

Stairway to Excellence

Cohesion Policy and the Synergies with the Research and Innovation Funds Hrvatska (Croatia) (HR) Facts & Figures



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Joint Research Centre

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Please include the following information to reference this report:

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For further information contact:

- Mathieu Doussineau: Mathieu.DOUSSINEAU@ec.europa.eu
- Nicholas Harrap: Nicholas.HARRAP@ec.europa.eu

Introduction

Background of Stairway to excellence project

The European Commission Framework Programme (FP) for research and technology development has been vital in the development of European knowledge generation. However, there is considerable disparity across EU countries and regions in terms of FP participation and innovation performance.

Horizon 2020 will continue to provide funding on the basis of excellence, regardless of geographical location. However, it will also introduce novel measures for "spreading excellence and widening participation" by targeting low Research & Innovation (R&I) performing countries - most of whom are eligible for innovation funding under Cohesion Policy for the period 2014-2020.

In addition, the new regulations for ESIF aim to use funds more effectively to build regional/national excellence and capacities. By doing so, the two funding sources (ESIF and Horizon 2020) can complement one another along the entire innovation process.

Objectives of S2E

The Stairway to Excellence (S2E) project (<u>http://s3platform.jrc.ec.europa.eu/stairway-to-excellence</u>) is centred on the provision of support to enhance the value of two key European Union (EU) funding sources for research, development and innovation (ESIF and H2020) by actively promoting their combination. The project has two main objectives, namely:

- Providing of assistance to regions and countries that joined the EU since 2004 in closing the innovation gap, in order to promote excellence in all regions and EU countries;
- Stimulating the early and effective implementation of national and regional Smart Specialisation Strategies.

Main purpose of the document

The main aim of this document is to draw the European profile of a territory (region or country) with statistical and financial information coming from the EU 7th framework programme and Structural funds dedicated to Research and innovation during the previous financial period (2007-2013). Other information is used in support of this aim. The document is guided by the following questions:

- What is the overall position of the territory in terms of FP7 budget captured and Structural funds dedicated to R&I?
- What are the specialisation areas emerging from FP7 participation? Are they corresponding with areas chosen in the smart specialisation strategy (S3)?
- What are the main R&I stakeholders involved in EU programmes? Are there any regional/ national specificities in terms of participation in EU programmes?
- What are the main European collaboration axes of the territory in the EU framework programme?

The document provides national authorities and the European Commission with relevant and useful information to facilitate the creation of synergies between structural funds dedicated to research and innovation and the Horizon 2020 programme.

The document is divided in four sections: (1) the keys messages coming from the direct interpretation of tables and figures provided in the following sections, (2) the main characteristics of the territory, (3) the specialisation areas, and (4) the Characterization of organisations participating in the FP with the identification of the key players and the main European organisations collaborating with the territory.

Complementarity with other analysis

This document contains key messages only based on the presented quantitative indicators. This "facts and figures" document provides as full a picture as possible of how and where European funding dedicated to R&I is spent in EU13 territories. Within the wider context of the Stairway to excellence project this work complements other analyses to give further insights into R&I funding in EU13 and related issues. Such complementary work includes:

- National profiles based on the input of country experts giving an updated picture of the strategy and governance at the national level.
- Knowledge flow analysis including the use of various types of indicators such as patents, bibliometrics, and FP/H2020 participations.
- Case studies giving examples of success stories of existing synergies between ESIF and other types of funding from across Europe.

The document will also provide background and context to workshops and meetings organised at the national and regional levels.

Source of information

The regional macro-economic indicators are provided by Eurostat. Regional specialisation areas and structural closeness are extracted from the S3 platform. The FP7 related information comes from the last updated FP7 contracts database (June 2014) provided by DG RTD J5. The information about Structural Funds is provided by DG REGIO database.

Disclaimer

This document aims to give an instantaneous picture about the expenditure of EU funding at NUTS2 level but it is NOT a monitoring report. Some gaps may occur in indicators without calling into account the key messages provided at the beginning of the document.

1. Key messages

Overall economic performance of the country by comparing macro-economic indicators, FP7 and Structural Funds indicators

- The level of R&D expenditure based on GDP in Croatia (0.81%) is lower than the EU13 average (1.05%) and that for the EU15 countries (2.09%). R&D expenditure is primarily concentrated in the business enterprise sector (0.41%) and academic sector (Higher Education and Governmental sectors) (Table 1).
- Unlike most of the EU13 countries, Croatia managed to substantially improve its funding share for FP6 in FP7. Overall the EU13 countries are even outperformed by the countries associated to FP7 (Figure 1).
- In FP7, Croatia accounts for 394 participations ad 39 project coordinations. The FP7 financial contribution per inhabitant (20.5 €/inhabitant) is higher than the EU13 average (17.8 €/inhabitant) but remains far below the EU15 average (95.2 €/inhabitant) (Table 3).

EU funding allocation

- While the largest FP7 financial contribution to Croatia is from the Cooperation Specific Programme (the thematic part of FP7), there is a bias towards the Capacities Specific Programme (SME Measures, Research infrastructures initiatives etc.) as it accounts for around 39.1% of their contribution but only accounts for 8.5% of FP7 (Table 4 & Figure 2). Croatia receives most funding through collaborative research projects but there are biases towards Coordination and Support Actions, Infrastructure Initiatives and SME Measures (Table 5 & Figure 3).
- As Croatia joined the EU in July 2013, it is a specific case as the structural funds do not cover the entire 2007-2013 period. The Instrument for the Pre-Accession Assistance (IPA) funds were implemented in Croatia through three multi-annual Operational Programmes (most recently for the years 2007-2011): (i) the Environmental Operational Programme (waste and water sub-sectors), (ii) the Transportation Operational Programme (modernisation of the railways and the inland waterway infrastructure) and (iii) the Regional Competitiveness Operational Programme. During the period Croatia has received 257.4 M€ (Table 7).
- According to the 2013 annual implementation report, 29.2% of structural funds earmarked to research and innovation RTDI are allocated to "R&TD infrastructure and centres of competence in a specific technology". The second biggest amount of Structural funds goes to "Other measures to stimulate research and innovation and entrepreneurship in SMEs". The direct support to "R&TD activities in research centres" accounts for only 2.2% of the total allocated to Research and Innovation (Table 6).
- In terms of funding absorption, Croatia almost consumed the envelope dedicated to research and innovation (93.7%) but with important variations in terms of what was originally programmed in the OP and what was finally allocated among the priorities. Significant amounts were programmed without any subsequent allocation of funding in priorities related to "Investment in firms directly linked to research and innovation" and "Assistance to R&TD, particularly in SMEs". Conversely, two priorities have been allocated much more than it was originally programmed in the OP: "Other investment in firms" and "Other measures to stimulate research and innovation and entrepreneurship in SMEs" (Table 6).

Specialisation areas

• The six specialisation areas chosen by Croatia for the 2014-2020 programming period are aligned with specialisation indicators observed for participation in FP7. Croatian participants have shown a strong interest in FP7 priorities linked to Health and Quality of Life, Bio-economy, Security, Energy and Sustainable Environment, Transport and Mobility (Figure 4, Tables 8, 9&10). Only Food and Agriculture chosen as a specialisation area does not emerge from participation in FP7.

Beneficiaries profile including SME participation

By far the largest proportion of FP7 beneficiaries for Croatia (44.2% of the EU Contribution received by Croatia) is for the Higher or Secondary Education sector (University of Zagreb in ICT and food & agriculture). An important bias can be observed regarding the participation of public administrations in Croatia. This category of participant represents 7.7% the EC budget received by the country when it accounts only for 2.6% in the whole FP7 (Table 11 & Figure 5).

- The financial contribution to SMEs is proportionally larger than FP7. Croatia accounts for 22 participations of SMEs in the FP7 thematic programme, representing 18.1% of the EC budget for thematic programme open to all type of participants. Croatian SMEs are involved in the Health theme (7 participations), Environment (6) which is not an SME intensive theme, Waterborne Transport (6) and Urban Transport and Intermodalities (4) (Table 12 & Figure 6).
- The overall success rate for Croatia (16.3%) is lower than the average FP7 success rate (20.4%). The Croatian success rate is higher than the FP7 average in Transport, Space, Security, Research for the Benefit of SMEs and Regions of Knowledge (Table 13).

Main collaboration axis between Croatia and other European regions

- The EU regions that Croatia collaborated with the most in FP7 were Île-de-France (Paris area), followed by Attiki (Athens area), Madrid area, Western Slovenia (Zagreb area), and the Roma area (Table 14 & Figure 7).
- Croatian participation in FP7 is organised around all four categories of participant; structured into three distinct groups. Research organisations and Higher Education organisations collaborate predominately with their EU counterpart organisations, especially those based in Paris (INRA), Athens, Wien or Roma areas. We can observe the same phenomenon with private companies grouped together and another group composed of public administrations (Figure 8).

2. Main country characteristics

2.1 General macro-economic indicators

Table 1 demonstrates some selected macro-economic variables appertaining to the research and development activities, including the R&D expenditure and number of full time equivalent research personnel by different sectors. While the significant gap between EU15 and EU13 Member States is observable in this table, it also provides a general understanding on the position of the MS in the European context.

Table 1: General macro-economic indicators of the Country in 2013

	Croatia	EU13*	EU15	EU28
Population	4 262 140	105 127 027	401 484 800	506 611 827
GDP - Euro per capita	10 100	10 417	29 800	25 700
GDP - Euro per capita in % of EU average	39.2	40.5	115.3	100
R&D expenditure – Total (million Euro)	354.68	11 521.81	260 036.97	271 558.78
R&D expenditure – Total [% of GDP]	0.81	1.05	2.09	2.01
R&D expenditure - Business Enterprise Sector (BES) [% of GDP]	0.41	0.54	1.34	1.28
R&D expenditure - Government Sector (GOV) [% of GDP]	0.21	0.23	0.25	0.25
R&D expenditure - Higher Education Sector (HES) [% of GDP]	0.20	0.27	0.49	0.47
R&D expenditure - Private non-Profit Sector (PnP) [% of GDP]	-	0.004	0.02	0.02
R&D Personnel** – Total (% of active population)	0.57	0.62	1.25	1.12
R&D Personnel – BES (% of active population)	0.14	0.25	0.69	0.60
R&D Personnel – GOV (% of active population)	0.19	0.15	0.15	0.15
R&D Personnel – HES (% of active population)	0.24	0.22	0.39	0.36
R&D Personnel – PnP (% of active population)	-	0.002	0.01	0.01
Unemployment Rate***	17.3	9.9	9.50	9.60

Source: Compiled and calculated by using Eurostat 2013

* As EU13 indicators are not available in the data sources, the values are calculated over national statistics provided by Eurostat 2013.

** R&D personnel refer to the number of full time equivalent R&D personnel.

****Unemployment uses latest available figures for 2013 age group 15 years and over.

2.2 Main EU funding targeting Research and Innovation received by the Country

2.2.1 Breakdown of the main EU funding received

The data in **Table 2** is for FP7 and the Structural Funds 2007-2013. The FP7 data represents the total EU contribution to projects for each NUTS2 region in Croatia. The information is taken from the FP7 contract database and it represents the funding allocated to beneficiaries involved in projects that have been successfully evaluated.

The data on structural funds is from the Annual Implementation Report (AIR)¹ for 2013 and represents the EU support allocated to selected projects. The values presented in Table 1 are only for priority themes that represent research and technological development, innovation and entrepreneurship (categories 1-9) and category 74 "Developing human potential in the field of research and innovation" as described in the Official Journal². Hereafter categories 1-9 and 74 are collectively known as research and technological development, and innovation (RTDI). It should be noted that these values do not represent the total funding available but only the total allocated to projects at the time of the 2013 AIR.

¹ The Annual Implementation Reports are progress reports produced by the Structural Fund managing authority they monitor information on (1) allocations decided, (2) amounts allocated to projects and (3) the core indicators used for ERDF and Cohesion Fund.

² See Annex IV in Council Regulation (EC) No 1083/2006 available at http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32006R1083&from=EN

	FP7 EU contribution (in €M)	% of the national total	EU Contribution per inhabitant (in €)	Structural funds (in €M)	% of the national total	EU Contribution per inhabitant (in €)
Northwestern Croatia -						
(HRO1)	73.9	81,6%		n.a.	n.a.	
Central and Eastern Croatia (HRO2)	3.4	3,8%		n.a.	n.a.	
Adriatic Croatia (HRO3)	13.2	14,6%		n.a.	n.a.	
Total	90.6	100%	20.5	125.4	100%	28.3

Table 2: Regional breakdown of FP7 EU contribution received by the country

Source: EC FP7 contract database June 2014 and Annual Implementation Report (AIR) for 2013

2.2.2 Croatia in the FP7³

This section presents how the country participated in the FP7 by comparison with the EU13, the EU15 and FP7 in

- The EU FP7 budget captured (also per inhabitant), the number of participation and coordination (**Table 3**), by the yearly trend of EU FP7 budget received since the FP6 (**Figure 1**).
- The breakdown between FP7 specific programmes (**Figure 2** and **Table 4**) and funding instruments (comparison only with the FP7) (**Figure 3** and **Table 5**).

	Croatia (% of FP7)	EU13 (% of FP7)	EU15 (% of FP7)	FP7 ⁴
EU Contribution (in M€)	90.6 (0.20%)	1 883,6 (4.2%)	37 852,2 (85.3%)	44 364,1
Number of participations	394 (0.3%)	10 637 (8.0%)	105 731	132 382
Number of coordinations	39 (0.16%)	1 011(4.0%)	20 301	25 052
EU Contribution per inhabitant (in \in)	20.5	17.8	95.2	78.9 (EU28)

Source: JRC/IPTS calculated using the EU FP7 contract database June 2014

The following graph shows the evolution of the share of FP7 budget for the 15 "old" members States (EU15), the 13 "new" member States, the associated countries and the country under consideration. The share of budget from FP6 is considered as the reference (Base 100). The graph shows the share of cumulated funding by year for each of these categories. Therefore, the year 2014 represents the total share of budget taken in the FP7.

³ The "Headquarter effect " in the FP7 contract database can be an important issue for Regions (especially in the most centralized countries). If available, the location of a research department has been used as the "true" location if this differs from the headquarter location.

⁴EU28 and associated countries

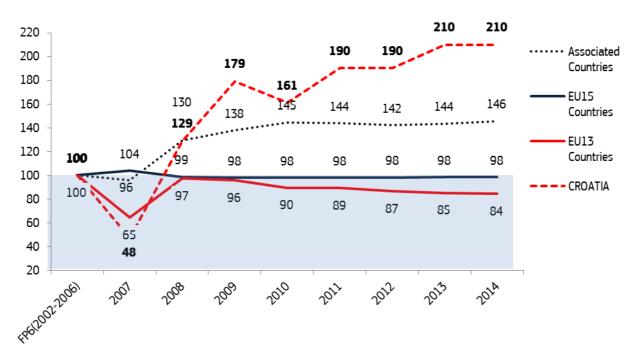




Figure 2 and Table 4 below show the difference between national profile and FP7 specific programmes where the FP7 breakdown is taken as reference.

Figure 2: Comparison of the EU Contribution breakdown among FP7

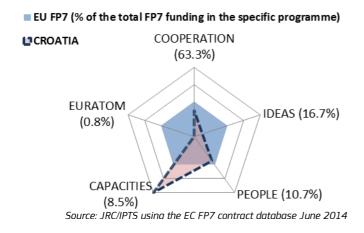


Table 4: Breakdown of the FP7 EU Contribution among specific programmes

	% of EU Contribution Croatia FP7		
COOPERATION	47.4%	63.3%	
IDEAS	4.1%	16.7%	
PEOPLE	9.3%	10.7%	
CAPACITIES	39.1%	8.5%	
EURATOM	0.0%	0.8%	
	100%	100%	

Source: JRC/IPTS calculated using the EC FP7 contract database June 2014

Source: IRCIPTS using the ECFP7 contract database June 2014

Figure 3: Comparison of funded participations breakdown among FP7 funding instruments

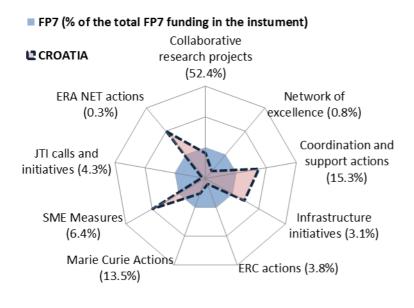


Table 5: Breakdown of the participationsamong FP7 funding instruments

	% of EU CONTRIBUTION		
	Croatia FP7		
Collaborative research projects	42.6%	52.4%	
Network of excellence	0.3%	0.8%	
Coordination and support actions	26.9%	15.3%	
Infrastructure initiatives	4.6%	3.1%	
ERC actions	0.8%	3.8%	
Marie Curie Actions	7.1%	13.5%	
SME Measures	16.5%	6.4%	
JTI calls and initiatives	0.5%	4.3%	
ERA NET actions	0.8%	0.3%	
TOTAL	100.0%	100.0%	

Source: JRC/IPTS calculated using the EC FP7 contract database June 2014

2.2.3 Structural funds⁵ dedicated to Research and innovation in the Country

Table 6 shows the estimated funds for the Croatia Operational Programmes for Regional Competitiveness (ERDF) and Human Resources Development (ESF) dedicated to the priority themes identified as research and technological development, innovation and entrepreneurship (RTDI). Only those priority themes that actually have funds attributed to them are shown in the table. There are ten priority themes identified as RTDI:

- 1. R&TD activities in research centres
- 2. R&TD infrastructure and centres of competence in a specific technology
- 3. Technology transfer and improvement of cooperation networks
- 4. Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)
- 5. Advanced support services for firms and groups of firms
- 6. Assistance to SMEs for the promotion of environmentally-friendly products and production processes
- 7. Investment in firms directly linked to research and innovation
- 8. Other investment in firms
- 9. Other measures to stimulate research and innovation and entrepreneurship in SMEs
- 74. Developing human potential in the field of research and innovation, in particular through postgraduate studies.

⁵ ERDF = European Regional Development Fund, ESF = European Social Fund, CF = Cohesion Fund

Priorit		Estimate in Adopted OP		AIR 2013			Absorp	
y code		M€ (a)	% of OP	% of RTDI	M€ (b)	% of OP	% of RTDI	(b/a)
	Reg	ional Com	petitiveness	5				
1	R&TD activities in research centres	15.3	8.1 %	8.1 %	2.8	1.5 %	2.3%	18.4 %
2	R&TD infrastructure and centres of competence	41.4	22.1 %	22.1 %	36.6	19.2 %	30.3%	88.3 %
3	Technology transfer	18.9	10.0 %	10.0 %	17.3	9.1 %	14.3%	91.7 %
4	Assistance to R&TD, particularly in SMEs	4.5	2.4 %	2.4 %	0.0	0.0 %	0.0%	0.0 %
5	Advanced support services for firms	10.4	5.5 %	5.5 %	8.1	4.2 %	6.7%	77.7 %
6	Assistance to SMEs for the promotion of environmentally-friendly products and production processes	12.4	6.6 %	6.6 %	6.8	3.6 %	5.6%	55.1 %
7	Investment in firms directly linked to research and innovation	17.2	9.1 %	9.1 %	0.0	0.0 %	0.0%	0.0 %
8	Other investment in firms	3.0	1.6 %	1.6 %	15.2	8.0 %	12.6%	505.0 %
9	Other measures to stimulate research and innovation and entrepreneurship in SMEs	6.0	3.2 %	3.2 %	34.0	17.8 %	28.1%	562.7 %
	Total Research and innovation activities in Operational Programme	129.1	68.7 %	68.7 %	120.7	63.4 %	100%	93.5 %
	Total Operational Programme	187.8	100 %	-	190.4	100 %	-	101.4 %
	Humar	Resource	s Developm	ent				
74	Developing human potential in the field of research and innovation	4.7	3.09%	100%	4.7	3.1 %	100%	100%
	Total Operational Programme	152.4	100%	-	152.4	100%	-	100%
Overall	RTDI	133.8			125.4			93.7%

Table 6: Estimated funding dedicated to Research and innovation in the Croatia Regional Competitiveness OP and Human resources Development OP for 2007-2013

Source: JRC/IPTS based on the Croatia Regional Competitiveness Operational Programme for 2007-2013 and AIR 2013

Prior to joining the EU Croatia had funding from the Instrument for Pre-Accession Assistance (IPA). The funds were implemented for the period 2007-2011 are implemented in Croatia through three multi-annual Operational Programmes as follows:

- IPA Environmental Operational Programme in Croatia IPA contribution €96 699 750
- IPA Transportation Operational Programme in Croatia IPA contribution €96 700 500 IPA
- Regional Competitiveness Operational Programme in Croatia IPA contribution €63 949 750.

The Regional Competitiveness Operational Programme supports competitiveness and a balanced regional development by enhancing SMEs competitiveness, alongside with improving economic conditions in Croatia's lagging areas and was funded as shown in **Table 7**.

Priority	IPA Contribution	National co- financing	Total funding	Co-financing rate		
Priority 1 - Improving the development potential of lagging behind regions	19 823 500	3 498 268	23 321 768	85 %		
Priority 2 - Enhancing the competitiveness of Croatian economy	38 903 500	6 865 326	45 768 826	85 %		
Priority 3 - Technical Assistance	5 222 750	921 664	6 144 414	85 %		
Total (2007-2011)	63 949 750	11 285 258	75 235 008	85 %		
Source: DG Regio - http://ec.europa.eu/regional_policy/index.cfm/en/funding/ipa/croatia/competitiveness/						

3. National specialisation areas

3.1 Specialisation areas chosen in the smart specialisation strategy for the period 2014-2020

The following tables show the specialisation areas chosen by Croatia in the design of their smart specialisation strategy. Based on information that authorities submit to the Eye@RIS3⁶ database the following related information is added:

- the capability for the priority;
- the target market that will be addressed; and
- the EU priority to which this specialisation area connects.

Capability and market categories are based on NACE⁷ sectoral codes. Often these capability and market categories overlap, as is the case in for Croatia. Any subcategories were combined with the main category.

Description of chosen specialisation area	Identified capability	Identified target market	EU priority connected to
Health and quality of life	Human health & social work activities	Human health & social work activities	Public health & security
Bio-economy	Manufacturing & industry - Biotechnology	Manufacturing & industry – Biotechnology	KETs - Industrial biotechnology
Security	Public administration, security & defence	Public administration, security & defence	Public health & security
Energy and sustainable environment	Energy production & distribution - Power generation/renewable sources	Energy production & distribution - Energy distribution	Sustainable innovation - Sustainable energy & renewables
Transport and mobility	Transporting & storage - Water transport & related services	Transporting & storage	Sustainable innovation - Smart green & integrated transport systems
Agro-food	Agriculture, forestry & fishing	Manufacturing & industry - Food, beverage & tobacco products	Sustainable innovation - Sustainable agriculture

 Table 8: Specialisation areas chosen in the smart specialisation strategy of Croatia

Source: S3 web platform http://s3platform.jrc.ec.europa.eu/eye-ris3

3.2 National specialisation indication through the participation in FP7 for the period 2007-2014

In the innovation Union progress report published in 2014⁸, the science and technology classifications were matched with FP7 thematic priorities thereby offering the possibility of further analysis of codevelopments of science and technologies at the EU and national level. We choose here to follow the same taxonomy in order to offer the reader the possibility to compare easily specialisation information provided by the IU progress report and those provided in this report.

The following table shows the participation breakdown by EU Contribution among research areas. Correspondence with specialisation areas chosen by the region and countries in their Smart Specialisation strategy is shown in the last column according to JRC-IPTS interpretation. Some specialisation areas chosen by the region or country can be too generic or on the contrary too specific with regard to the taxonomy used. In this case, we consider the research area not being fully covered by S3 strategy.

⁶ <u>http://s3platform.jrc.ec.europa.eu/eye-ris3</u>

⁷ http://epp.eurostat.ec.europa.eu/portal/page/portal/nace_rev2/introduction

⁸ http://ec.europa.eu/research/innovation-union/pdf/state-of-the-union/2014/iuc_progress_report_2014.pdf#view=fit&pagemode=none

FP7 participations can be analysed with regard to specialisation indicators provided with bibliometric and patents indicators provided in the Innovation Union progress report (only) at national level.

- yes = Research area fully included into S3 priority definition;
- yes partially= Research area only partially included into S3 priority definition (S3 priority definition do not cover the full scope the research area).

Table 9: General assessment of the participation of the country in the FP7 themes and activities and correspondence with specialisation areas of S3

Research area	EU Contribution (in M€)	S3 Priority
Food, Agriculture and Fisheries	1.27	yes
Biotechnology	1.35	yes partially
Health	10.48	yes partially
Information & communication technologies (ICT)	8.76	
Nanosciences & Nanotechnologies	0.39	
Materials	0.21	
New production technologies (incl. Construction technologies)	0.61	yes partially
Integration of nanotechnologies for industrial applications (JTI ENIAC Incl.)	0.14	
Energy	3.95	yes partially
Environment	3.27	yes partially
Aeronautics	0.01	
Space	0.54	
Automotive	0.10	
Rail	0.26	
Waterborne	1.29	yes partially
Urban transport and intermodalities	4.79	yes partially
Socio economic sciences and humanities	1.91	
Security	3.50	yes
TOTAL Cooperation Programme	42.83	
TOTAL Cooperation Programme related to S3 priorities	30.51 (71.2%)	

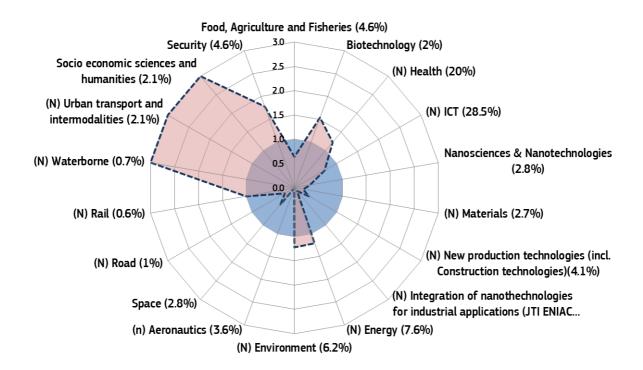
Source: data: FP7 contracts database-June 2014, processed by JRC-IPTS

Regarding specialisation areas emerging from the FP7 participation, the following graph shows the difference in the budget breakdown between overall FP7 funding and the FP7 contribution received by the country (or the region) among themes. This is not a performance indicator because we are only comparing the territory (Country or Region) with itself. In order to avoid mass effect of better funded themes (such as Health, ICT for instance) It has been decided to consider a uniform distribution of the overall FP7 funding among themes. Graph show if indicator is superior to 1 an "over-distribution" or a "sub-distribution" if indicator inferior to 1. The graph must be read with the table hereunder. The table show the weight of each theme in the total funding.

The matching between smart specialisation areas chosen by (national or regional) authorities should be treated with care in the case of specialisation areas that are more detailed than FP7 or conversely less detailed. The theme funded by FP7 encompasses a broad range of activities (see table in annex 1 to see research activities funded under each theme) whereas Specialisation areas concern only one or a limited number of activities.

Figure 4: S&T specialisation areas according to the EU Contribution received by FP7 participants

Framework programme 7 (% of FP7 budget dedicated to cooperation programme in the area)
 CROATIA



Source: data: FP7 contracts database-June 2014, processed by JRC-IPTS

Table 10: Budget breakdown among themes (Figure 4 is only the graphical interpretation of this table)

Research area	Croatia	FP7
Food, Agriculture and Fisheries	3.0%	4.6%
Biotechnology	3.2%	2.0%
Health	24.5%	20.0%
ICT	20.5%	28.5%
Nanosciences & Nanotechnologies	0.9%	2.8%
Materials	0.5%	2.7%
New production technologies (incl. Construction technologies)	1.4%	4.1%
Integration of nanothechno. for industrial applications	0.3%	3.9%
Energy	9.2%	7.6%
Environment	7.6%	6.2%
Aeronautics	0.0%	3.6%
Space	1.3%	2.8%
Automotive	0.2%	1.0%
Rail	0.6%	0.6%
Waterborne	3.0%	0.7%
Urban transport and intermod.	11.2%	2.1%
Socio economic sci and humanity	4.5%	2.1%
Security	8.2%	4.6%
	100%	100%

Source: IPTS/JRC calculated using the FP7 contracts database-June 2014

4. EU funding users profile

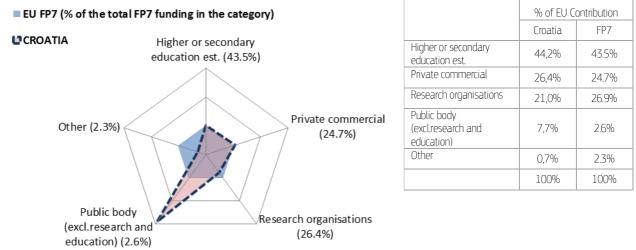
4.1 FP7 beneficiaries profile

4.1.1 Participation profile by type of activity

Figure 5 shows graphically the difference between national (in dark blue) and regional (red line) participation profile by type of participant with the FP7 breakdown taken as the reference (in Base 100). We observe the difference in the distribution at country level and at regional level. **Table 11** complements the figure comparing the breakdown of FP7 contribution among the participant typology for the country and all FP7 participants.

Figure 5: Comparison of the EU Contribution breakdown by type of 7 participant between FP7 profile (in base 100) and national profile (

Table 11: Breakdown of the FP7 EU Contribution



Scurce: JRC/IPTS calculated using the FP7 contracts database-June 2014

FP7 SME Participation

This section shows the participation of SMEs from the country in the FP7 cooperation programme and other activities and compares figures with the national level. **Table 12** provides information about SMEs' participation in the regional research and innovation landscape. The official EU target is 15% of FP7 budget dedicated to the cooperation programme (thematic) should go to SMEs. The country level (i) is compared in budget and in number of participations and coordinations to and to the overall FP7 (column ii).

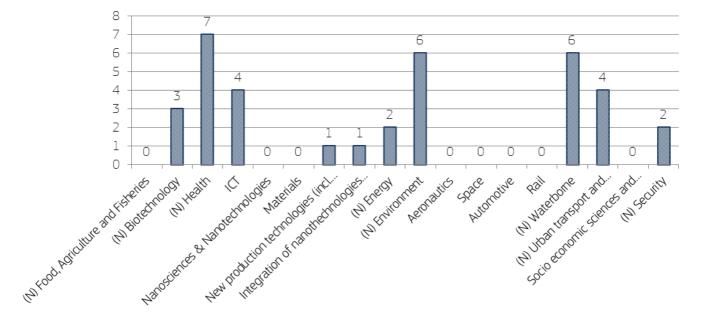
Table 12: General indicators about SME participation in the FP7 Cooperation programme

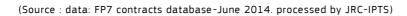
	Croatia (i)	FP7 (ii)
EC Financial Contribution-Cooperation Programme	12.33 (28.7%)	2 560.42 (9.1%)
Number of SME participation-Cooperation Programme	36 (15.9%)	9 483 (10.9%)
Number of SME coordination-Cooperation Programme	0 (0%)	555 (7.1%)
Source: data: FP7 contracts database-June 2014 processed by JRC-II	PTS	

The participation of Croatian SMEs among the various research areas is shown with **Figure 6**. Information about the chosen national (N) specialisation areas are given to assess the extent to which the research theme participation of SMEs corresponds to the specialisation areas.









4.1.2 Success rates: Comparison between national and overall FP7 in FP7 themes and activities

The following table shows a comparison of success rates by FP7 themes and activities between the <u>national</u> and FP7 level. Information at regional level is not shown because it is not reliable enough to be considered in the analysis.

In tional success rate is above EU average

🔻 : National success rate is below EU average

Table 13: Success rates by Themes or activities- Comparison between national and European level

			Croatia		FP7			
FP7 specific programme	Theme/ Activity	Nbr of Particip ations*	Nbr of Retained participat ions*	Success Rate	Nbr of Participat ions*	Nbr of Retained participat ions*	Success Rate	
COOPERATION	Health	125	23	V 18.4%	41 361	10 275	24.8%	
COOPERATION	Food. Agriculture. and Biotechnology	172	25	V 14.5%	35 362	7 465	21.1%	
COOPERATION	Information and Communication Technologies	340	44	V 12.9%	131 030	21 356	16.3%	
COOPERATION	Nanosciences. Nanotechnologies. Materials and new Production Technologies	61	9	▼ _{14.8%}	35 451	9 354	26.4%	
COOPERATION	Energy	76	13	V 17.1%	17 415	4 072	23.4%	
COOPERATION	Environment (including Climate Change)	154	26	V 16.9%	31 912	6 825	21.4%	
COOPERATION	Transport (including Aeronautics)	133	41	0 30.8%	30 340	8 779	28.9%	
COOPERATION	Socio-economic sciences and Humanities	177	13	V 7.3%	23 830	2 492	10.5%	
COOPERATION	Space	16	5	0 31.3%	8 277	2 397	29.0%	
COOPERATION	Security	62	13	21.0%	18 826	3 595	19.1%	
COOPERATION	General Activities (Annex IV)	0	0		120	50	41.7%	
COOPERATION	Joint Technology Initiatives (Annex IV-SP1)	15	2	V 13.3%	15 299	6 277	41.0%	
COOPERATION	TOTAL COOPERATION	1 331	214	V 16.1%	389 223	82 937	21.3%	
IDEAS	European Research Council	121	2	V _{1.7%}	54 789	5 312	9.7%	
PEOPLE	Marie-Curie Actions	312	56	V 17.9%	111 266	22 530	20.2%	
CAPACITIES	Research Infrastructures	39	14	▼35.9%	10 677	4 564	42.7%	
CAPACITIES	Research for the benefit of SMEs	309	65	21.0%	48 493	8 426	17.4%	
CAPACITIES	Regions of Knowledge	44	9	0 20.5%	3 844	746	19.4%	
CAPACITIES	Research Potential	152	15	▼9.9%	3 107	362	11.7%	
CAPACITIES	Science in Society	46	5	V 10.9%	7 329	1 961	26.8%	
CAPACITIES	Coherent development of research policies	0	0		390	89	22.8%	
CAPACITIES	Activities of International Cooperation	29	7	V 24.1%	3 908	1 476	37.8%	
EURATOM	Fusion Energy	0	0		79	65	82.3%	
EURATOM	Nuclear Fission and Radiation Protection	4	1	▼25.0%	3 113	1 539	49.4%	
FP7	TOTAL	2 387	388	V 16.3%	636 218	130 007	20.4%	

Source : data: FP7 proposals database-Feb 2014. processed by JRC-IPTS

4.2 FP7 Main collaboration axis and stakeholder analysis

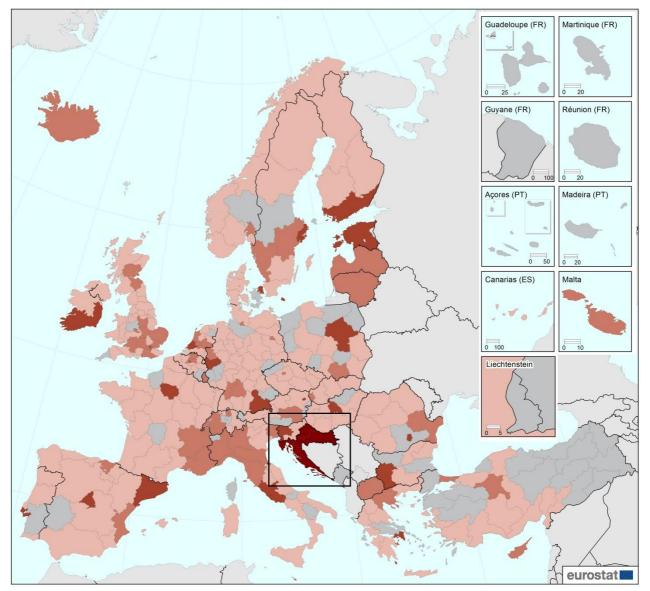
4.2.1 From a territorial perspective

The map below shows the European regions (at NUTS2 level) collaborating the most with Croatia in the FP7 thematic activities. **Table 14** shows the list of the first regions collaborating. The figure represents the number of projects where at least one participant from Croatia collaborates with at least one participant from the other region.

Figure 7: Origins of organisations collaborating with Croatia in FP7 thematic activities

European collaboration map

Source: EC FP7 Contract database-cooperation programme processed by JRC-IPTS



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat

Number of collaborations





Rank	NUTS2 Code	Name	Nbr of Collaborations
1	FR10	Île de France (Paris area)	97
2	EL30	Attiki (Athens area)	83
3	ES30	Comunidad de Madrid	73
4	SI02	Zahodna Slovenija	71
5	ITE4	Lazio (Roma area)	70
6	AT13	Wien	69
7	BE10	Région de Bruxelles-Capitale / Brussels Hoofdstede	63
8	NL33	Zuid-Holland (Amsterdam area)	60
9	HU10	Közép-Magyarország	55
10	R032	București - Ilfov	54

Table 14: The closest EU regions to Croatia in the FP7 cooperation programme

Source: JRC/IPTS calculated using the FP7 contracts database-June 2014

4.2.2 From a stakeholder perspective

Table 15 shows the organisations most frequently collaborating with organisations based in Croatia in the FP7 cooperation programme and the

Table 16 shows the leading organisations based in Croatia in the FP7 cooperation programme.

Table 15: the leading organisations collaboratin	g with organisations based in Croatia in FP7
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Legal Name	Theme	Туре	NUTS2	Participations	
FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	NG DER ANGEWANDTEN Technologies		DE21	7	
INSTITUT JOZEF STEFAN	EF STEFAN Information and Communication Technologies		SI02	6	
INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	Food, Agriculture, and Biotechnology	REC	FR10	5	
INSTITUT JOZEF STEFAN	Environment (including Climate Change)	REC	SI02	4	
JRC -JOINT RESEARCH CENTRE- EUROPEAN COMMISSION	Environment (including Climate Change)	REC	EU	4	
UNIVERZA V LJUBLJANI	Environment (including Climate Change)	HES	SI02	4	
FUNDACAO PARA A CIENCIA E A TECNOLOGIA	Food, Agriculture, and Biotechnology		PT17	4	
ISTITUTO SUPERIORE DI SANITA	Food, Agriculture, and Biotechnology		ITE4	4	
OBENHAVNS UNIVERSITET	Food, Agriculture, and Biotechnology	HES	DK01	4	
MINISTERIO DE ECONOMIA Y COMPETITIVIDAD	Food, Agriculture, and Biotechnology	PUB	ES30	4	
STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	Food, Agriculture, and Biotechnology	REC	NL22	4	
UNIVERZA V LJUBLJANI	Food, Agriculture, and Biotechnology	HES	SI02	4	
THE UNIVERSITY OF EDINBURGH	Health	HES	UKM2	4	
CONSIGLIO NAZIONALE DELLE RICERCHE	Information and Communication Technologies	REC	ITE4	4	
EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZURICH	Information and Communication Technologies	HES	CH04	4	
AN TUDARAS UM ARD OIDEACHAS	Socio-economic sciences and Humanities	HES	IE02	4	
Ministrstvo za izobrazevanje, znanost in sport	Socio-economic sciences and Humanities	PUB	SI02	4	
UNIVERSITAT POMPEU FABRA	Socio-economic sciences and Humanities	HES	ES51	4	
BUREAU VERITAS-REGISTRE INTERNATIONAL DE CLASSIFICATION DE NAVIRES ET D AERONEFS SA	Transport (including Aeronautics)	PRC	FR10	4	
CENTER OF MARITIME TECHNOLOGIES EV	Transport (including Aeronautics)	REC	DE60	4	

Source: JRC/IPTS calculated using the FP7 contracts database-June 2014

Legal Name	Theme	Туре	Participations
NOVAMINA CENTAR INOVATIVNIH TEHNOLOGIJA DOO	Research for the benefit of SMEs	PRC	19
SVEUCILISTE U ZAGREBU FAKULTET ELEKTROTEHNIKE I RACUNARSTVA	Information and Communication Technologies	HES	12
RUDER BOSKOVIC INSTITUTE	Marie-Curie Actions	REC	9
INETEC-INSTITUT ZA NUKLEARNU TEHNOLOGIJU DRUSTVO S OGRANICENOM ODGOVORNOSCU ZA ISTRAZIVACKO RAZVOJNE I KONSULTING USLUGE, PROIZVODNJU I TRGOVINU	Research for the benefit of SMEs	PRC	7
RUDER BOSKOVIC INSTITUTE	Research Infrastructures	REC	7
CROATIAN CHAMBER OF ECONOMY CCE	Research for the benefit of SMEs	REC	6
EMERGO d.o.o.	Research for the benefit of SMEs	PRC	5
ERICSSON NIKOLA TESLA D.D.	Information and Communication Technologies	PRC	5
RUDER BOSKOVIC INSTITUTE	Information and Communication Technologies	REC	5
Alveus l.l.c.	Transport (including Aeronautics)	PRC	5
ULJANIK BRODOGRADILISTE DD	Transport (including Aeronautics)	PRC	5
BRODARSKI INSTITUT DOO*BI	Research for the benefit of SMEs	REC	4
RUDER BOSKOVIC INSTITUTE	Research Potential	REC	4
UNIVERSITY OF ZAGREB-Faculty of Veterinary Medicine	Food, Agriculture, and Biotechnology	HES	4
AGENCIJA ZA MOBILNOST I PROGRAME EUROPSKE UNIJE	Marie-Curie Actions	PUB	4
SVEUCILISTE U RIJECI	Marie-Curie Actions	HES	4

Source: JRC/IPTS calculated using the FP7 contracts database-June 2014

Figure 8 is a network analysis revealing the main collaboration links between organisations based in the country with national and international organisations. To improve the readability, organisations have been gathered in "groups" according to their type of activities (research, industry, higher education, governmental) and their geographical origins (according to NUTS2 classification). The graph does not show the full picture, some groups (nodes) may not appear on the graph if they do not have at least one strong link to another group.

In the case of Croatia, three rather homogeneous sub-networks can be easily identified:

- One network with Croatian firms (PRC) in the centre strongly linked to Slovenian firms and German firms from Koln;
- A second sub-network with Higher education (HES) and public research centres mostly linked to other European public research organisations and some universities
- A third Sub-network with Croatian public bodies (mainly ministries) linked with their European equivalent in ERA-NETs and coordination and support actions.

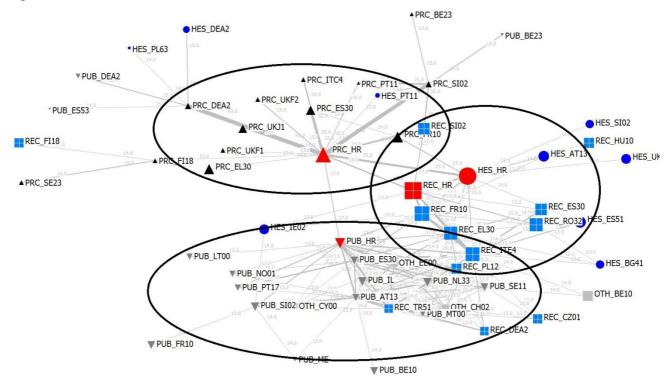


Figure 8 The main collaboration network of Croatia in the FP7

Remark: -The graph does not show the full picture of regional collaborations. A node appears on the graph only if the number of connections (collaborations) is superior to 6.

- HES Higher or secondary education est.
- REC Public Research organisations
- PRC Private commercial (Large companies and SME)
- PUB Public body (excl. research and education)
- OTH Other private organisations

Région de Bruxelles-Capitale **BE10** BE23 Prov. Oost-Vlaanderen BG41 Югозападен/ Yugozapaden

CY00 Cyprus

Wien

Praha CZ01

AT13

- DEA2 Köln
- EL30 Attiki
- ES30 Comunidad de Madrid
- ES51 Cataluña
- ES53 Illes Balears
- Etelä-Suomi FI18
- FR10 Île de France
- HU10 Közép-Magyarország (Budapest) Southern and Eastern
- IE02
- Israel IL
- ITC4 Lombardia
- LT00 Lietuva
- ME Montenegro
- MT00 Malta
- N001 Oslo og Akershus
- PL63 Pomorskie
- PT11 Norte(Porto área)
- PT17 Lisboa
- București Ilfov R032 Stockholm SF11
- SE23 Västsverige
- SI02 Zahodna Slovenija
- TR51 Ankara
- UKF1 Derbyshire and Nottinghamshire
- UKF2 Leicestershire, Rutland and Northamptonshire

Source: JRC/IPTS calculated using the FP7 contracts database-June 2014

Annexes

1. Participation in FP7 cooperation programme

Table 17: Detailed participation figures in FP7 research areas

		Croatia			FP7	
		EC contrib. (In €M)	Nbr of part.		EC contrib. (In €M)	Nbr of part.
TOTAL FP7		42.92	226		27 902.29	85 994
Health		10.48	24		5 515.56	12 523
Biotechnology. generic tools and medical technologies for human health	HR	5.70	9	FP7	2 377.05	4 377
High-throughput research	HR	0.99	1	FP7	157.93	306
Detection. diagnosis and monitoring	HR	0.63	1	FP7	272.30	577
Suitability, safety, efficacy of therapies	HR	0.00	0	FP7	117.78	204
interventions	HR	3.79	6	FP7	457.80	833
Integrating biological data and processes: large- scale data gathering. systems biology	HR	0.29	1	FP7	647.92	1 190
JTI-IMI (Innovative Medicines Initiative)	HR	0.00	0	FP7	723.31	1 267
Translating research for human health	HR	4.02	8	FP7	2 356.65	5 429
Research on the brain and related diseases. human development and ageing	HR	1.66	2	FP7	518.12	1094
Translational research in major infectious diseases: To confront major threats to public health	HR	0.31	2	FP7	764.08	175
Translational research in other major diseases	HR	2.05	4	FP7	1 074.45	258
Optimising the delivery of healthcare to European citizens	HR	0.73	5	FP7	399.06	1422
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 Quality. efficiency and solidarity of healthcare	HR	0.49	4	FP7	106.73	36.
systems including transitional health systems	HR	0.00	0	FP7	99.32	37
Health promotion and prevention	HR	0.23	1	FP7	81.77	32
International public health & health systems Specific international cooperation actions for health system research	HR HR	0.00	0	FP7 FP7	86.37	28
·						
Other Actions across the Health Theme	HR	0.04	2	FP7	382.80	1295
Coordination and Support Actions across the Theme	HR	0.04	2	FP7	46.70	436
Responding to EU policy needs	HR	0.00	0	FP7	192.51	638
Specific International Cooperation Actions (SICA) Horizontal topics for collaborative projects relevant	HR	0.00	0	FP7	49.36	139
for the whole of theme health	HR	0.00	0	FP7	94.24	82
Food. Agriculture and Fisheries. and Biotechnology Sustainable production and management of	HR	2.62	26	FP7	1 841.70	784
biological resources from land. forest. and aquatic environment	HR	0.11	3	FP7	452.65	216
Increased sustainability of all production systems (agriculture, forestry, fisheries and aquaculture); plant health and crop protection	HR	0.09	2	FP7	326.56	155
Optimised animal health production and welfare across agriculture. fisheries and aquaculture	HR	0.02	1	FP7	126.09	607

Energy	HR	3.95	19	FP7	2 094.31	5422
topics within NMP	HR	0.34	2	FP7	641.14	1870
JTI-ENIAC (Nanoelectronics Technologies 2020) Recovery Package: Public-Private Partnership (PPP)	HR	0.00	0	FP7	468.96	1349
applications	HR	0.14	4	FP7	594.25	2121
New production processes Integration of nanothechnologies for industrial	HR	0.27	1	FP7	490.01	1525
Materials	HR	0.21	1	FP7	742.04	2226
Nanosciences and Nanotechnologies	HR	0.39	2	FP7	771.56	2457
Nanosciences. Nanotechnologies. Materials and new Production Technologies - NMP	HR	1.35	10	FP7	3 707.95	11548
JTI-ARTEMIS (Embedded Computing Systems)	HR	0.00	0	FP7	135.81	1039
International Cooperation	HR	0.00	0	FP7	36.05	307
ICT for Learning and Access to Cultural Resources	HR	0.24	2	FP7	171.24	495
ICT for the Enterprise and Manufacturing	HR	0.00	0	FP7	216.75	523
Horizontal Actions	HR	0.19	4	FP7	64.38	545
Future and emerging technologies	HR	2.45	11	FP7	1 466.65	3983
Governance	HR	1.22	6	FP7	883.60	2650
energy efficiency ICT for Health. Ageing Well. Inclusion and	HR	1.31	9	FP7	842.77	2695
Digital libraries and content ICT for mobility, environmental sustainability and	HR	1.06	4	FP7	644.08	1790
Components. systems. engineering	HR	0.21	1	FP7	810.22	2398
Cognitive systems. interaction. robotics	HR	0.98	2	FP7	615.93	1220
infrastructures	HR	1.08	6	FP7	1 987.50	555
Technologies Pervasive and Trustworthy network and service	HR	8.76	45	FP7	7 874.97	23202
Information and Communication						
and Cross cuting activities	HR	0.25	7	FP7	252.64	1547
Other activities Socio-economic research and support to policies	HR	0.25	7	FP7	252.64	1547
Emerging trends in biotechnology	пк	0.00	0	FP7	76.38	205
Environmental biotechnology	HR HR	0.12	1	FP7	58.30	268
Biorefinery	HR	0.00	0	FP7	78.68	222
bio-products and bio-processes	HR	0.52	4	FP7	114.61	328
biotechnology) Industrial biotechnology: novel high added-value		0.70	2	FP7	125.95	413
Novel sources of biomass and bioproducts Marine and fresh-water biotechnology (blue	HR		0	FP7	110.98	39]
I	HR	0.00				
Environmental impacts and total food chain Life sciences. biotechnology and biochemistry for sustainable non-food products and processes	HR	1.35	0	FP7 FP7	84.21	395
Food quality and safety	HR	0.48	6	FP7	101.10	467
Food processing	HR	0.18	1	FP7	127.13	590
Nutrition	HR	0.00	0	FP7	149.25	493
Consumers	HR	0.17	1	FP7	39.78	142
The Ocean of Tomorrow	HR	0.08	1	FP7	70.04	217
and well being	HR	0.91	9	FP7	571.52	2304

Hydrogen and fuel cells	HR	0.00	0	FP7	23.94	69
JTI-FCH European Hydrogen and Fuel Cell Technology Platform)	HR	0.16	2	FP7	415.67	1186
Renewable electricity generation	HR	0.00	0	FP7	473.52	998
Renewable fuel production	HR	0.20	3	FP7	239.19	508
Renewables for heating and cooling	HR	0.00	0	FP7	59.28	174
CO2 capture and storage technologies for zero emission power generation	HR	0.05	1	FP7	145.80	478
Clean coal technologies	HR	0.00	0	FP7	58.13	130
Cross-cutting actions between activities Energy-5 and Energy-6	HR	0.08	2	FP7	27.99	84
Smart energy networks	HR	0.08	2	FP7	261.24	654
Energy efficiency and savings	HR	2.73	4	FP7	221.38	551
Knowledge for energy policy making	HR	0.13	2	FP7	17.82	115
Horizontal programme actions	HR	0.51	3	FP7	150.35	475
Environment (including Climate Change)	HR	3.27	27	FP7	1 719.15	7131
Pressures on environment and climate	HR	0.71	7	FP7	360.13	1587
Sustainable management of resources	HR	0.88	4	FP7	276.87	1106
Environmental technologies	HR	0.34	3	FP7	290.21	1404
Earth observation and assessment tools for sustainable development	HR	0.45	4	FP7	160.60	810
Horizontal activities	HR	0.09	2	FP7	16.72	152
Coping with climate change	HR	0.00	0	FP7	146.51	399
Sustainable use and management of land and seas	HR	0.00	0	FP7	139.29	450
Improving resource efficiency	HR	0.41	5	FP7	169.03	580
Protecting citizens from environmental hazards	HR	0.33	1	FP7	86.87	270
Mobilising environmental knowledge for policy. industry and society	HR	0.06	1	FP7	72.92	373
Aeronautics and air transport	HR	0.01	1	FP7	1 004.78	3174
Green Aircraft	HR	0.00	0	FP7	295.55	827
Time Efficient Air Transport Operations	HR	0.00	0	FP7	40.45	108
Aircraft Safety	HR	0.00	0	FP7	150.26	401
Aircraft Operational Cost	HR	0.00	0	FP7	385.95	1034
Operational Security	HR	0.00	0	FP7	13.48	45
Promising Pioneering Ideas in Air Transport CROSS-CUTTING ACTIVITIES for implementation of	HR	0.00	0	FP7	81.68	307
the sub-theme programme	HR	0.01	1	FP7	35.41	434
JTI-CLEAN SKY (Aeronautics and Air Transport)	HR	0.00	0	FP7	2.00	18
Space	HR	0.54	5	FP7	784.60	3203
Space-based applications at the service of the European Society	HR	0.00	0	FP7	350.86	1245
Research to support space science and exploration	HR	0.52	4	FP7	248.28	979
International Cooperation	HR	0.03	1	FP7	109.56	400
GALILEO/Exploiting the Full Potential	HR	0.00	0	FP7	48.23	386
GALILEO/Adapting Receivers to Requirements and Upgrading Core Technologies	HR	0.00	0	FP7	13.94	69
GALILEO/Supporting Infrastructure Evolution	HR	0.00	0	FP7	13.74	124
Sustainable surface transport (INCLUDING THE 'EUROPEAN GREEN CARS INITIATIVE')	HR	6.45	39	FP7	1 203.53	5255

				1		
Rail	HR	0.26	3	FP7	164.54	766
Road	HR	0.10	1	FP7	287.80	1051
Urban mobility	HR	2.86	7	FP7	142.53	429
Waterborne	HR	1.29	10	FP7	184.66	776
Multimodal	HR	1.66	13	FP7	364.33	1794
Cross cutting activities	HR	0.27	5	FP7	59.67	439
		1.01	15		57055	2766
Socio-economic sciences and Humanities Growth employment and competitiveness in a	HR	1.91	15	FP7	579.55	2766
knowledge society Combining economic, social and environmental objectives in a European perspective	HR HR	0.04	1	FP7 FP7	108.37	473
Major trends in society and their implications	HR	0.59	3	FP7	93.80	485
Europe in the world	HR	0.00	0	FP7	98.91	432
The Citizen in the European Union	HR	0.98	7	FP7	92.55	397
Socio-economic and scientific indicators	HR	0.11	1	FP7	23.44	150
Foresight activities	HR	0.07	1	FP7	15.88	105
Horizontal Actions	HR	0.02	1	FP7	28.92	225
Security	HR	3.50	13	FP7	1 263.49	3741
Increasing the Security of citizens	HR	2.58	6	FP7	235.78	656
Increasing the Security of infrastructures and utilities	HR	0.00	0	FP7	248.96	710
Intelligent surveillance and enhancing border security	HR	0.00	0	FP7	208.72	466
Restoring security and safety in case of crisis	HR	0.43	2	FP7	289.53	733
Improving Security systems integration. interconnectivity and interoperability	HR	0.20	1	FP7	74.50	212
Security and society	HR	0.07	1	FP7	113.39	479
Security Research coordination and structuring	HR	0.22	3	FP7	70.01	398
Security systems integration. interconnectivity and Interoperability	HR	0.00	0	FP7	21.80	83
Horizontal Actions	HR	0.00	0	FP7	0.79	4