 with three specific objectives: to identify the capacity of Catalan companies and administrations to apply for EU support to have visibility and impact at European level; to allow Catalan research and innovation actors to interact with the European actors and the EU technical and decision making structures; to ensure the quality of proposals, at the very heart what is being done with regard to national R&D funds; and to establish as a milestone the FP7 funding received by Catalonia equivalent to the Catalonia's position in the EU.

The Government of Catalonia seeks to support the different stakeholders to involve them in European projects, which has been realised through the European and International Projects Service (SPEI), from the Agency for Management of University and Research Grants (AGAUR), to facilitate and promote participation and leadership of researchers from Catalan universities and research institutions in the EU FPs (particularly in FP7). Since 2007 this has also been undertaken through the Support Service for Business Participation in the FP7, from ACC1Ó, to encourage businesses to participate in the FPs. In 2010, the CONNECT-EU[1] programme fostered new initiatives to increase participation in the FPs.

The Government of Catalonia considers that research and innovation "are key to ensure progress and quality of life of today's and tomorrow's Catalan citizens" and aims at "becoming Catalonia in an economic driving force of Europe and an attractive talent location in the Mediterranean, as well as making Catalonia global benchmark, which will be able to compete on the global market", by placing high expectations on "internationalisation, research and innovation and identity as key elements in achieving excellence".

I.2. Information on FP7

FP7 is the EU's main instrument for funding research in Europe with a budget of EUR 50,521 million for seven years (2007-2013), which represents an increase of annual budget of 65% in relation to the its predecessor, FP6.[2]

FP7 is made up of 4 specific programmes which correspond to four key objectives of the FP[3] as follows:

1. Cooperation. It is focused on stimulating trans-national cooperation and strengthening the links among industry, universities and research centres. It is implemented by consortium-based projects (at least 15% of the budget will be allocated to SMEs). This programme represents almost two-thirds of the total FP7 budget.

   This specific programme is organised in four-subprogrammes: collaborative research (collaborative research); joint technology initiatives, which are mainly be created on the basis of the work undertaken by the European Technology Platforms; coordination of non-Community research programmes (e.g. ERA-NET scheme); and international cooperation (including research activities, technological development and demonstration).

   This programme is the core of FP7 and fosters collaborative research according to 10 key thematic areas: health; food, agriculture and fisheries, biotechnology; socio-economic sciencies and the humanities; energy; space; Information & Communication Technologies (ICT); environment (including climate change); nanoscience, nanotechnologies, materials & new production technologies; security; transport (including aeronautics).

2. Ideas. This programme enhances creativity and excellence of European research at the frontier of knowledge, i.e. encourages the discovery of new knowledge that could radically change the current view of the world and the way of living by financing high-risk basic research, on a non-profit basis and multidisciplinary and innovative nature. Two types of grants are available:

   a. ERC Starting Independent Researcher Grants (ERC Starting Grant, StG)
   b. ERC Advanced Investigator Grant (ERC Advanced Grant, AdG).

3. People. This programme provides quantitative and qualitative strengthening of human resources in research and technology in Europe by supporting lifelong training, mobility and career development of researchers at all stages of their careers in the public and private sectors, via a set of Marie Curie actions and other initiatives. Fellowships can be agruped in two kind of actions:

   a. Individual actions aimed at individual researchers with experience who, together with the host institution, will carry out a mobility project and will develop their career with a personal supervisor or mentor.

   b. Host actions aimed at organisations from different countries and sector to foster mobility and training programmes based on researcher recruitment and exchange.

4. Capacities. The programme is designed to help strengthen research capacities across Europe by investing in research infrastructures in the least strongest regions, in creating regional research-driven clusters and in SME research including different tools or funding lines: science in society; research infrastructures; activities of international cooperation; coherent development of research policies; research potential; SME research; regions of knowledge.

All this structure is summarized, in budget terms,[4] in the following table.

Table I.1 Breakdown of FP7 budget (2007-2013) by priority area (EUR million)

	Priority	EUR million	Funding share
COOPERATION	Food, Agriculture and Fisheries, Biotechnology	1,935	3.8%
	Socio-economic sciences and the humanities	623	1.2%
	Energy	2,350	4.7%
	Space	1,430	2.8%
	Information &Communication Technologies	9,050	17.9%
	Environment	1,890	3.7%
	Nanotechnologies, Materials & Production	3,475	6.9%
	Health	6,100	12.1%
	Security	1,400	2.8%
	Transport	4,160	8.2%
	IDEAS	7,510	14.9%
	PEOPLE	4,750	9.4%
CAPACITIES	Science in Society	330	0.7%
	Research infrastructures	1,715	3.4%
	Activities of international cooperation	180	0.4%
	Coherent development of research policies	70	0.1%
	Research potential	340	0.7%
	Research for the benefit of SMEs	1,336	2.6%
	Regions of Knowledge	126	0.2%
Non-nuclear actions of the Joint Research Centre		1,751	3.5%

Source: CDTI (2010).

I.3. Objectives and nature of the report

Three years after the launch of FP7 is particularly important to make an initial assessment of the Catalonia participation in this FP. The report on "*The participation of Catalonia in calls under the 7th Framework Programme. Period 2007-2009*", the Executive summary of which you have in your hands, seeks to be useful to stakeholders involving in the Catalan RDI system (public administration, businesses, Catalan public and private research institutions), by providing key measurement indicators on this participation to monitor the reality of the participation and, at the same time, to map out the situation at all times and its development.

A mixed working group has been set up to draw up this report, including experts in data mining systems and FP7 programme from the FICSR, AGAUR and ACC1Ó, who tasked to analyse the existing information, to define scope and report methodology, to identify strategic data, to establish typologies and to pre-select work indicators, as well as to take responsibility for implementing and systematising the contents of the database that has facilitated the exploitation of information available.

The AQR-IREA research group at the University of Barcelona (UB) has drawn up the final report and has worked in validating and exploiting pre-existing database and has conducted and interpreted statistical results on the Catalonia participation in FP7. A range of indicators has been used and would explain the reality of involvement of Catalan institutions and companies in this programme.

Combined efforts and coordination by the teams, with complementary views and expertises, have led to produce a report providing an independent overview of the participation of the Catalan RDI system.

- Data sources: R&D information system from FICSR, a repository of FP7 data developed under the Connect-EU programme which includes data 2007-2009 provided by CDTI in June 2010.

- Additional information from other reports such as those produced by the Centre for the Development of Industrial Technology in Spain (CDTI) in 2010[5], or the report entitled Participació catalana a l'R+D europea drawn up by the Metallurgy Research and Advisory Centre (CEAM 2008 (ACC1Ó).

II. CATALONIA PARTICIPATION IN FP7 IN THE PERIOD 2007-2009: OVERALL RESULTS

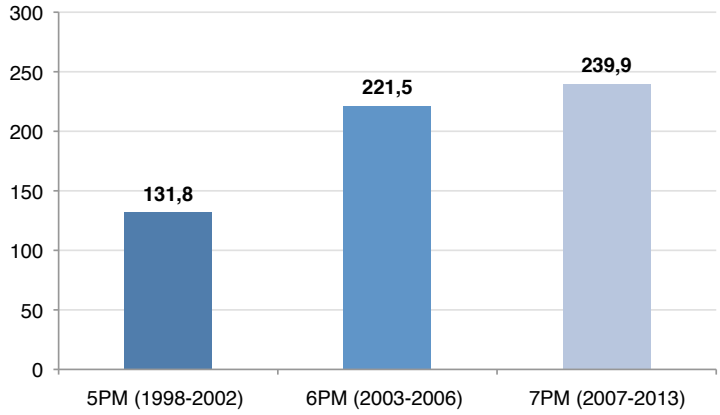
A positive assessment is made of the Catalonia participation in FP7 during its first three years in both quantitative and qualitative terms.

Before analysing the participation, it should be noted that Spanish organisations have received 6.4% of all FP7 funding between 2007 and 2009, ranking 6th behind Germany, United Kingdom, France, Italy and the Netherlands. This means that FP7 is an important funding stream for Spanish R&D.

Comparing the results achieved by Catalonia between 2007 and 2009 with those in FP5 and FP6:

- The total funding from FP7 in the first three years (EUR 240 million) is almost twice the total funding from FP5 and 8.3% above the total funding from FP6.

Figure— II.1 FP7 funding received (EUR million)



Source: elaborated from CEAM (2008) and the FICSR database.

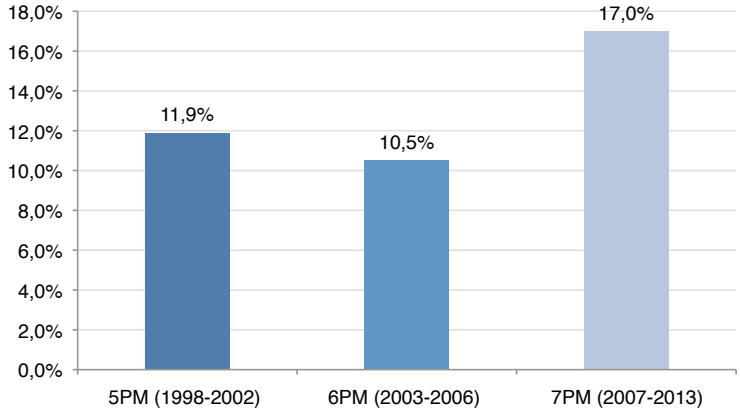
- The Catalonia's share has increased in the total of EU funding received. The Catalonia's return as compared with Europe was 0.9% in FP5, increasing in FP6 and FP7 (1.3% and 1.6% respectively). Similarly, the Catalonia's share as compared to Spain has steadily increased.

- The average funding per project, with a total of 606 projects financed between 2007 and 2009, has grown from EUR 145,154 in FP5 to EUR 395,855 in FP7.

• A total of 225 Catalan organisations have received funding between 2007 and 2009, which is an average of a million euro per organisation (13 organisations account for 51% of funding[6]). This figure has increased fourfold the funding obtained in FP5 (EUR 280,426).

• The Catalonia leadership[7] rate has risen significantly, from 11.9% in FP5 to 17% in FP7. However, because of difficulty of coordinating European projects, this result enhances high quality of research work carried out by Catalan organisations and the improvement of their competitiveness. The annual survey shows an annual increase from 15% in 2007 to 18.6% in 2009[8].

Figure— II.2 Leadership rate



Source: elaborated from the FICSR database.

• Comparison of participation results by type of entity[9] rom the two previous framework programmes highlights a fall in the weight of universities (39.9% under FP5) and companies (29.3% under FP5) to benefit other entities such as R&D centres (13.1% under FP5) and innovation and technology centres (1.2% under FP5).

• In comparison with the other Spanish regions:

- Catalonia is the second region in terms of share[10] of funding received between 2007 and 2009 (28.8%[11])
- Catalonia is the region with an increasing number of coordinated activities.

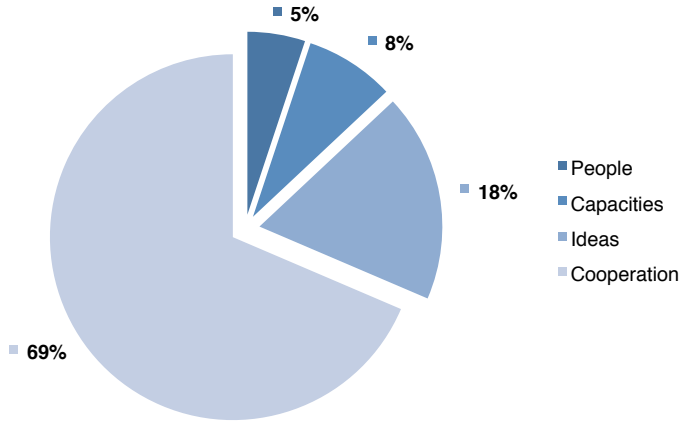
III. CATALONIA PARTICIPATION IN FP7 IN THE PERIOD 2007-2009: DETAILED RESULTS BY SPECIFIC PROGRAMMES

III.1. Comparative results by specific programmes

- Funding received sorted by specific programme:
  - Cooperation: EUR 164 million (68.2% of the total funded projects)[12]
  - Ideas: EUR 44 million (5.8%)
  - Capacities: EUR 19 million (16.5%)
  - People: EUR 12 million (9.6%)

- Although the breakdown is relatively similar to that of the total EU budget for programmes, it should be mentioned that the People programme and particularly the Ideas programme have a higher relative importance for Catalonia, demonstrating creativity and excellence in research and the Catalonia's efforts to enhance its human capital and to attract and retain talent.

Figure—III.1 Breakdown of funding received, by specific programmes



Source: elaborated from the FICSR database.

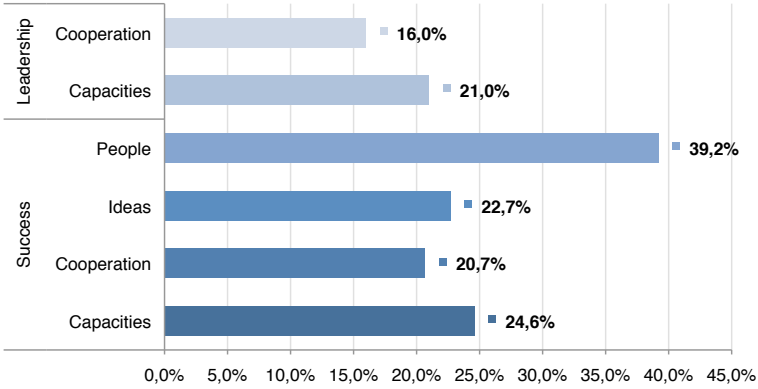
- Catalonia has received 1.4% of total funding in the Capacities programme and 1.6% in the Cooperation programme. In the case of the People programme, Catalonia has received 2.4% of total funding and 3.8% in the Ideas programme. Similarly, the Catalonia's share compared to the total funding received by Spain has been well above in the People and Ideas programme, with return rates of 34.6% and 58.6%, respectively.

• By analysing the rate[13] the following results are observed:

- People Programme: almost 40%
- Capacities Programme: 24.6%
- Ideas Programme: 22.2%
- Cooperation Programme: 20.7%[14]

• Catalan organisations have coordinated 21% of the total of projects funded under the Capacities Programme and 16% under the Cooperation Programme.

Figure—III.2 Success and leadership rates by specific programmes



Source: elaborated from FICSR database.

Table III.1 Participation of Catalan organisations sorted by funding received

	Organisation	Submitted Projects	Funded Projects	Coordinated projects
1	Technical University of Catalonia – Barcelona Tech Catalunya (UPC)	299	57	12
2	University of Barcelona (UB)	265	44	13
3	Pompeu Fabra University (UPF)	91	25	7
4	Autonomous University of Barcelona (UAB)	265	53	12
5	Center for Genomic Regulation (CRG)	40	18	8
6	Spanish National Research Council (CSIC)	68	40	6
7	Barcelona Supercomputing Center - Centro Nacional de Supercomputación (Marenostrum) (BSC-CNS)	22	21	3
8	Barcelona Media	57	14	5
9	Institute of Photonic Sciences (ICFO)	25	14	6
10	Catalan Institute of Nanotechnology (ICN)	33	10	3
11	August Pi i Sunyer Biomedical Research Institute (IDIBAPS)	25	7	3
12	Rovira i Virgili University (URV)	68	17	9
13	Institute of Chemical Research of Catalonia (ICIQ)	21	7	5
14	Institute for Research in Biomedicine (IRB Barcelona)	27	8	5
15	Vall d'Hebron University Hospital	35	8	2
16	Hospital Clínic of Barcelona	35	12	2
17	University of Lleida (UdL)	36	5	2
18	Starlab Barcelona, S.L.	27	9	2
19	Center for Research in Environmental Epidemiology (CREAL)	15	7	3
20	International Center for Numerical Methods in Engineering (CIMNE)	52	12	4
21	Municipal Institute for Medical Research (IMIM-Hospital del Mar)	21	7	
22	University of Girona (UdG)	55	7	4
23	Institute for Bioengineering of Catalonia (IBEC)	25	8	4
24	Termisa Energia, S.A.	1	1	0
25	Technological Center of Telecommunications of Catalonia (CTTC)	36	7	0

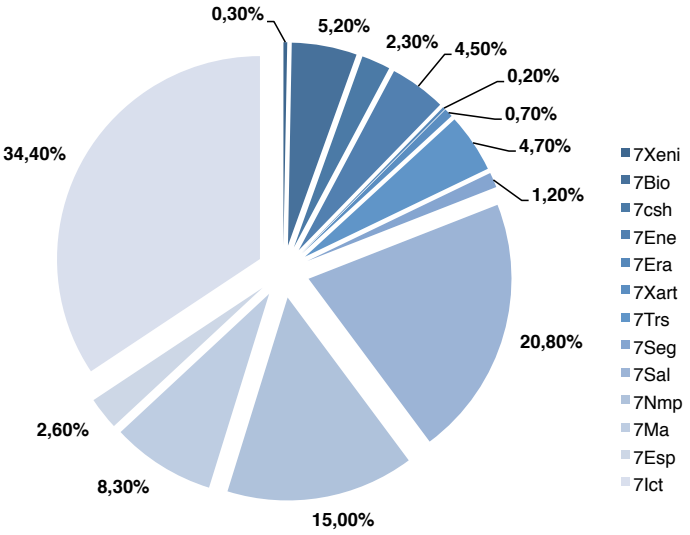
Source: elaborated from the FICSR database.

III.2. Detailed results by Cooperation Programme

The specific programme Cooperation promotes cross-national collaborative research between industry and academia in ten thematic areas.

- Breakdown of funding received by thematic priority areas:
  - Information and Communication Technologies: 34.4% of the total funding received by Catalonia (28% of the total funded projects)
  - Health: 20.8% (18% of the total of funded projects)
  - Nanotechnologies, Materials and New Production Technologies: 15% (12% of the total of funded projects).
  - Environment: 8.3% (10% of the total of funded projects)

Figure—III.3 Breakdown of funding received from the Cooperation Programme, sorted by thematic priority area[15]



Source: elaborated from the FICSR database.

- When funding received by Catalonia is compared to the EU total budget by thematic areas, it can be concluded that the Catalan organisations have been more competitive and have had greater relative weight than Europe in the following thematic priority areas:
  - Environment: 2.2%
  - Space: 2.1%

- Nanotechnologies, Materials and New Production Technologies: 1.9%
- Health: 1.9%
- Information and Communication Technologies: 1.9%
- Socio-economic sciences and Humanities: 1,9%

• "Transport" is the fourth thematic priority area with a major funding at European level. In Catalonia, this area is ranked 9th in terms of order of importance.

Table III.2 20 Breakdown of Catalan organisations participating in the Cooperation programme, sorted by funding received[16]

	Organisation	Participations in funded projects	Participations in coordinated projects
1	Technical University of Catalonia – Barcelona Tech (UPC)	55	9
2	University of de Barcelona (UB)	33	6
3	Autonomous University of Barcelona (UAB)	35	3
4	Spanish National Research Council (CSIC)	33	2
5	Pompeu Fabra University (UPF)	15	1
6	Barcelona Media	14	5
7	Center for Genomic Regulation (CRG)	12	2
8	Barcelona Supercomputing Center - Centro Nacional de Supercomputación (Marenostrum) (BSC-CNS)	12	3
9	Center for Research in Environmental Epidemiology (CREAL)	8	3
10	Rovira i Virgili University (URV)	12	1
11	Catalan Institute of Nanotechnology (ICN)	11	1
12	Starlab Barcelona, S.L.	13	3
13	Hospital Clínic of Barcelona	16	2
14	Institute of Photonic Sciences (ICFO)	10	2
15	Technological Center of Telecommunications of Catalonia (CTTC)	10	0
16	August Pi i Sunyer Biomedical Research Institute (IDIBAPS)	6	1
17	International Center for Numercial Methods in Engineering (CIMNE)	12	4
18	Municipal Institute for Medical Research (IMIM-Hospital del Mar)	7	0
19	IDIADA Automotive Technology, S.A.	9	0
20	Termisa Energía, S.A.	1	0

Source: elaborated from the FICSR database.

Table III.3 the Top ten companies participating in the Cooperation Programme, sorted by funding received[17]

	Companies	Participations in funded projects	Participations in coordinated projects
1	Starlab Barcelona, S.L.	13	3
2	IDIADA Automotive Technology, S.A.	9	0
3	Termisa Energía, S.A.	1	0
4	GTD Sistemas de Información, S.A.	4	1
5	Intelligent Software Components SA	4	0
6	MEDIAPRODUCCIÓN, S.L.	3	1
7	SYSTELAB Technologies SA	1	1
8	PILDO CONSULTING Sociedad de Responsabilidad Limitada	6	2
9	Industrias de Óptica, S.A.	1	1
10	Aplicaciones en Informática Avanzada, S.A.	2	0

Source: elaborated from the FICSR database.

• If comparing the Catalonia's weight in each thematic priority area with all other Spain's regions, it can be concluded that Catalonia accounts for the largest percentage of funding received in Spain in the following thematic priority areas:

- Socio-economic sciences and Humanities: 46%
- Environment: 39%
- Health: 40%

Catalonia is ranked second, behind Madrid, in terms of a major funding by thematic priority areas:

- Food, Agriculture and Fisheries and Biotechnology: 22%
- Space: 40%
- Information and Communication Technologies: 31%
- Security: 11%

Catalonia is only behind Basque Country in 'Nanotechnologies, Materials and New Production Technologies'.

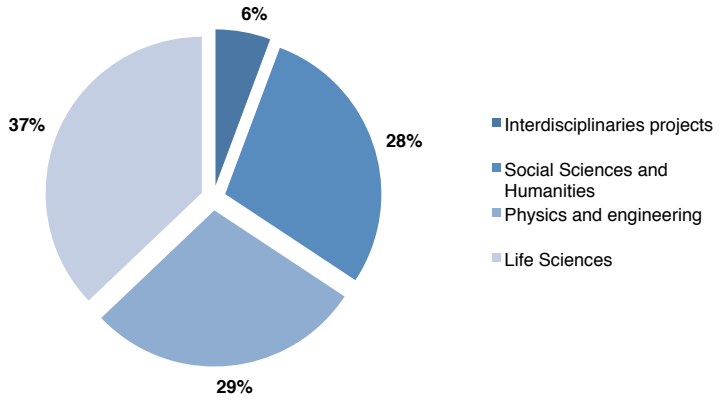
• The coordinating role by the Catalan participants has been significant in 'Information and Communication Technologies' (23.9%) and 'Nanotechnologies, Material and New Production Technologies' (20.4%).

III.3. Detailed results by Ideas Programme

The specific Ideas programme supports basic research at the frontiers of knowledge by funding high-risk multi-disciplinary projects solely on the basis of scientific excellence.

- 66% of the total funding received from the Ideas Programmne has gone to young researchers (over EUR 29 million), while the remaining 34% has gone to senior researchers (EUR 15 million) in the first three calls (STG 2007, 2009 and ADG 2009)[18].
- The funding received from this specific programme accounts for 3.8% of the total received by EU and 58.6% of Spain's total. Catalonia accounts for 59% of funding awarded, followed by Madrid (34%), as compared with the other Spain's regions.
- Catalonia has performed well in terms of participations in funded projects (35) accounting for 61.4% of total Spain's weight and 4.2% of total EU's weight. Fifty percent of these projects were led by ICREA researchers.
- Regarding the breakdown by areas of knowledge, 37.1% of granted projects is focused on Life Sciences; 28.6% on Social Sciences and Humanities; 28.6% on Physics and Engineering; and 7.5% are interdisciplinary projects.

Figure—III.4 Breakdown of funded projects by areas of knowledge in the Ideas Programme



Source: elaborated from the FICSR database.

- CERCA research centres hosted 54% of researchers who received funding, followed by universities (40%).

Table III.4 Catalan organisations with two or more funded projects which have hosted researchers under the Ideas Programme

	Organisation	Funded projects
1	Center for Genomic Regulation (CRG)	4
2	Pompeu Fabra University (UPF)	4
3	University of Barcelona (UB)	4
4	Centre for Research in International Economics (CREI)	3
5	Barcelona Technical University (UPC)	2
6	Institute of Chemical Research of Catalonia (ICIQ)	2
7	Catalan Institute of Nanotechnology (ICN)	2
8	University of Lleida (UdL)	2
9	Institute of Photonic Sciences (ICFO)	2
10	Institute for Research in Biomedicine (IRB Barcelona)	2
11	Autonomous University of Barcelona (UAB)	2
12	University of Girona (UdG)	2

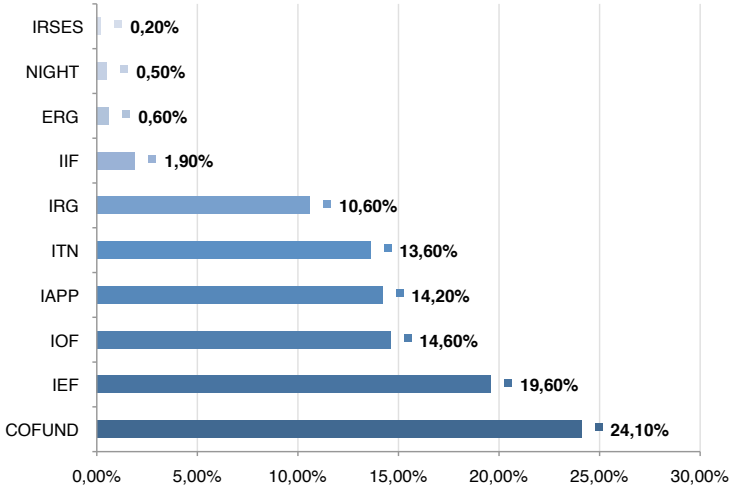
Source: elaborated from the FICSR database.

III.4. Detailed results by People Programme

The specific People Programme aims to strengthen the human potential in research and technology in Europe by supporting mobility, training and career development of researchers.

- Catalonia has received EUR 5, 785,717 in funding from Individual Actions (47.3% of total funding received from the People Programme) and EUR 6,437, 427 from Institutional Actions (52.7%), with 40 and 21 participations in funded projects respectively.
- The Catalonia's weight is 2.4% in terms of total received funding as compared with the EU total and 34.6% compared to the Spain's total, ranking first, followed by Madrid (32%) and Andalusia (9%).
- It should be noted the funds collected through COFUND (EUR 2,947,984, ie., 24.1% of the total) and through IEF (Intra-European Fellowships for career development, with EUR 2,398 171 and 15 participations).

Figure—III.5 Breakdown of received funding by types of fellowships of the People Programme



Source: elaborated from the FICSR database.

Table III.5 List of organisations which have hosted researchers under People Programme, sorted by received funding[19]

	Organisation	Participations in funded projects	Participations in coordinated projects*
1	August Pi i Sunyer Biomedical Research Institute (IDIBAPS)	2	2
2	Rovira i Virgili University (URV)	7	7
3	Spanish National Research Council (CSIC)	4	3
4	Autonomous University of Barcelona (UAB)	7	4
5	University of Barcelona (UB)	6	5

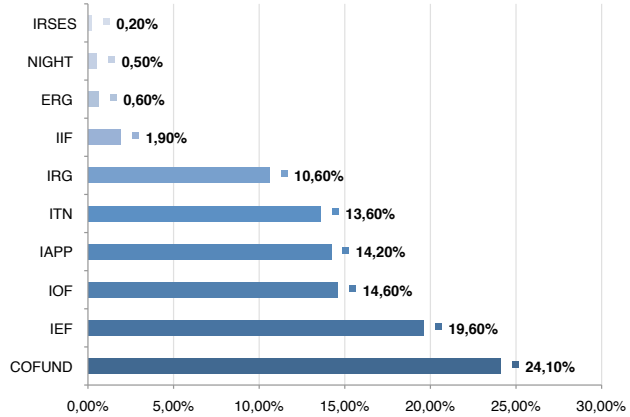
Source: elaborated from the FICSR database.

III.5. Detailed results by Capacities Programme

The specific Capacities Programme aims to enhance research and innovation capacities throughout Europe in all areas of knowledge.

The Research for the benefit of SMEs (43.5%) and Research Infrastructures (41.7%) areas account for the largest volume of funding as compared with the total funding received from the Capacities Programme by Catalonia.

Figure III.6 Breakdown of received funding by the priority areas of the Capacities Programme[20]



Source: elaborated from the FICSR database.

- Catalonia[21] has been relatively higher competitive and has had a strong presence (2.3% compared to EU) in the Research for the benefit of SMEs. Instead, the areas of weakest performance are the Support to the coherent development of research policies (0.3%) and International Cooperation (0.8%).

- In terms of funding received by the total of Spain's territory, Catalonia has performed significantly in the Science in Society area (46.5%). By contrast, Catalonia's presence has been quite insignificant in the Regions of Knowledge area (12.4%). At the same time, Catalonia is ranked the second region with a major funding rate (behind Madrid) in the Research Infrastructures and International Cooperation areas.

- The Regions of knowledge (46.2%) and International Cooperation (44.4%) areas show the highest success rate. Instead, Research for the Benefit of SMEs (19%) is the area with the lowest success rate.

• The Catalan organisations leadership rate is above in the Research potential of convergence regions (50%) and the Research for the benefit of SMEs (41.3%) areas. However, the Catalan organisations have not led any project in the Research Infrastructures, International Cooperation and Regions of knowledge areas.

Table III.6 Main Catalan organisations participating in the Capacities Programme, sorted by received funding

	Organisation	Participations in funded projects	Participations in coordinated projects
1	Barcelona Supercomputing Center - Centro Nacional de Supercomputación (Marenostrum) (BSC-CNS)	10	0
2	Autonomous University of Barcelona (UAB)	12	3
3	Spanish National Research Council (CSIC)	6	0
4	Centre de Recerca i Investigació de Catalunya, S.A.	15	8
5	Pompeu Fabra University (UPF)	4	0

Source: elaborated from the FICSR database.

• The following highlights the ten-top Catalan organisations with greater performance in the Research for the benefit of SMES and Research Infrastructures areas.

Table III.7 Main Catalan organisations participating in the Research for benefit of SMEs area of the Capacities programme, sorted by received funding[22]

	Organisation	Participations in funded projects	Participations in coordinated projects
1	Centre de Recerca i Investigació de Catalunya, S.A. (CRIC)	28	15
2	Innovació i Recerca Industrial i Sostenible, S.L.	13	13
3	JCB Electromecánica, S.L.	3	0
4	FISA Ibérica, S.L.	2	1
5	Asociación de Industrias de Acabados de Superficies (AIAS)	1	0
6	Petita i Mitjana Empresa de Catalunya (PIMEC)	2	0
7	Salvio Busquets, S.A	2	0
8	Asociación Industrial Textil de Proceso Algodonero (AITPA)	1	0
9	Portes Bisbal, S.A.	1	0
10	VOZTELECOM Sistemas, S.L.	1	0

Source: elaborated from the FICSR database.

Table III.8 Catalan organisations participating in the Research Infrastructure area of the Capacities Programme, sorted by received funding[23]

	Organisation	Participation in funded projects	Participations in coordinated projects
1	Barcelona Supercomputing Center - Centro Nacional de Supercomputación (Marenostrum) (BSC-CNS)	10	0
2	Spanish National Research Council (CSIC)	3	0
3	Centre for Research on Animal Health (CRESA)	1	0
4	High Energy Physics Institute (IFAE)	1	0
5	Hospital Clínic of Barcelona	1	0
6	Ramon Llull University (URL)	1	0
7	Barcelona Technical University (UPC)	1	0
8	I2CAT Foundation	1	0
9	CELLS Consortium	2	0
10	University of Barcelona (UB)	3	0

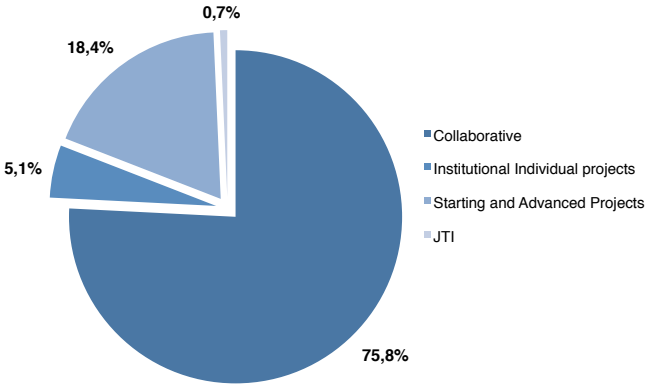
Source: elaborated from the FICSR database.

III.6. Results by type of project

- Collaborative projects that corresponds to ten thematic areas in the Cooperation and Capacities Programmes.
- JTI (Joint Technology Initiatives) including JTI ARTEMIS and JTI ENIAC mentioned above.[24]
- Clustering of starting and advanced projects that includes participation within the Ideas Programme.
- Clustering of institutional and individual projects that includes participation within the People Programme.

• Collaborative projects account for 75.8% of total funding received by Catalonia, followed by the clustering of starting and advance projects associated with the Ideas Programme (18.4%), the clustering of institutional and individual projects associated with the People Programme (5.1%) and the Joint Technology Initiatives (0.7%).

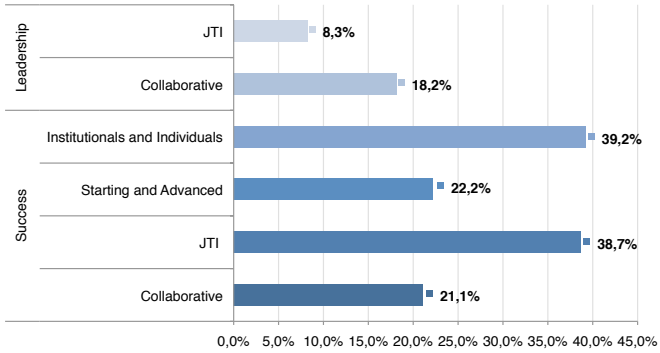
Figure—III.7 Breakdown of received funding, sorted by type of project



Source: elaborated from the FICSR database.

- In comparison with the total EU funding, Catalonia has accounted for 3.8% of funding from the Ideas Programme; 2.4% from the People Programme; 1.6% from the Cooperation Programme; and 1% from the JTIs included in this executive report (ENIAC and ARTEMIS).
- In comparison with the Spain's total funding, Catalonia has accounted for 58.6% of funding from the Ideas Programme; 34.6% from the People Programme; 25.5% from the collaborative projects; and 19.1% from the JTIs.
- The results indicate that the Joint Technology Initiatives (and consequently, the European Technology Platforms) remain still underexploited by the Catalan organisations.

Figure—III.8 Success and leadership rates by type of project



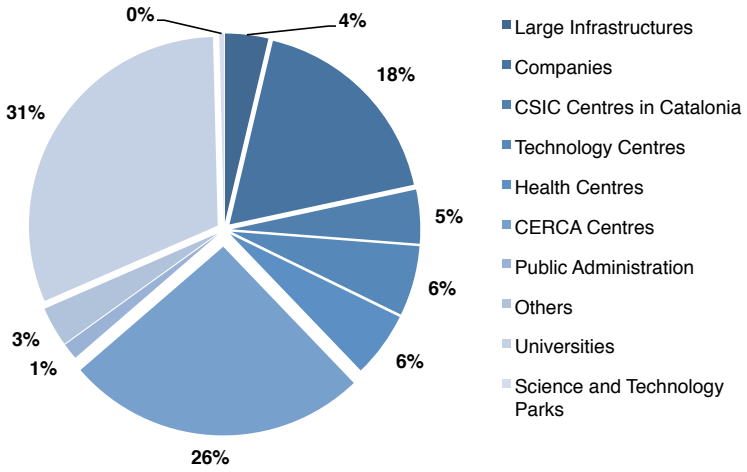
Source: elaborated from the FICSR database.

IV. RESULTS BY TYPE OF ORGANISATION ACCORDING TO THE CONNECT-EU CLASSIFICATION

The Connect-EU[25] classification is intended to reflect the specific features of the main research stakeholders of Catalonia by working with their own typology (through 10 categories) which involves both the public and private sectors[26]:

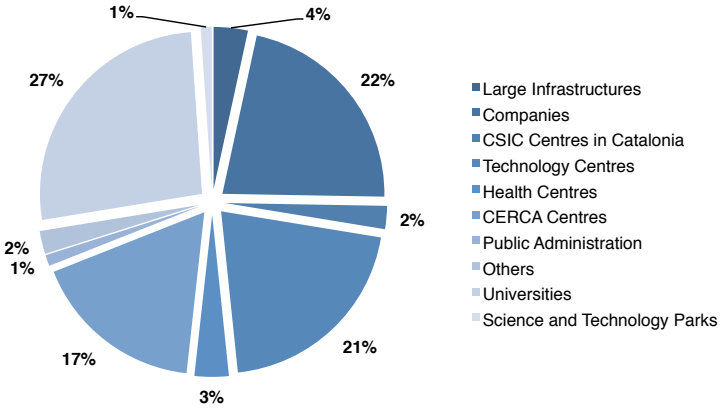
- Public Administration
- CERCA Centres
- Health Centres
- Technology Centres
- CSIC centres in Catalonia
- Companies
- Large infrastructures
- Science and technology parks
- Universities
- Other

Figure—IV.1 Breakdown of funded by type of organisation



Source: elaborated from the FICSR's database.

Figure—IV.2 Breakdown of organisation participation in coordinated projects, by type of organisation[27]



Source: elaborated from the FICSR's database.

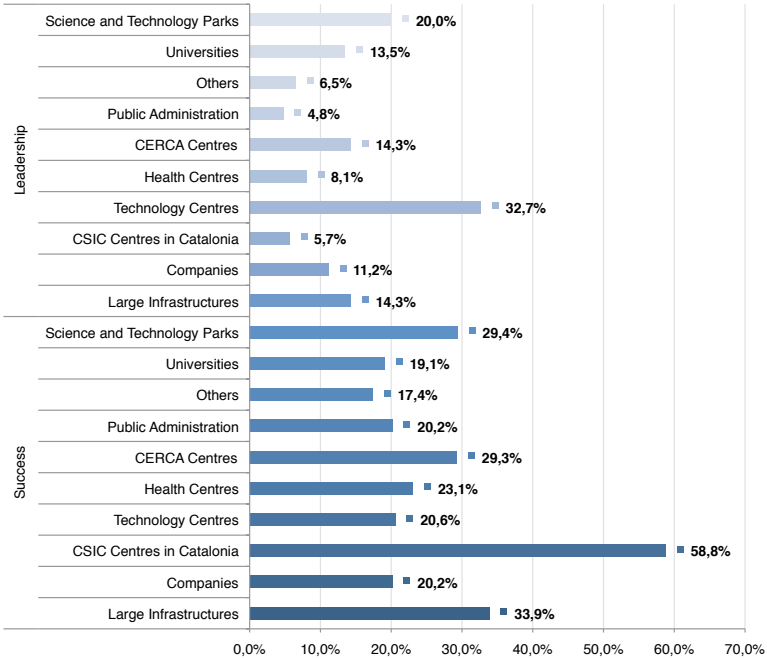
• Public Administration: 1.4% of all funding received by Catalonia; 2.9% of the total of participations in funded projects: success and leadership rates of 2.2% and of 4.8% respectively. Health and Environment areas of the Cooperation Programme have accounted for the largest percentage of participations.

• CERCA centres: 25.8% of the all funding received by Catalonia; 19.1% of the total of participations in funded projects; success and leadership rates of 29.3% and 14.3% respectively. Participation in the Ideas and People Programmes accounted for 48.6% and 32.8% of funded participations respectively. The Information and Communication Technologies and Health areas of the Cooperation Programme have accounted for the largest percentage of participations.

• Health Centres: 5.6% of the all funding received by Catalonia; 5.6% of the total participations in funded projects; success and leadership rates of 23.1% and 8.1% respectively. The Health area of the Cooperation Programme has accounted the largest percentage of their participations.

• Technology Centres: 6% of the all funding received by Catalonia; 7.3% of the total of participations in funded projects; success and leadership rates of 20.6% and 32.7% respectively. The Catalan Technology Centres have performed strongly in the JTI ENIAC, where they have accounted the largest percentage of the total of funded participations. The Information and Communication Technology; Nanotechnologies, Materials and New Production Technologies areas of the Cooperation programme have accounted for the largest percentage of participations. The Research for the benefit of SME's area has accounted for 24.3% of the total participations in funded projects.

Figure—IV.3 Success and leadership rates by type of organisation



Source: elaborated from the FICSR's database.

- CSIC Centres in Catalonia: 4.6% of the all funding received by Catalonia; 5.3% of the total of participations in funded projects; success and leadership rates of 58.8% and 5.7% respectively. The CSIC Centres in Catalonia have performed strongly in the Research Potential area where they have accounted for the largest percentage of the total of funded participations (together with companies and universities). The Energy; Nanotechnologies, Materials and New Production Technologies; and Environment areas of the Cooperation programme have accounted for the largest percentage of participations.

- Companies: 17.9% of the all funding received by Catalonia; 22.8% of the total of participations in funded projects; success and leadership rates of 20.2% and 11.2% respectively. Companies have performed strongly in the Research for the benefit of SMEs area where they have accounted for the largest percentage of the total funded participations. The Information and Communication Technology; Energy; Nanotechnology, Materials and New Production Technologies; Security; Transport areas of the Cooperation Programme and the JTI ARTEMIS have accounted for the largest percentage of participations.

• Large Infrastructures: 3.7% of the all funding received by Catalonia; 2.8% of the total of participations in funded projects; success and leadership rates of 33.9% and of 14.3% respectively. Large infrastructures have performed strongly in the Research Infrastructures area where they have accounted the largest percentage of the total of funded participations. The Information and Communication Technologies area of the Cooperation Programme has accounted for the largest percentage of participations.

• Science and Technology Parks: 0.4% of the all funding received by Catalonia; 0.7% of the total participations in funded projects; success and leadership rates of 29.4% and 20% respectively. The Health; Nanotechnologies, Materials and New Production Technologies areas of the Cooperation Programme have accounted for the largest percentage of participations.

• Universities: 31.1% of the all funding received by Catalonia; 29.1% of the total of participations in funded projects; success and leadership rates of 19.1% and 13.5% respectively. Universities have performed strongly in the Ideas and People Programmes, where they have accounted for 45.9% and 49.2% of funded participations respectively. The Information and Communication Technologies; Environment; Health; Food, Agriculture and Biotechnology; Socio-economic Sciences and Humanities; Space areas of the Cooperation Programme have accounted for the largest percentage of participations.

V. CONCLUSIONS

The aim of this report was to develop knowledge about the participation of Catalonia in FP7 during the first three years of its application. This analysis is based on the FICSR database as a main resource, a software application of the FP7 data created under the Connect-EU programme. Different reports have also been taken in consideration (CDTI, 2010; CEAM, 2008) to have a comparative view at regional level and over time.

After analysing the results achieved, the main conclusions of this report are as follows.

1. *Catalonia were allocated a total of EUR 240 million in funding during the first three years of FP7, which is a return of 1.8% compared with EU.*

   Over the period 2007-2009, Catalan organisations received EUR 240 million in funding from FP7 (225 organisations, 606 funded projects and 169 led projects). This is 28.8% of the total of funding achieved by Spain and 1.8% of the total of funding granted to the EU.

2. *The results of Catalonia participation in FP7 improve quantitatively those in earlier FPs.*

   Catalan organisations have improved their results in FP7 compared to those achieved in FP5 and FP6. Funding received during the first three years of FP7 (EUR 240 million) is almost twice that of FP5 (EUR 131.8 million) and is 8.3% higher than funding received in FP6 (221.5%). At the same time, average amount of funding per project in FP7 is higher than the average in FP5 (EUR 395,855 and EUR 145,154 respectively), i.e 173% above. Average amount of funding per organisation is almost fourfold compared to the average in FP5 (EUR 280 426 in FP5 and EUR 1 066 million in FP7). Catalonia has received average annual funding increase of 44% compared to that of FP6 (from EUR 55 million in FP6 to EUR 80 million in FP7).

3. *The Catalonia's share has significantly increased in the total funding received by Spain and the EU.*

   There has been a gradual increase in the EU total budget allocated to the FPs, from EUR 14,980 million (FP5) to EUR 17,500 million (FP6) and EUR 50 521 million (FP7), i.e. EUR 16,780 million in the period 2007-2009. However, the increase in funding received by Catalonia has been more than proportional to the increase in the EU budget, which has resulted in a growth in the Catalonia's share in the EU total budget. While the return of Catalonia with regard to Europe was 0.9% in FP5, this percentage rose 1.3% in FP6 and 1.8% in FP7. Similarly, the Catalonia's share compared to Spain has steadily increased from 21.1% in FP5, 24.3% in FP6 and 28.8% in FP7.

4. *Catalonia's performance has also improved qualitatively.*

The leadership rate of Catalonia (taking into account only the results from the Cooperation and Capacities Programmes) has risen significantly from 11.9 in FP5 to 17% in FP7. Because of the difficulty of coordinating European projects, the result strengthens the major quality of the work carried out by the Catalan institutions in terms of research and improving competitiveness. However, this rate has been much lower than the Spain's leadership rate (19%).

5. *The Catalonia's share as compared to Spain and EU, in terms of funding received through FP7, is higher than the Catalonia's contribution to GDP and the overall spending on R&D in Spain and EU.*

   The Catalonia's share with regard to the total of Spain and EU in terms of funding from through FP7 (28.8% and 1.8% respectively) is comparatively higher than the Catalonia's participation in the overall spending on R&D in Spain and EU-27 during the period 2007-2008 (22.1% and 1.3% according to EUROSTAT data). It shows the relevance of FP7 for Catalonia as a funding stream of its R&D. The relative share of Catalonia in FP7 is higher than its contribution to Spain's GDP (18.7%) and EU's GDP (1.6%) in 2007.

6. *FP7 as a funding stream of R&D is much more relevant in Catalonia than in Spain.*

   Funding received from FP7 between 2007 and 2009 is 2.5% of the total spending on R&D over the same period. This figure is higher than that of Spain (2%) and is one of the largest as compared to the other regions of Spain and is only overtaken by the Basque Country (2.7%) and Cantabria (3.7%).

7. *Catalonia is among the Spain's regions that have most greatly improved its participation in FP7 and it is the second region with the highest share in terms of received funding. Catalonia is also the only region that has experienced a rise in its share as compared to the total of funding received by Spain. These results strengthen the idea of the high quality of the participation of the Catalan organisations in FP7 as compared to the other Spain's regions.*

   Catalonia is the second region behind Madrid in terms of funded projects (26.1% Catalonia and 30% Madrid) and received funding (28.8% and 31.9%, respectively).

   Catalonia is the only region that has increased its share in a significant continuing way as compared with the total of funding received by Spain over the last three years of FP7. However Madrid, despite it is still ranked first in funding in the period 2007-2009, has been losing share in relative terms, from 37.3% in FP5 to 31.9% in FP7.[28]

8. *The average funding received per organisation has increased, although there has been a drop in the number of Catalan organisations participating in FP7 as well as in the number of participations in funded projects.*

In the course of the period 2007-2009 there has been a gradual decrease in the number of Catalan organisations participating in the FPs (470 in FP5; 343 in FP6; and 225 in FP7). If the annual averages are calculated, there is a steady reduction of the number of Catalan participating organisations (from 118 organisations in FP5 to 75 in FP7), the number of participations of the Catalan organisations in funded projects (from 273 in FP5 to 250 in FP7) and the number of funded projects which have involved Catalan organisations (from 227 in FP5 to 202 in FP7). Despite this, the amount of funding received per organisation has considerably increased in the first three years of FP7 (EUR 240 million), which is twice of that from FP5 and is more than 8.3% in funding from FP6.

9. *Universities and CERCA Centres have accounted for around 60% of the all funding received during the period 2007-2009.*

Following the Connect-EU[29] organisations classification, universities have accounted for the largest percentage of the all received funding (31.1%), followed by the CERCA Centres (25.8%) and companies (17.9%). The rest have played a marginal role: Technology Centres (6%), Health Centres (5.6%); CSIC Centres in Catalonia (4.6%); Large Infrastructures (3.7%); Other (3.4%); Public Administration (1.4%) and Science and Technology Parks (0.4%).

In terms of number of participations in funded projects, universities are once again ranked first (29.1% of the total participations), followed by companies (22.8%); CERCA Centres (19.1%). The rest lag far behind: Technology Centres (7.3%), Health Centres (5.6%), CSIC Centres in Catalonia (5.3%), other (4.3%), Large infrastructures (2.8%) and Science and Technology Parks (0.7%).

10. *The influence of companies in Catalonia is significantly lower than that of at national level.*

The breakdown of funding received by the Catalan organisations (CDTI, 2010) and throughout Spain's territory indicates that universities and other organisations in Catalonia have a share much higher than in Spain (31.6% in Catalonia against 23.7% in Spain) while the opposite happens with companies (33% in Spain against 18.8% in Catalonia). There is need to clarify that in Spain 80.7% are SMEs while this figure is higher in Catalonia (87%).

11. *The CSIC centres in Catalonia have the highest success rate in the period 2007 and 2009, and the Technology Centres have the largest leadership rates.*

Following the Connect-EU organisations classification, the CSIC centres in Catalonia have achieved the largest success rate (58.8%), which are way ahead of Large Infrastructures (33.9%). The CERCA centres (29.8%), universities (19.1%) and Other (17.45) show the lowest success rates.

Looking only at results which are linked to the Cooperation and Capacities programmes, the Technology centres of the TECNIO network,[30] have shown the highest leadership rate (un 32.7%), followed by Science Parks (20%). Public administration (4.8%) and the CSIC Centres in Catalonia (5.7%) show the lowest leadership rates.

12. *By specific programmes, Catalonia has obtained the best results under the Ideas and People programmes, which reflects creativity and excellence of research and the Catalonia's effort to enhance its human capital and to attract and retain talent.*

The Cooperation Programme has accounted for 68.5% of the total funding received by Catalan organisations between 2007 and 2009, followed by the Ideas Programme, (18.4%); Capacities Programme (7.9%) and People Programme (5.1%). This reproduces the breakdown of EU budget by programmes.

In the case of Catalonia, the People programme and, particularly the Ideas Programme, have had a high relative importance, and this is reflected in return rates. Return rate with respect to Europe has been 1.4% in the Capacities Programme, 1.6% in the Cooperation Programme, 2.4% in the People Programme and 3.8% in the Ideas Programme. Similarly, the Catalonia's share with regard to the total funding received by Spain is significantly higher in the People and Ideas Programmes, where the return rates have reached 34.6% and 58.6% respectively.

13. *The Information and Communication Technologies, Health and Nanotechnologies, Materials and New Production Technologies areas have accounted for the largest amount of funding.*

In comparison with all the funding received by Catalonia, the Information and Communication Technologies area has accounted for the largest amount of received funding between 2007 and 2009, i.e., 23.6% of the total (19.3% of the total funded projects), followed by Health (14.3%), Nanotechnologies, Materials and New Production Technologies (10.3%) and Environment (5.5%). Other thematic priority areas are also: Space (2.1%), Socio-economic Sciences and Humanities (1.9%) and Research for the benefit of SMEs (2.3%).

Thematic priority areas with the lowest share in terms of the total funding received by Catalonia are ERANET (0.1%), and the areas linked to the Capacities programmes: Research Potential (0.1%), International Cooperation (0.2%) and Regions of knowledge (0.2%). Only one project was submitted to the area of Support to the coherent development of research policies which was finally not accepted.

14. *Catalan companies have been the most competitive at European level in the area of Research for the benefit of SMEs of the Capacities programme.*

When comparing the funding received by Catalonia with the total EU budget by areas, it should be noted that the Catalan companies have been the most competitive and have had a greater relative weight with respect to EU in the area of Research for the benefit of SMES (41.3%), where the coordinating role has been particularly remarkable.

15. *Universities and companies have accounted for the largest number of funded participations for the most part of the analysed areas.*

Following the Connect-EU organisations classification, universities have accounted for the largest number of participations in the People programme (49.2%). Universities is also ranked first in the thematic priority areas of the Cooperation Programme such as Food, Agriculture and Fisheries and Biotechnology (32.3%), Socio-economic sciences and humanities (57.9%), Space (50%), Information and Communication Technologies (36.1%), and Environment (30%) and those of the Capacities Programme such as Science in Society (53.3%) and International Cooperation (100%).

The companies' share have been more important in relative terms in areas such as Energy (57.9%), Nanotechnologies, Materials and New Production Technologies (24.2%), Security (33.3%), Transport (58.1%), in the JTI ARTEMIS (accounting for 70% of the total funded participations) and in the Research for the benefit of SMEs area (54.3%). At the same time, companies have been the most important together with the CSIC centres in Catalonia in the Research Potential area (33.3% each) and also in the JTI ENIAC along with Technology Centres (30% each).

In addition, Health Centres have accounted for the largest percentage of participations in the Health (30.9%) and Large Infrastructures in the Research Infrastructures (33.3%) areas. Finally, it should be pointed that the Public Administration has received funding through two participations in the ERANET.

Based on these results, it seems therefore clear that the overall result of the Catalan participation in the first three years of FP7 is positive. Catalonia's results have improved in both quantitative (largest received funding in absolute terms and annual average) and qualitative (steadily increasing of the leadership rate and continuing improvement in comparison with the other Spain's region). This indicates that the Catalonia's share has increased on a constant basis compared to the total of Spain (narrowing the gap with Madrid) and the total of EU.

At the same time it appears that funding through the FPs is a relatively attractive choice for Catalonia and it is the most widely used in Catalonia in comparison with the other Spain's regions, as demonstrated by the high share of funding through FP7 in the total R&D spending of Catalonia in relation to other autonomous communities. Indeed, the Catalonia's share as compared with EU, in the total funding allocated to FP7, is higher than its contribution in terms of total R&D expenditure or GDP.

ENDNOTES

1. The CONNECT-EU aims to support Catalonia's participation in FP7 in accordance with agreements concluded by the Governement of Catalonia under the EUROINGENIO funds.
2. http://cordis.europa.eu
3. http://cordis.europa.eu/fp7/faq_en.html#5
4. http://cordis.europa.eu/fp7/budget_en.html
5. CDTI (2010), Informe Global del VII Programa Marco. Resultados provisionales de la Participación Española (2007-2009).
6. See table III.1.
7. Leadership rate is calculated as the ratio between coordinated projects and funded projetcs. Only the information relevant for the both Cooperation and Capacities programmes has been taken into account for the calculation of leadership rate. Both the the Ideas and People programmes have not been considered because their grants are mainly available to a single researcher and not to collaborative projects. Where reference is made to leadership rate in this document, only those projects linked to the Cooperation and Capacities Programme shall be considered.
8. It should be noted that there are no data from 2009 on the Ideas and People programmes.
9. According to the CDTI data.
10. Madrid is the first region in Spain which has been losing relative weight (from 37.3% in FP5 to 31.9% in FP7). Euskadi is ranked third.
11. Source: elaborated from CEAM (2008) and CDTI (2010) data.
12. Ten 10 thematic priorities have been considered as well as the Catalonia participation in the ERANET scheme and in two Joint Techonology Initiatives (JTI ARTEMIS and JTI ENIAC), because no information was available relating the rest of the initiatives at the time of drafting this report.
13. The ratio between funded projects and submitted projects.
14. According to the report Interim Evaluation of the Seventh Framework Programme (2010), these rates are higher than those for the whole EU: Cooperation (below 20%), Ideas (below 15%), People (below 33%) and Capacities (below 20%).
15. Food, Agriculture and Fisheries and Biotechnology (7Bio), Socio-economic sciences and Humanities (7Csh), Energy (7Ene), Space (7Esp), Information and Communication Technologies (7Ict), Environment (7Ma), Nanotechnologies, Materials and New Production Technologies (7Nmp), Health (7Sal), Security (7Seg), Transport (7Trs).
16. This table takes into account the information provided by CDTI (December 2010).
17. This table takes into account the information provided by CDTI (December 2010).
18. ERC Starting Independent Research Grants to support researchers at the stage at which they are starting or consolidating their own research.
19. It should also be taken into consideration that a significant proportion of aids under People Programmes are individual.
20. Science in Society (7Cys), Research Infrastructures (7Iin), International Cooperation (7Inc), Support to the coherent development of research policies (7Pol), Research Potential of Convergence Regions (7Pot), Research for the benefit of SMEs (7Pym), Regions of Knowledge (7Reg).

21. The Catalonia's weight in funding granted by FP7 has been 1.8% in 2007-2009.
22. This table takes into account of December 2010 data provided by CDTI.
23. This table takes into account of December 2010 data provided by CDTI.
24. It should be emphasised that the JTI come under the Cooperation Programme, but given the importance of the share of industry they are highligthed separately.
25. This is an own classification based on the organisation classification from the Secretary for Universities and Research and the classification used by ACC1Ó.
26. See Annex 4. Connect-EU typology of organisations.
27. Only results from the Cooperation and Capacities programmes are considered.
28. CDTI (2010), Informe Global del VII Programa Marco. Resultados provisionales de la Participación Española (2007-2009).
29. See Annex 4. CONNECT-EU Typologies of organisations.
30. It is a network set up by ACC1Ó with the aim of bringing together leading experts currently working in applied research and technology transfer in Catalonia to make them accessible to businesses fostering their competitiveness and international visibility.
31. Entity which is aimed at research and knowledge transfer. Its research work is focused on a specific area and is organised into research groups in order to achieve common scientific objectives.

    a. A research centre may have legal personality and separate budgets and it may belong to a university, public administration or company or not.
    b. A research centre may be an entity without own legal personality.
    c. A research centre may be shared centre involving one or more universities, themselves or together with other public or private entities through collaboration agreements or other cooperation.
    d. A research centre may be linked to one or more universities through a collaboration agreement, when ownership is held by another public or private entity, including technology, science and arts-based businesses which have emerged from university activity.

32. The Spanish National Research Council (CSIC) is made up of a network of centres and institutes. It may be owned or co-managed with universities, autonomous communities or other institutions conducting scientific research independently and autonomously.
33. Research centres from the CERCA system are independent with their own legal personality (consortia or foundations), controlled by the Government of Catalonia. Their main aim is excellence in scientific research.

APPENDICE 1.
Bibliography

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- *Informe Global del VII Programa Marco. Resultados provisionales de la Participación Española (2007-2009).*
- *Participación española en el VII Programa Marco: Resultados provisionales por CCAA (2007-2009).*
- *Participación española en el VII Programa Marco: Resultados provisionales por temáticas (2007-2009).*
- *VII Programa Marco de I+D: Metodología de cálculo de Objetivos 2010-2013 por CCAA y temáticas, Foro CDTI con las Comunidades Autónomas.*

CEAM (ACC1Ó) (2008), Participació catalana a l'R+D europea.

European Commission (2010), Interim Evaluation of the Seventh Framework Programme. Report of the Expert Group.

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SPEI (2009), Primers resultats de la participació de Catalunya en convocatòries del. 7è Programa marc d'R+D de la UE.

APPENDICE 2.
Sources of information

CORDIS (Community Research and Development Information Service), http://cordis.europa.eu/fp7/home_en.html

EUROSTAT, http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes

Idescat, http://www-idescat.es

INE, http://www.ine.es

Oficina Europea del Ministerio de Ciencia e Innovación (OEMICINN), http://www.oemicinn.es/

APPENDICE 3.
Abbreviations

COOPERATION PROGRAMME:

- Food, Agriculture and Fisheries, Biotechnology (7Bio),
- Socio-economic sciences ahd humanities (7Csh)
- Energy (7Ene)
- Space (7Esp)
- Information and Communication Technologies (7Ict)
- Environment (7Ma)
- Nanotechnologies, materials and new production technologies (7Nmp)
- Health (7Sal)
- Security (7Seg)
- Transport (7Trs)
- ERANET scheme (ERANET)
- ARTEMIS Joint Technology Initiative (ARTEMIS JTI)
- ENIAC Joint Technology Initiative (ENIAC JTI)

IDEAS PROGRAMME:

- Grants for Starting Indpenedent Researcher Grants (ERC Starting Grant, StG)
- Grants for Advanced for Investigator Grants (ERC Advanced Grant, AdG).

PEOPLE PROGRAMME:

- Intra-european Fellowships for Career Development (IEF)
- International Outgoing Fellowships for Career Development (IOF)
- International Incoming Fellowships (IIF)
- European Reintegration Grants (ERG)
- International Reintegration Grants (IRG)
- Initial Training Networks (ITN)
- Industry-Academy Partnerships and Pathways (IAPP)
- International Research Staff Exchange Scheme (IRSES)
- Co-funding of Regional, National and International Programmes (COFUND)
- Researchers' Night (NIGHT)

CAPACITIES PROGRAMME:

- Science in Society (7Cys)
- Research Infrastructures (7Iin)
- International Cooperation (7Inc)
- Support to the coherent development of research policies (7Pol)
- Research Potential of Convergence Regions (7Pot)
- Research for the benefit of SMEs (7Pym)
- Regions of knowledge (7Reg)

APPENDICE 4.
CONNECT-EU type of organisations

Public Administration: bodies and organisations specific to the local, autonomous and national administrations.

Large infrastructures: R&D infrastructures that have their uniqueness either from difficulties in constructing, costs, geographical location or from the importance of the results generated.

Science and Technology Parks: areas with a collection of businesses and tertiary facilities dedicated to R&D and knowledge transfer which are a productive interface between research and the private sector.

CSIC Centres in Catalonia: research institutes and centres[31] from the Spanish National Research Council (CSIC) that have their headquarters in Catalonia.[32]

Technology Centres: any non-profit organisation that are endowed with legal personality and legal personality whose corporate purpose are to contribute to the improvement of businesses' competitiveness through the creation and development of technology as well as to their transparency and dissemination.

Health Centres: hospitals and other public and private health institutions. Also included all institutions linked to health centres, whether management organisations or research centres, excluding those included in the CERCA centres category.

Businesses: private company, included SMEs.

CERCA Centres: research institutes and centres attached to the Research Centres of Catalonia programme (CERCA)[33].

Universities: public or private higher institutions. Management and teaching institutions, which do not directly carry out research, are also included linked to the same universities and non-teaching institutions (research institutes and centres) related to universities and without own legal personality.

Other: those organisations which do not belong in one of the above-mentioned typologies.

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