European Commission

Stairway to Excellence

Cohesion Policy and the Synergies with the Research and Innovation Funds

Bulgaria (BG)

Facts & Figures

July 2015

Joint Research Centre

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Please include the following information to reference this report:

- European Commission, JRC-IPTS (2015), Stairway to Excellence Facts and Figures: Bulgaria.

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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 (http://s3platform.jrc.ec.europa.eu/stairway-to-excellence) 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 a 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 Bulgaria (0.65%) is lower than the EU13 average (1.05%) and EU15 countries (2.09%). R&D expenditure is primarily concentrated in the Business Enterprise sector followed by the Government sector (Table 1).

- The Sofia region (Yugozapaden) takes by far the largest proportion of FP7 funding (80%). The Structural funds are managed at the national level and the regional breakdown of Structural funds is unavailable (Table 2).

- As is the case for many of the EU13 countries, Bulgaria did not manage to maintain its funding share from FP6 in FP7. Overall the EU13 countries are even outperformed by the countries associated to FP7 (Figure 1).

- In FP7, Bulgaria accounts for 697 participations and 45 project coordinations. The FP7 financial contribution per inhabitant (12.9 €/inhabitant) is lower than the EU13 average (17.8 €/inhabitant) and is far below the EU15 average (95.2 €/inhabitant) (Table 3).

EU funding allocation

- While the largest FP7 financial contribution to Bulgaria is from the Cooperation specific programme (the thematic part of FP7), there is a strong bias towards the Capacities (SME Measures, Research infrastructures initiatives.) specific programme as it accounts for around 42.7% of their contribution but only accounts for 8.5% of FP7 (Table 4 & Figure 2). The same bias occurs to a lesser extent for the EURATOM programme. In terms of FP7 funding instruments, it appears that Bulgarian organisations have had a preference for Coordination and Support actions, Infrastructure Initiatives and SME Measures (Figure 3 & table 5).
- Structural funds dedicated to Research and Innovation are managed through two Operational Programmes (one using ERDF and the other ESF) at the national level. The absorption rate is over 100% for RTDI with some disparities (in funding and absorption rate) among priority themes (eg ''other investment in firms'' represents around 44% of the RTDI dedicated funds). No funding has been spent on R&TD activities in research centres. Developing human potential is funding through the ESF (Table 6).

Specialisation areas

- Bulgaria has designed its S3 national strategy only at the national level. The four specialisation areas chosen by Bulgaria are partially aligned with specialisation information observed form the Bulgarian participation in FP7. About 56% of the FP7 funding can be estimated as being aligned to Bulgarian specialisation areas chosen in the S3 (Tables 7 & 8).

- Participants have shown stronger interest in FP7 priorities linked to Food, Agriculture and Fisheries, Biotechnology, ICT, Nanosciences & Nanotechnologies, Environment, and Social Sciences and Humanities that account for a greater proportion of Bulgaria's funding than FP7 overall. However, the highest proportion of funding for Bulgaria comes from ICT (33.6%) and this is greater than the proportion for FP7 (28.5%). (Figure 4, Tables 9).

Beneficiaries profile including SME participation

- The largest proportion of the FP7 EU contribution received by Bulgaria is to the Higher or Secondary Education sector, 33.1% which is less than the FP7 average. This sector is closely followed by research organisations, 30.9% and Private Commercial sector at 28.7%. A bias appears for participation in the 'Other" category (Consulting firms etc.) (Table 10 & Figure 5).

- The financial contribution to SMEs is proportionally much larger than FP7. Bulgaria accounts for 78 participations of SMEs in the FP7 thematic programme, representing 34.1% of the EC budget for thematic programme open to all type of participants. The area Bulgarian SMEs are involved in the most is the ICT theme (39 participations), and the areas where SMEs are not involved are Biotechnology, Integration of Nanotech, Space, Rail and Socio-economics and Humanities (Table 11 & Figure 6).

- The overall success rate for Bulgaria (15.4%) is lower than the average FP7 success rate (20.4%). The Bulgarian success rate is higher than the FP7 average in theme dedicated to Space, Marie Curie actions and Research infrastructure initiatives and Regions of Knowledge (Table 12).

Main collaboration axis between Bulgaria and other European countries

- The EU regions that Bulgarian organisations collaborated with the most in FP7 are France (Paris area), Greece (Athens area), Italy (Roma area), and Spain (Madrid area) (Table 13 & Figure 7).

- Bulgarian participation in FP7 is organised around all four categories of participant; structured into three distinct groups. Network analysis shows that Bulgarian research organisations are strongly linked to Bulgarian universities who are acting as an interface between other European Universities and the other participants. The role of Private firms appears minor. Bulgarian firms appear isolated from the other participants connecting with other (Bulgarian but not only) participants through other firms based in EU member States. Universities mostly from Germany, UK, Italy, the Netherlands, and Spain etc. play a structuring while Bulgarian universities appear closer to Research organisations than universities based in other Member States (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

	Bulgaria	EU13*	EU15	EU28
Population	7 284 552	105 127 027	401 484 800	506 611 827
GDP - Euro per capita	5 500	10 417	29 800	25 700
GDP - Euro per capita in % of EU average	21.3	40.5	115.3	100
R&D expenditure – Total (million Euro)	266.74	11 521.81	260 036.97	271 558.78
R&D expenditure – Total [% of GDP]	0.65	1.05	2.09	2.01
R&D expenditure - Business Enterprise Sector (BES) [% of GDP]	0.40	0.54	1.34	1.28
R&D expenditure - Government Sector (GOV) [% of GDP]	0.19	0.23	0.25	0.25
R&D expenditure - Higher Education Sector (HES) [% of GDP]	0.06	0.27	0.49	0.47
R&D expenditure - Private non-Profit Sector (PnP) [% of GDP]	0	0.004	0.02	0.02
R&D Personnel** – Total (% of active population)	0.52	0.62	1.25	1.12
R&D Personnel – BES (% of active population)	0.11	0.25	0.69	0.60
R&D Personnel – GOV (% of active population)	0.27	0.15	0.15	0.15
R&D Personnel – HES (% of active population)	0.13	0.22	0.39	0.36
R&D Personnel – PnP (% of active population)	0.01	0.002	0.01	0.01
Unemployment Rate***	12.9	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 Bulgaria. The information is from the contract database for FP7 and it represents funding to beneficiaries in the regions for projects that have been successfully evaluated. The table is ranked by the first region being the one with the largest contribution from FP7.

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 Journal[2]. 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 funding available, 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

Table 2: Territorial (NUTS3 level) breakdown of FP7 EU contribution received by the country

	FP7 EU contribution (€M)	% of the national total	FP7 EU contribution er capita (in €/inhab)	Structural funds RTDI (€M)	% of the national total	Structural funds dedicated to RTDI per capita (in €/inhab
Северозападен/ Severozapaden (BG31)	0.5	0.5%	0.58	-	-	-
Северен централен/ Severen tsentralen (BG32)	3.1	3.1%	3.35	-	-	-
Североизточен/ Severoiztochen(BG33)	7.5	7.7%	7.62	-	-	-
Югоизточен/ Yugoiztochen (BG34)	0.9	0.9%	0.80	-	-	-
Югозападен/ Yugozapaden (BG41)	77.4	79.4%	36.52	-	-	-
Южен централен/ Yuzhen tsentralen (BG42)	8.0	8.3%	5.27	-	-	-
	97.4	**100.0%**	**12.9**	**826.4**	**100%**	**109.3**

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

2.2.2 The country in the FP7[3]

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**).

Table 3: General FP7 indicators (Source: EU FP7 contract database June 2014)

	Bulgaria (% of FP7)	EU13 (% of FP7)	EU15 (% of FP7)	FP7[4]
EU Contribution (in M€)	97.4 (0.22%)	1 883.6 (4.2%)	37 852.2 (85.3%)	44 364,1
Number of participations	697(0.53%)	10 637 (8.0%)	105 731	132 382
Number of coordinations	45(0.18%)	1 011 (4.0%)	20 301	25 052
EU Contribution per inhabitant (in €)	12.9	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.

[4] EU28 and associated countries

Figure 1: Evolution of the Share of EU FP contribution received between 2006 and 2014 (EU FP6 budget share taken as base 100)

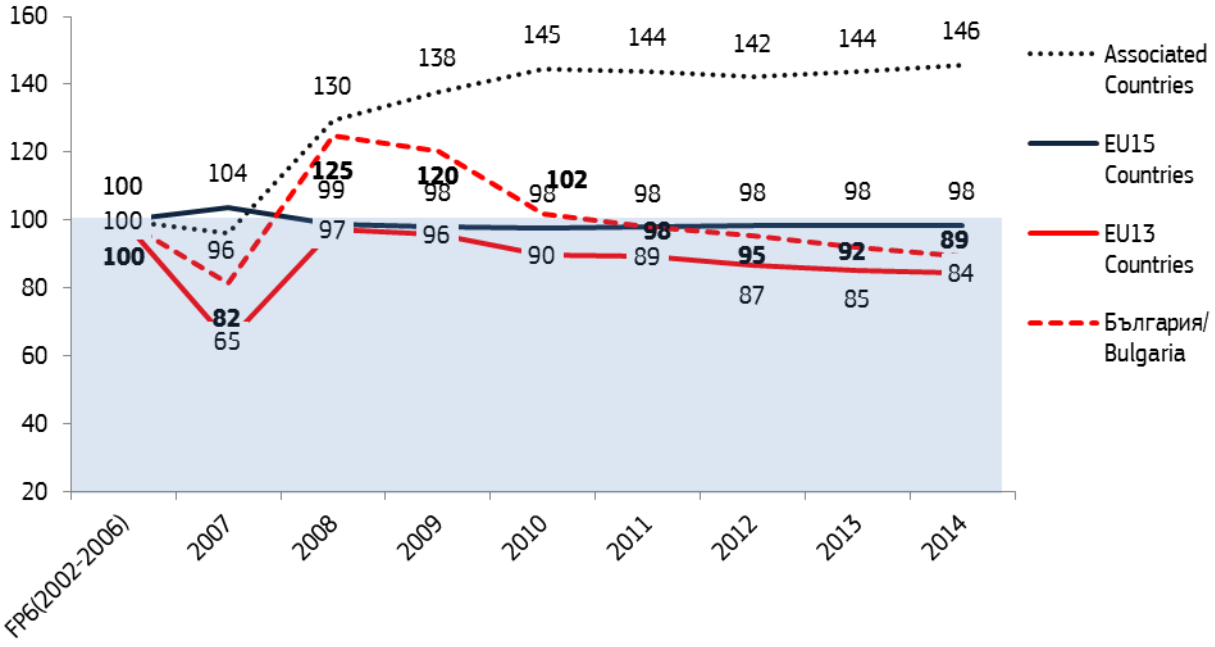
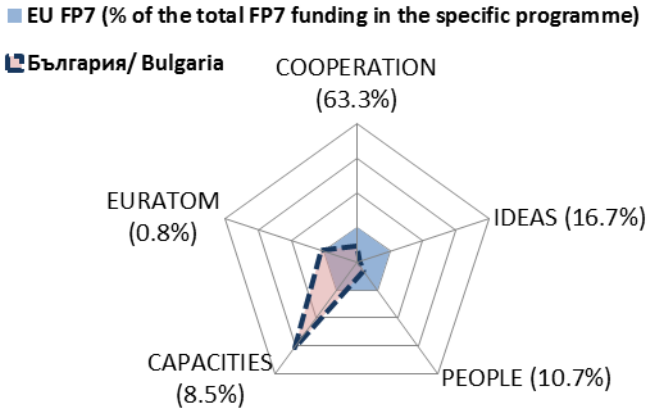


Figure 2 and Table 4 below show the difference between national profile and FP7 specific programmes where the FP7 breakdown is taken as reference.

Figure 2: Comparison of the EU Contribution breakdown among FP7



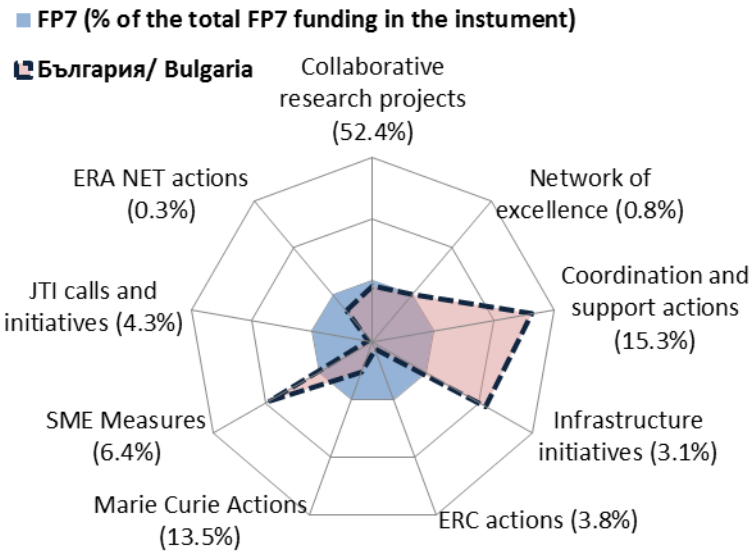
Source: JRC/IPTS using the EC FP7 contract database June 2014

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

	% of EU Contribution	
	Bulgaria	FP7
COOPERATION	48.1%	63,3%
IDEAS	2.1%	16,7%
PEOPLE	5.6%	10,7%
CAPACITIES	42.7%	8,5%
EURATOM	1.4%	0,8%
	100%	100%

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

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



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

Table 5: Breakdown of the participations among FP7 funding instruments

	% of EU Contribution	
	Bulgaria	FP7
Collaborative research projects	41.0%	52.4%
Network of excellence	0.7%	0.8%
Coordination and support actions	34.7%	15.3%
Infrastructure initiatives	5.7%	3.1%
ERC actions	0.4%	3.8%
Marie Curie Actions	6.2%	13.5%
SME Measures	10.8%	6.4%
JTI calls and initiatives	0.3%	4.3%
ERA NET actions	0.1%	0.3%
TOTAL	100%	100%

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

2.2.3 Structural funds[5] dedicated to Research and innovation in the country

Table 6 shows the estimated funds for the Development of the Competitiveness of the Bulgarian Economy OP (ERDF) and the Human Resources Development OP (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 post-graduate studies.

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

Table 6: Estimated funding dedicated to Research and Innovation in the Development of the Competitiveness of the Bulgarian Economy OP and Human Resources Development OP for 2007-2013

Priority code	Priority Theme	Estimate in Adopted OP			AIR 2013			Absorption (b/a)
		M€ (a)	% of OP	% of RTDI	M€ (b)	% of OP	% of RTDI	
Development of the Competitiveness of the Bulgarian Economy OP								
2	R&TD infrastructure and centres of competence in a specific technology	17.0	1.7 %	2.3 %	26.9	2.7%	3.5%	158.4 %
3	Technology transfer and improvement of cooperation networks ...	46.8	4.7 %	6.5 %	44.5	4.5%	5.7%	95.2 %
4	Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)	81.3	8.2 %	11.2 %	129.2	13.0%	16.7%	158.9 %
5	Advanced support services for firms and groups of firms	112.2	11.4 %	15.5 %	84.4	8.5%	10.9%	75.2 %
6	Assistance to SMEs for the promotion of environmentally-friendly products and production processes (...)	9.6	1.0 %	1.3 %	1.1	0.1%	0.1%	11.9 %
7	Investment in firms directly linked to research and innovation (...)	75.7	7.7 %	10.4 %	33.3	3.4%	4.3%	44.0 %
8	Other investment in firms	370.0	37.4 %	51.1 %	361.2	36.5%	46.6%	97.6 %
9	Other measures to stimulate research and innovation and entrepreneurship in SMEs	11.7	1.2 %	1.6 %	93.8	9.5%	12.1%	802.5 %
	Total Research and innovation activities in Operational Programme	**724.2**	**73.3 %**	**100.0 %**	**774.5**	**78.2%**	**100.0%**	**106.9 %**
	Total Operational Programme	**987.9**	**100.0 %**	**-**	**990.4**	**100.0%**	**-**	**100.3 %**
Human Resources Development OP								
74	Developing human potential in the field of research and innovation, in particular through post-graduate studies	51.0	4.9 %	100 %	51.9	5.1%	100%	**101.7 %**
	Total Operational Programme	**1031.8**	**100%**	-	**1009.2**	**100%**	**-**	**97.8 %**
	Overall RTDI	**775.2**			**826.4**			**106.6%**

Source: JRC/IPTS based on the Bulgaria Operational Programmes for 2007-2013 and AIR 2013

For the 2007-2013 period Bulgaria also had a **Regional Development Operational Programme** with estimated total funding of 1 361M€, **Transport OP** with estimated total funding of 1 624M€ and an **Environment OP** with estimated total funding of 1 446M€, however, none of these were dedicated to RTDI priority themes.

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 Bulgaria in the design of their smart specialisation strategy. Based on information that regional and national authorities submit to the Eye@RIS3[6] 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 NACE[7] sectoral codes. Often these capability and market categories overlap, as is the case in for Bulgaria. Any subcategories were combined with the main category.

Table 7: Specialisation areas chosen in the smart specialisation strategy of Bulgaria

Description of chosen specialisation area	Identified capability	Identified target market	EU priority connected to
Healthy Life and Biotechnology industries	Manufacturing & industry - Biotechnology	Human health & social work activities - Human health activities (medical services)	Public health & security
ICT and Informatics	Information & communication technologies (ICT)	Information & communication technologies (ICT)	Digital Agenda
Mechatronic and clean technologies	Manufacturing & industry - Machinery & equipment n.e.c.	Manufacturing & industry - Machinery & equipment n.e.c.	Sustainable innovation - Eco-innovations
New technologies in creative and re-creative industries	Creative, cultural arts & entertainment	Creative, cultural arts & entertainment	Cultural & creative industries

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

3.2 Regional & national specialisation indication through the participation in FP7 for the period 2007-2014

In the innovation Union progress report published in 2014[8], the science and technology classifications were matched with FP7 thematic priorities thereby offering the possibility of further analysis of co-developments 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.

- 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).

[6] http://s3platform.jrc.ec.europa.eu/eye-ris3

[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.

Table 8: General assessment of the participation of the country in the FP7 themes and activities and correspondence with specialisation areas of S3

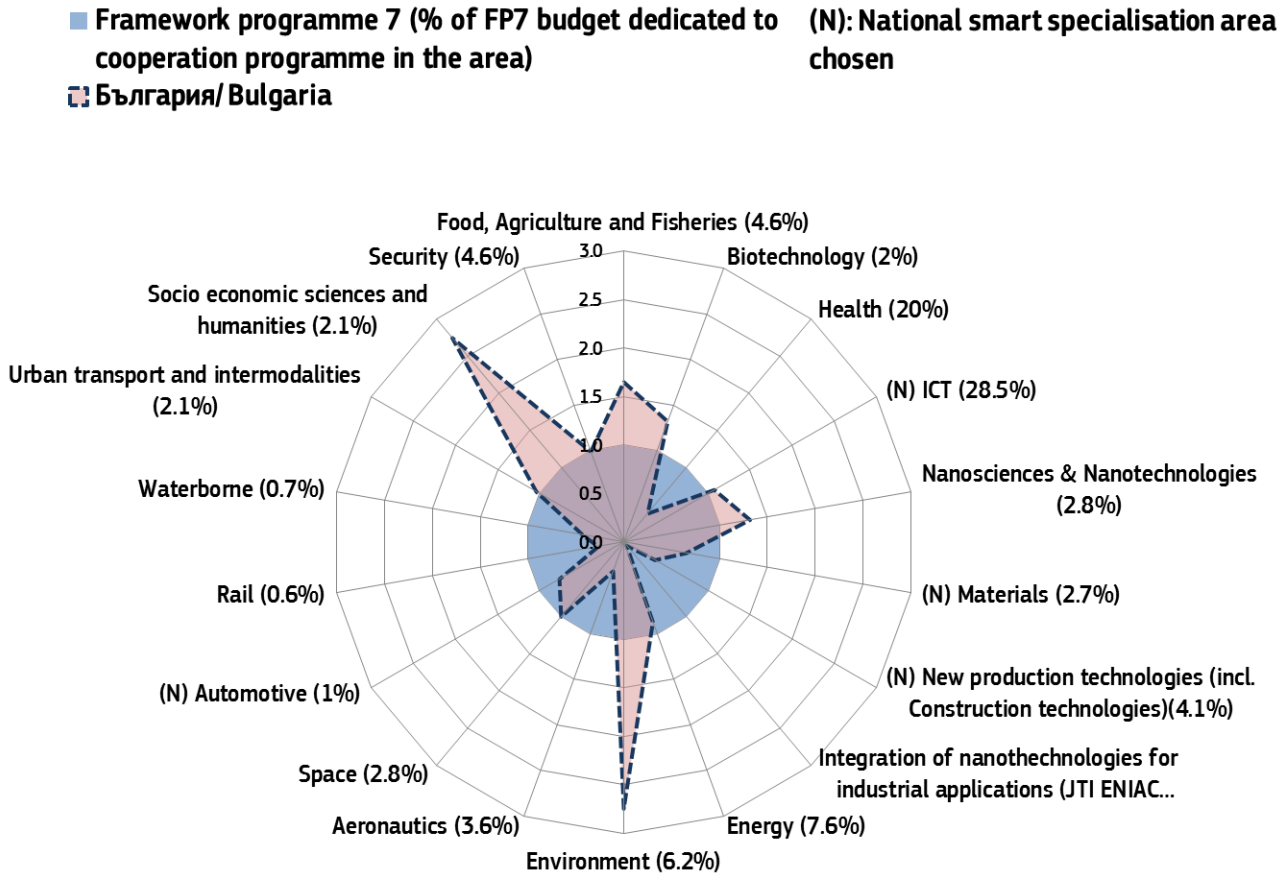
Research area	EU Contribution (in M€)	S3 Priority alignment
Food, Agriculture and Fisheries	3.90	
Biotechnology	1.38	
Health	3.92	yes partially
Information & communication technologies (ICT)	15.72	yes partially
Nanosciences & Nanotechnologies	1.89	
Materials	0.90	
New production technologies (incl. Construction technologies)	0.78	yes partially
Integration of nanotechnologies for industrial applications (JTI ENIAC Incl.)	0.09	
Energy	3.40	
Environment	6.25	yes partially
Aeronautics	0.60	
Space	1.46	
Automotive	0.41	
Rail	0.08	
Waterborne	0.15	
Urban transport and intermodalities	1.09	
Socio economic sciences and humanities	2.49	
Security	2.32	
TOTAL COOPERATION	**46.83**	
TOTAL COOPERATION related to S3 priorities	**26.67 (56.9%)**	

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



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

Table 9: Budget breakdown among themes (Figure 4 is the graphical interpretation of this table)

Research area	Bulgaria	FP7
Food, Agriculture and Fisheries	8.3%	4.6%
Biotechnology	3.0%	2.0%
Health	8.4%	20.0%
ICT	33.6%	28.5%
Nanosciences & Nanotechnologies	4.0%	2.8%
Materials	1.9%	2.7%
New production technologies (incl. Construction technologies)	1.7%	4.1%
Integration of nanotechnologies for industrial applications	0.2%	3.9%
Energy	7.3%	7.6%
Environment	13.3%	6.2%
Aeronautics	1.3%	3.6%
Space	3.1%	2.8%
Automotive	0.9%	1.0%
Rail	0.2%	0.6%
Waterborne	0.3%	0.7%
Urban transport and intermod.	2.3%	2.1%
Socio economic sciences and humanity	5.3%	2.1%
Security	5.0%	4.6%
	100%	100%

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

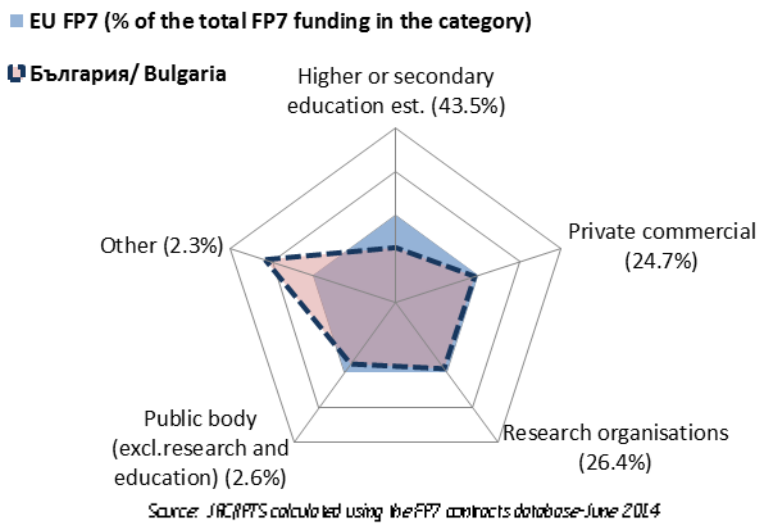
4. EU funding users profile

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 10** 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 participant between FP7 profile (in base 100) and national profile



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

Table 10: Breakdown of the FP7 EU contribution

	% of EU Contribution	
	Bulgaria	FP7
Higher or secondary education est.	33.1%	43.5%
Private commercial	28.7%	24.7%
Research organisations	30.9%	26.9%
Public body (excl.research and education)	2.8%	2.6%
Other	4.4%	2.3%
	100%	100%

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 11** 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).

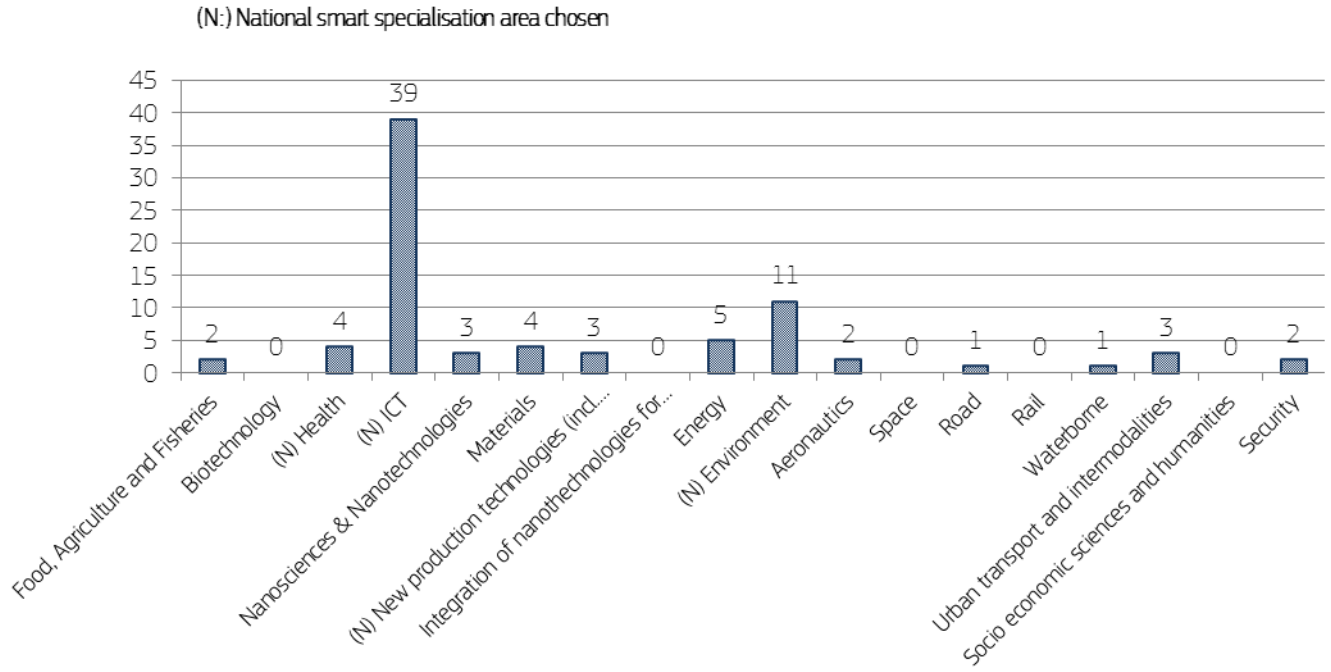
Table 11: General indicators about SME participation in the FP7 Cooperation programme

	Bulgaria (i)	**FP7 (ii)**
EC Financial Contribution-Cooperation Programme	15.98 (34.1%)	2 560.42 (9.1%)
Number of SME participation-Cooperation Programme	78 (21.3%)	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-IPTS

The participation of Bulgarian 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.

Figure 6: Number of SMEs in FP7 research themes for Bulgaria



Source: data: FP7 contracts database-June 2014. Processed by JRC-IPTS

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 national and FP7 level. Information at regional level is not shown because it is not reliable enough to be considered in the analysis.

: National success rate is above EU average

: National success rate is below EU average

Table 12 Success rates by Themes or activities- Comparison between national and European level

FP7 specific programme	Theme/ Activity	Bulgaria			FP7		
		*Nbr of Participations**	*Nbr of Retained participations**	*Success Rate*	*Nbr of Participations**	*Nbr of Retained participations**	*Success Rate*
COOPERATION	Health	165	26	15.8%	41 361	10 275	**24.8%**
COOPERATION	Food. Agriculture. and Biotechnology	282	48	17.0%	35 362	7 465	**21.1%**
COOPERATION	Information and Communication Technologies	754	82	10.9%	131 030	21 356	**16.3%**
COOPERATION	Nanosciences. Nanotechnologies. Materials and new Production Technologies	125	19	15.2%	35 451	9 354	**26.4%**
COOPERATION	Energy	165	24	14.5%	17 415	4 072	**23.4%**
COOPERATION	Environment (including Climate Change)	299	54	18.1%	31 912	6 825	**21.4%**
COOPERATION	Transport (including Aeronautics)	158	31	19.6%	30 340	8 779	**28.9%**
COOPERATION	Socio-economic sciences and Humanities	387	27	7.0%	23 830	2 492	**10.5%**
COOPERATION	Space	50	16	32.0%	8 277	2 397	**29.0%**
COOPERATION	Security	167	21	12.6%	18 826	3 595	**19.1%**
COOPERATION	General Activities (Annex IV)	0	0		120	50	**41.7%**
COOPERATION	Joint Technology Initiatives (Annex IV-SP1)	22	3	13.6%	15 299	6 277	**41.0%**
COOPERATION	***TOTAL COOPERATION***	2 574	351	13.6%	***389 223***	***82 937***	***21.3%***
IDEAS	European Research Council	265	9	3.4%	54 789	5 312	**9.7%**
PEOPLE	Marie-Curie Actions	455	112	24.6%	111 266	22 530	**20.2%**
CAPACITIES	Research Infrastructures	95	51	53.7%	10 677	4 564	**42.7%**
CAPACITIES	Research for the benefit of SMEs	510	63	12.4%	48 493	8 426	**17.4%**
CAPACITIES	Regions of Knowledge	91	19	20.9%	3 844	746	**19.4%**
CAPACITIES	Research Potential	152	14	9.2%	3 107	362	**11.7%**
CAPACITIES	Science in Society	134	24	17.9%	7 329	1 961	**26.8%**
CAPACITIES	Coherent development of research policies	1	0	0.0%	390	89	**22.8%**
CAPACITIES	Activities of International Cooperation	34	11	32.4%	3 908	1 476	**37.8%**
EURATOM	Fusion Energy	2	1	50.0%	79	65	**82.3%**
EURATOM	Nuclear Fission and Radiation Protection	43	16	37.2%	3 113	1 539	**49.4%**
FP7	**TOTAL**	4 356	671	15.4%	**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 Bulgaria in the FP7. **Table 13** shows the list of the first regions collaborating with Bulgarian organisations. The figure represents the number of projects where at least one participant from Bulgaria collaborates with at least one participant from the other region.

Figure 7: Origins of organisations collaborating with Bulgaria in the FP7

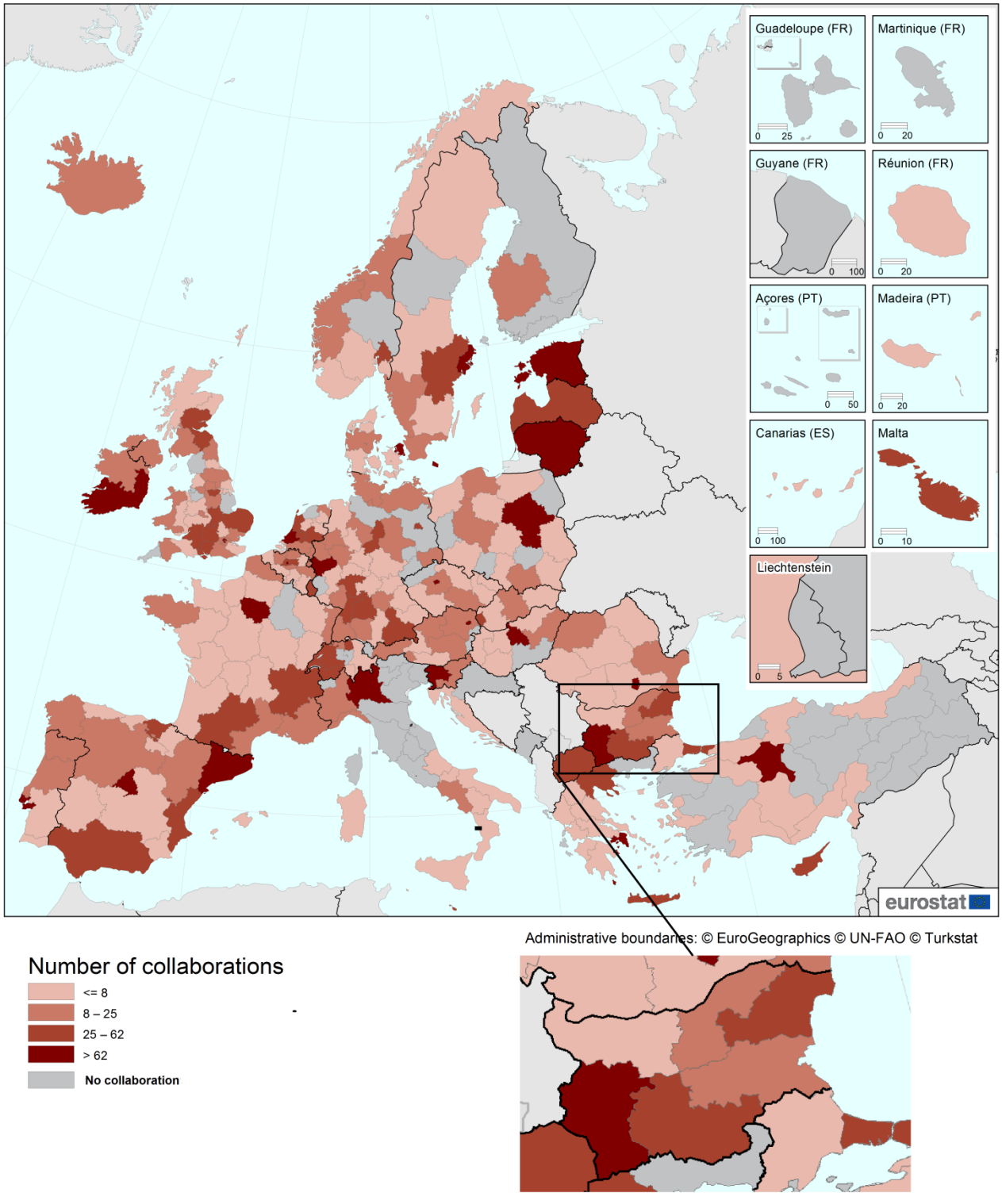


Table 13: The closest EU region from Bulgaria in the FP7

Rank	NUTSO Code	Name	Number of Collaborations
1	FR10	Île de France	180
2	EL30	Attiki	136
3	ITE4	Lazio	132
4	ES30	Comunidad de Madrid	126
5	BE10	Région de Bruxelles-Capitale / Brussels Hoofdstede	121
6	AT13	Wien	114
7	RO32	Bucureşti - Ilfov	104
8	HU10	Közép-Magyarország	99
9	UKI1	Inner London	98
10	NL33	Zuid-Holland	95

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

4.2.2 From a stakeholder perspective

Table 14 shows the organisations most frequently collaborating with organisations based in Bulgaria in the FP7 programme and the **Table 15** ranks the FP7 leading organisations based in Bulgaria according to their number of participations.

Table 14: the leading organisations collaborating with organisations based in Bulgaria in FP7

Legal name	Themes/activities	Type	NUTS2	N° of collab
INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	Food, Agriculture, and Biotechnology	REC	FR10	19
TWI LIMITED	Research for the benefit of SMEs	REC	UKH3	12
WAGENINGEN UNIVERSITY	Food, Agriculture, and Biotechnology	HES	NL22	12
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	Research Infrastructures	REC	FR10	12
GREEK RESEARCH AND TECHNOLOGY NETWORK S.A.	Research Infrastructures	PRC	EL30	12
TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU	Research Infrastructures	REC	TR51	10
STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	Environment (including Climate Change)	REC	NL22	10
STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	Food, Agriculture, and Biotechnology	REC	NL22	10
JRC -JOINT RESEARCH CENTRE- EUROPEAN COMMISSION	Environment (including Climate Change)	REC	EU	10
FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	Information and Communication Technologies	REC	DE21	9
HELLENIC CENTRE FOR MARINE RESEARCH	Research Infrastructures	REC	EL30	9
EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH	Research Infrastructures	REC	CH01	8
ISTITUTO NAZIONALE DI OCEANOGRAFIA E DI GEOFISICA SPERIMENTALE - OGS	Research Infrastructures	REC	ITD4	8
STICHTING DELTARES	Environment (including Climate Change)	REC	NL33	8
FOUNDATION FOR RESEARCH AND TECHNOLOGY HELLAS	Information and Communication Technologies	REC	EL43	8
NEMZETI INFORMACIOS INFRASTRUKTURA FEJLESZTESI IRODA	Research Infrastructures	PUB	HU10	7
SUOMEN YMPARISTOKESKUS	Environment (including Climate Change)	REC	FI18	7
MAGYAR TUDOMANYOS AKADEMIA WIGNER FIZIKAI KUTATOKOZPONT	Research Infrastructures	REC	HU10	7
UNIVERSITAET INNSBRUCK	Information and Communication Technologies	HES	AT33	7
UNIVERSITAET FUER BODENKULTUR WIEN	Food, Agriculture, and Biotechnology	HES	AT13	7

Table 15: the leading organisations based in Bulgaria in FP7

Legal Name	Theme/activities	Type	N° of participations
INSTITUTE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Information and Communication Technologies	HES	18
ONTOTEXT AD	Information and Communication Technologies	PRC	15
SOFIISKI UNIVERSITET SVETI KLIMENT OHRIDSKI	Marie-Curie Actions	HES	11
INSTITUTE OF OCEANOLOGY - BULGARIAN ACADEMY OF SCIENCES	Environment (including Climate Change)	REC	9
INSTITUTE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Research Infrastructures	HES	9
TECHNICAL UNIVERSITY OF SOFIA	Marie-Curie Actions	HES	9
TRAKIYSKI UNIVERSITET	Marie-Curie Actions	HES	9
AGROBIOINSTITUTE	Food, Agriculture, and Biotechnology	REC	8
SOFIISKI UNIVERSITET SVETI KLIMENT OHRIDSKI	Research Infrastructures	HES	8
UNIVERSITY OF RUSE ANGEL KANCHEV	Marie-Curie Actions	HES	8
INSTITUTE OF NUCLEAR RESEARCH AND NUCLEAR ENERGY - BULGARIAN ACADEMY OF SCIENCES	Nuclear Fission and Radiation Protection	REC	8
INSTITUTE OF OCEANOLOGY - BULGARIAN ACADEMY OF SCIENCES	Research Infrastructures	REC	7
CLUB YOUNG SCIENTISTS	Marie-Curie Actions	OTH	7
NEMETSCHEK OOD	Research for the benefit of SMEs	PRC	6
Pensoft Publishers Ltd	Environment (including Climate Change)	PRC	6
Remote Sensing Application Centre - ReSAC	Space	REC	6
International Center For Minority Studies And Intercultural Relations	Socio-economic sciences and Humanities	REC	6
INSTITUTE OF NUCLEAR RESEARCH AND NUCLEAR ENERGY - BULGARIAN ACADEMY OF SCIENCES	Research Infrastructures	REC	5
UNIVERSITY OF PLOVDIV	Marie-Curie Actions	HES	5
SIRMA SOLUTIONS AD	Information and Communication Technologies	PRC	4
INSTITUTE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Information and Communication Technologies	HES	18
ONTOTEXT AD	Information and Communication Technologies	PRC	15

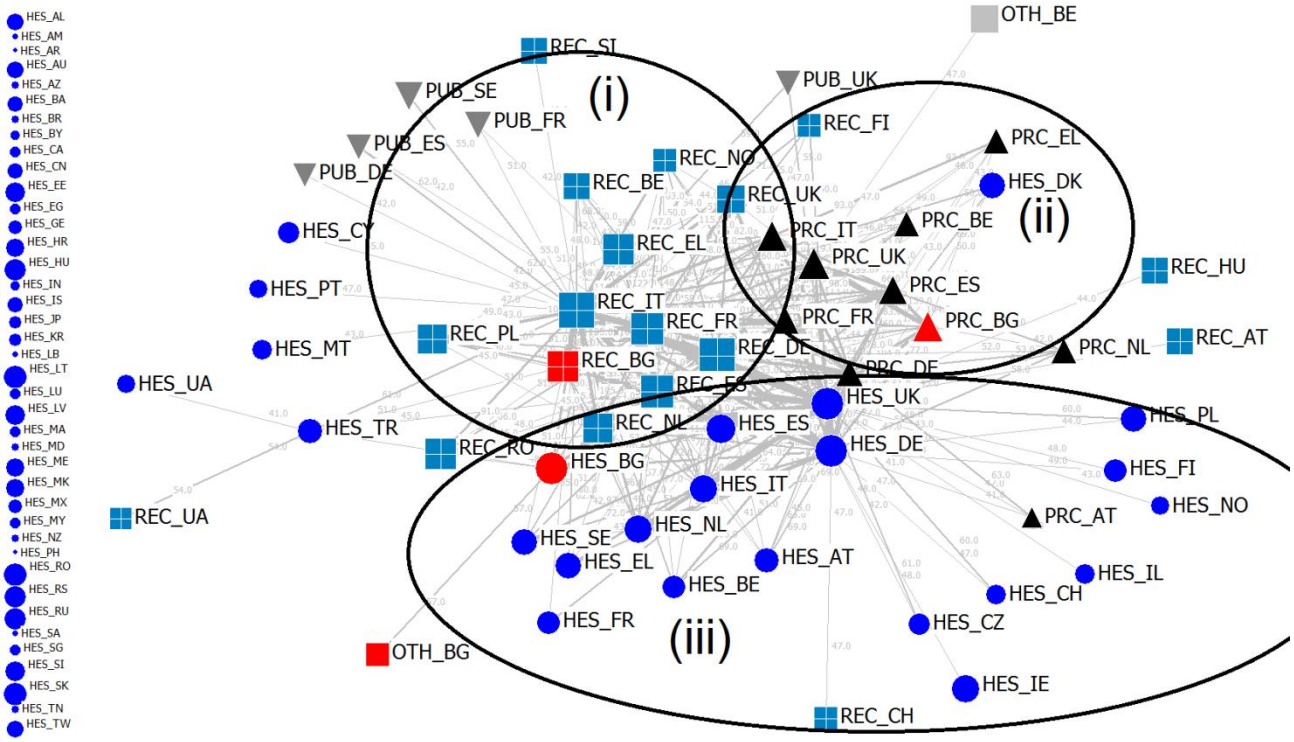
Source: JRC/IPTS calculated using the FP7 contracts database-June 2014

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 country 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 (only a part of the unconnected nodes appears in the left side of the graph).

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

i. This area is essentially composed of public research organisations (REC). Bulgarian public organisation appears in the centre of the graph. The graph shows that Bulgarian research organisations are strongly linked to Bulgarian universities (HES_BG) who is acting as an interface between other European Universities (HES) and the other participants.
ii. A second Sub-network is essentially made of Private companies (PRC) smaller than the two other sub-networks. Bulgarian companies (PRC_BG) appear isolated from the other participants connecting with other (Bulgarian but not only) participants through other firms based in EU member States.
iii. This area is made of Universities mostly (HES) from Germany, UK, Italy, the Netherlands, and Spain etc. Bulgarian universities appear closer to Research organisation than their EU counterparts.

Figure 8: The main collaboration network of Bulgaria 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 40.

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

AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DE	Germany
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HU	Hungary
IE	Ireland
IL	Israel
IT	Italy
LV	Latvia
LT	Lithuania
ME	Montenegro
MT	Malta
NO	Norway
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
TR	Turkey
UK	United Kingdom

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

Annexes

1. Participation in FP7 cooperation programme

Table 16: Detailed participation figures in FP7 research areas

		Bulgaria			FP7	
		EC contrib. (In €M)	Nbr of part.		EC contrib. (In €M)	Nbr of part.
TOTAL FP7		46.89	366		27 902.29	85 994
Health		3.92	25		5 515.56	12 523
Biotechnology, generic tools and medical technologies for human health	**BG**	0.90	6	**FP7**	2 377.05	4 377
High-throughput research	BG	0.47	4	FP7	157.93	306
Detection, diagnosis and monitoring	BG	0.00	0	FP7	272.30	577
Suitability, safety, efficacy of therapies	BG	0.22	1	FP7	117.78	204
Innovative therapeutic approaches and interventions	BG	0.21	1	FP7	457.80	833
Integrating biological data and processes: large-scale data gathering, systems biology	BG	0.00	0	FP7	647.92	1 190
JTI-IMI (Innovative Medicines Initiative)	BG	0.00	0	FP7	723.31	1 267
Translating research for human health	**BG**	1.62	9	**FP7**	2 356.65	5 429
Research on the brain and related diseases, human development and ageing	BG	0.48	1	FP7	518.12	1094
Translational research in major infectious diseases: To confront major threats to public health	BG	0.90	6	FP7	764.08	1751
Translational research in other major diseases	BG	0.24	2	FP7	1 074.45	2584
Optimising the delivery of healthcare to European citizens	**BG**	0.74	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	BG	0.07	1	FP7	106.73	361
Quality, efficiency and solidarity of healthcare systems including transitional health systems	BG	0.24	1	FP7	99.32	375
Health promotion and prevention	BG	0.42	2	FP7	81.77	323
International public health & health systems	BG	0.02	1	FP7	86.37	289
Specific international cooperation actions for health system research	BG	0.00	0	FP7	24.87	74
Other Actions across the Health Theme	**BG**	0.65	5	**FP7**	382.80	1295
Coordination and Support Actions across the Theme	BG	0.03	1	FP7	46.70	436
Responding to EU policy needs	BG	0.62	4	FP7	192.51	638
Specific International Cooperation Actions (SICA)	BG	0.00	0	FP7	49.36	139
Horizontal topics for collaborative projects relevant for the whole of theme health	BG	0.00	0	FP7	94.24	82
Food, Agriculture and Fisheries, and Biotechnology	**BG**	5.29	50	**FP7**	1 841.70	7847
Sustainable production and management of biological resources from land, forest, and aquatic environment	**BG**	0.89	12	**FP7**	452.65	2164
Increased sustainability of all production systems (agriculture, forestry, fisheries and aquaculture); plant health and crop protection	BG	0.60	9	FP7	326.56	1557
Optimised animal health production and welfare across agriculture, fisheries and aquaculture	BG	0.29	3	FP7	126.09	607

Fork to farm: Food (including seafood). health and well being	**BG**	1.64	9	**FP7**	571.52	2304
The Ocean of Tomorrow	BG	0.36	3	FP7	70.04	217
Consumers	BG	0.15	1	FP7	39.78	142
Nutrition	BG	1.06	3	FP7	149.25	493
Food processing	BG	0.00	0	FP7	127.13	590
Food quality and safety	BG	0.07	2	FP7	101.10	467
Environmental impacts and total food chain	BG	0.00	0	FP7	84.21	395
Life sciences. biotechnology and biochemistry for sustainable non-food products and processes	**BG**	1.38	9	**FP7**	564.90	1832
Novel sources of biomass and bioproducts	BG	0.18	2	FP7	110.98	391
Marine and fresh-water biotechnology (blue biotechnology)	BG	0.59	2	FP7	125.95	413
Industrial biotechnology: novel high added-value bio-products and bio-processes	BG	0.30	1	FP7	114.61	328
Biorefinery	BG	0.00	0	FP7	78.68	227
Environmental biotechnology	BG	0.31	4	FP7	58.30	268
Emerging trends in biotechnology	BG	0.00	0	FP7	76.38	205
Other activities	**BG**	1.38	20	**FP7**	252.64	1547
Socio-economic research and support to policies and Cross cuting activities	BG	1.38	20	FP7	252.64	1547
Information and Communication Technologies	**BG**	15.72	87	**FP7**	7 874.97	23202
Pervasive and Trustworthy network and service infrastructures	BG	1.78	12	FP7	1 987.50	5557
Cognitive systems. interaction. robotics	BG	0.58	3	FP7	615.93	1220
Components. systems. engineering	BG	0.00	0	FP7	810.22	2398
Digital libraries and content	BG	6.84	32	FP7	644.08	1790
ICT for mobility. environmental sustainability and energy efficiency	BG	1.23	10	FP7	842.77	2695
ICT for Health. Ageing Well. Inclusion and Governance	BG	2.34	15	FP7	883.60	2650
Future and emerging technologies	BG	1.16	5	FP7	1 466.65	3983
Horizontal Actions	BG	0.59	5	FP7	64.38	545
ICT for the Enterprise and Manufacturing	BG	0.17	1	FP7	216.75	523
ICT for Learning and Access to Cultural Resources	BG	1.00	3	FP7	171.24	495
International Cooperation	BG	0.05	1	FP7	36.05	307
JTI-ARTEMIS (Embedded Computing Systems)	BG	0.00	0	FP7	135.81	1039
Nanosciences. Nanotechnologies. Materials and new Production Technologies - NMP	**BG**	3.65	21	**FP7**	3 707.95	11548
Nanosciences and Nanotechnologies	BG	1.89	7	FP7	771.56	2457
Materials	BG	0.90	6	FP7	742.04	2226
New production processes	BG	0.40	3	FP7	490.01	1525
Integration of nanothechnologies for industrial applications	BG	0.09	2	FP7	594.25	2121
JTI-ENIAC (Nanoelectronics Technologies 2020)	BG	0.00	0	FP7	468.96	1349
Recovery Package: Public-Private Partnership (PPP) topics within NMP	BG	0.38	3	FP7	641.14	1870
Energy	**BG**	3.40	28	**FP7**	2 094.31	5422

Hydrogen and fuel cells	BG	0.23	1	FP7	23.94	69
JTI-FCH European Hydrogen and Fuel Cell Technology Platform)	BG	0.17	1	FP7	415.67	1186
Renewable electricity generation	BG	0.67	4	FP7	473.52	998
Renewable fuel production	BG	0.21	3	FP7	239.19	508
Renewables for heating and cooling	BG	0.00	0	FP7	59.28	174
CO2 capture and storage technologies for zero emission power generation	BG	0.29	2	FP7	145.80	478
Clean coal technologies	BG	0.00	0	FP7	58.13	130
Cross-cutting actions between activities Energy-5 and Energy-6	BG	0.00	0	FP7	27.99	84
Smart energy networks	BG	0.60	5	FP7	261.24	654
Energy efficiency and savings	BG	0.90	9	FP7	221.38	551
Knowledge for energy policy making	BG	0.00	0	FP7	17.82	115
Horizontal programme actions	BG	0.34	3	FP7	150.35	475
Environment (including Climate Change)	**BG**	6.25	54	**FP7**	1 719.15	7131
Pressures on environment and climate	BG	0.36	4	FP7	360.13	1587
Sustainable management of resources	BG	2.39	21	FP7	276.87	1106
Environmental technologies	BG	0.77	7	FP7	290.21	1404
Earth observation and assessment tools for sustainable development	BG	0.52	7	FP7	160.60	810
Horizontal activities	BG	0.29	5	FP7	16.72	152
Coping with climate change	BG	0.74	3	FP7	146.51	399
Sustainable use and management of land and seas	BG	0.99	6	FP7	139.29	450
Improving resource efficiency	BG	0.00	0	FP7	169.03	580
Protecting citizens from environmental hazards	BG	0.19	1	FP7	86.87	270
Mobilising environmental knowledge for policy. industry and society	BG	0.00	0	FP7	72.92	373
Aeronautics and air transport	**BG**	0.60	6	**FP7**	1 004.78	3174
Green Aircraft	BG	0.35	1	FP7	295.55	827
Time Efficient Air Transport Operations	BG	0.11	3	FP7	40.45	108
Aircraft Safety	BG	0.00	0	FP7	150.26	401
Aircraft Operational Cost	BG	0.00	0	FP7	385.95	1034
Operational Security	BG	0.00	0	FP7	13.48	45
Promising Pioneering Ideas in Air Transport	BG	0.09	1	FP7	81.68	307
CROSS-CUTTING ACTIVITIES for implementation of the sub-theme programme	BG	0.00	0	FP7	35.41	434
JTI-CLEAN SKY (Aeronautics and Air Transport)	BG	0.05	1	FP7	2.00	18
Space	**BG**	1.46	20	**FP7**	784.60	3203
Space-based applications at the service of the European Society	BG	1.12	13	FP7	350.86	1245
Research to support space science and exploration	BG	0.18	2	FP7	248.28	979
International Cooperation	BG	0.14	4	FP7	109.56	400
GALILEO/Exploiting the Full Potential	BG	0.02	1	FP7	48.23	386
GALILEO/Adapting Receivers to Requirements and Upgrading Core Technologies	BG	0.00	0	FP7	13.94	69
GALILEO/Supporting Infrastructure Evolution	BG	0.00	0	FP7	13.74	124
Sustainable surface transport (INCLUDING THE 'EUROPEAN GREEN CARS INITIATIVE')	**BG**	1.73	24	**FP7**	1 203.53	5255

Rail	**BG**	0.08	4	**FP7**	164.54	766
Road	**BG**	0.41	3	**FP7**	287.80	1051
Urban mobility	**BG**	0.00	0	**FP7**	142.53	429
Waterborne	**BG**	0.15	2	**FP7**	184.66	776
Multimodal	**BG**	0.94	12	**FP7**	364.33	1794
Cross cutting activities	**BG**	0.15	3	**FP7**	59.67	439
Socio-economic sciences and Humanities	**BG**	2.49	28	**FP7**	579.55	2766
Growth, employment and competitiveness in a knowledge society	**BG**	0.13	2	**FP7**	108.37	473
Combining economic, social and environmental objectives in a European perspective	**BG**	0.14	2	**FP7**	117.69	499
Major trends in society and their implications	**BG**	0.75	8	**FP7**	93.80	485
Europe in the world	**BG**	0.38	3	**FP7**	98.91	432
The Citizen in the European Union	**BG**	0.70	6	**FP7**	92.55	397
Socio-economic and scientific indicators	**BG**	0.24	2	**FP7**	23.44	150
Foresight activities	**BG**	0.09	2	**FP7**	15.88	105
Horizontal Actions	**BG**	0.07	3	**FP7**	28.92	225
Security	**BG**	2.32	21	**FP7**	1 263.49	3741
Increasing the Security of citizens	**BG**	0.53	3	**FP7**	235.78	656
Increasing the Security of infrastructures and utilities	**BG**	0.06	2	**FP7**	248.96	710
Intelligent surveillance and enhancing border security	**BG**	0.00	0	**FP7**	208.72	466
Restoring security and safety in case of crisis	**BG**	0.82	4	**FP7**	289.53	733
Improving Security systems integration, interconnectivity and interoperability	**BG**	0.00	0	**FP7**	74.50	212
Security and society	**BG**	0.72	7	**FP7**	113.39	479
Security Research coordination and structuring	**BG**	0.16	4	**FP7**	70.01	398
Security systems integration, interconnectivity and Interoperability	**BG**	0.03	1	**FP7**	21.80	83
Horizontal Actions	**BG**	0.00	0	**FP7**	0.79	4

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