

# COHESION POLICY: STRATEGIC REPORT 2013

Factsheet: Innovation and RTD investments



#### **Strategic Report 2013 – Programme implementation 2007-2013**

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This factsheet has been produced in support of the Commission 2013 Strategic report on cohesion policy programme implementation (2007-2013). It should be read in conjunction with that report (COM(2013) 210) and the accompanying Staff Working Document (SEC(2013) 129) available on this website: <a href="http://ec.europa.eu/regional\_policy/how/policy/strategic report en.cfm">http://ec.europa.eu/regional\_policy/how/policy/strategic report en.cfm</a>

#### 1. Overview

Investment in innovation and research is delivered in all Member States and regions and funded mainly by the ERDF with some specific ESF support to human potential in R&I.

The following 8 headings/categories are reported:

- R&TD activities in research centres
- R&TD infrastructure and centres of competence in a specific technology
- Technology transfer and improvement of cooperation networks
- Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)
- Assistance to SMEs for the promotion of environmentally-friendly products and production processes
- Investment in firms directly linked to research and innovation
- Other measures to stimulate research and innovation and entrepreneurship in SMEs
- Developing human potential in the field of research and innovation, in particular through post-graduate studies (ESF)

These 8 headings/categories of investment represent a "narrow" grouping of activities supporting innovation<sup>1</sup>.

In terms of the content and policy focus of Innovation and R&D measures, the European Commission has published targeted guidance in form of a communication - "Europe 2020: a strategy for smart, sustainable and inclusive growth" - and accompanying brochure, which highlighted good

This narrow view of 'innovation and R&D' should not be confused with the 2007 presentation when the Commission presented a wider analysis (18 categories) of planned innovation support – mobilising EUR 86 bn - which also included investment categories dealing with 1) new IT services for citizens and SMEs (comprised in in the factsheet on 'IT infrastructure and services'), 2) other entrepreneurship measures (comprised in the factsheet on 'Other Business support') and 3) ESF support to innovation in the work place (comprised in the factsheet on 'Labour Market').

See this Staff Working Document: <a href="http://ec.europa.eu/regional\_policy/sources/docoffic/working/doc/SEC-2007-1547.pdf">http://ec.europa.eu/regional\_policy/sources/docoffic/working/doc/SEC-2007-1547.pdf</a>

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52010DC0553:EN:NOT

http://ec.europa.eu/regional policy/sources/docgener/informat/2014/smart specialisation en.pdf

practices in Member States and regions, which inspired the concept of smart specialisation that is serving as a framework for the design of better regional innovation and R&D strategies.

A Guide to Research and Innovation Strategies for Smart Specialisation<sup>4</sup> as well as a series of complementary guides directly relevant for public support to innovation were also recently produced<sup>5</sup>. In addition, a range of peer-review and thematic seminars were organised involving and reaching out to Managing Authorities and stakeholders from the business community.

## 2. Project examples

These examples have been taken from the relevant National Strategic reports.

AT	Stärkung der regionalen Wettbewerbsfähigkeit	ERDF	EU: €6 m
	Oberösterreich		
Title: Profactor Steyr			

**Project description:** This is a key project to improve the competitiveness of the Steyr-Kirchdorf-region through R&D infrastructure, supporting 87 high-tech jobs. The centre promotes technology and know-how transfer from science to industry, from basic research to industrial production. Its main objective is to analyse the needs and demands of manufacturing industry (local, regional and EU) and to develop sustainable solutions for competitive production. The target group of Profactor are mainly Austrian SMEs, but also international companies, which may be attracted to the region by the well-developed technology suppliers.

BE	OP: Vlaanderen	ERDF	EU: €0.44M
Title	: SUSPRO3		

**Project description:** The project ran from March 2010 to November 2012 and provided specialist advice to integrate sustainable development practices into SMEs policies. By investing proactively in eco-innovative products and processes, the companies in the Flemish textile, wood and furniture industry are creating long-term benefits to improve competitiveness. The 85 companies supported are introducing eco-innovation processes into their business mainly in the areas of energy, water and materials resources efficiency measures. 51 have already implemented the advice received.

CZ	OP: Central Bohemian Region	ERDF	EU: € 2.1 m
Title	Title: EXBIO Research and Technology Center		

**Project description:** EXBIO Praha a.s. is a producer of monoclonal antibodies and other immunologic agents and was a spin-off from the Molecular Genetics Institute of the Czech Academy of Sciences. The company has put into production more than 500 new or innovated products over the last three years. The EU supported the construction of a new research centre including equipment which enabled implementation of several demanding development projects in cooperation with large international companies.

http://s3platform.jrc.ec.europa.eu/guides

http://s3platform.jrc.ec.europa.eu/s3pguide

ES | OP: Cantabria | ERDF | EU: € 12.4 m

Title: Cantabria Coastal and Ocean Basin (CCOB) R&D facility and new buildings for the Environmental Hydraulics Institute

**Project description:** The Environmental Hydraulics Institute "IH Cantabria" is a joint research centre that carries out research, knowledge transfer and training of specialists in the fields of fresh and saltwater. IH Cantabria has over 140 researchers and thirty years of experience. With a width of 44 m, a length of 30 m and 4-12 m in depth the new CCOB facility is capable of generating multidirectional waves, omnidirectional currents and winds. It is designed to carry out large scale wave tests for coastal and offshore engineering.

MT OP: People for more jobs and a better quality of life EU: €8.4 m

Title: Strategic Educational Pathway Scholarships (STEPS)

**Project description:** Since 2009 This project offers post-graduate bursaries at Masters and Doctoral level for fields of studies in areas of national priority. As at end 2011 more than 500 students had obtained a scholarship. Eight calls for scholarships have already been issued and the schemes are expected to run until 08/2015. The project links with the EU 2020 Strategy and the need for Inclusive Growth in that by 2020 more jobs will require higher qualifications.

NL OP: West Nederlands ERDF EU: €4.6 m

**Title: Bioprocess Pilot Facility** 

**Project description:** This testing facility in Delft has been set up to allow researchers, both public and private, to test new bio-processes in transition from the laboratory to production on an industrial scale. It allows users to construct complex operations by linking separate process modules to produce all kinds of products, such as raw materials for the construction sector, chemicals for biofuels or raw materials for the chemicals and pharmaceuticals industry. The facility is the first of its kind on this scale and became fully operational in May 2012.

PT OP: Norte ERDF EU: € 17 m

Title: UPTEC - Science & Technology Park, University of Porto (RegioStars winner 2013)

**Project description:** The Science and Technology Park of the University of Porto promotes technological business-oriented projects while developing Portugal's Norte Region. Traditionally dependent on low-tech industries the Norte Region's Innovation Plan has refocused policy on specific assets in the region's economy and universities. The project focused on health, ICT and production technologies, creative industries, marine technologies and other sea-related activities. UPTEC is driving long-term structural change in the Norte Region's innovation system. It has assisted 110 firms, including 95 start-ups, five large companies and five private innovation centres and created 800 jobs.

### 3 Assessment of Implementation

#### 3.1 Tracking EU financial input

Cohesion policy programmes play a crucial role in strengthening Europe's **innovation and research potential** with an overall allocation of EUR 53.2 billion to "core" innovation and research priorities

in the EU27<sup>6</sup>. Cohesion policy support is predominantly focused on innovation understood as the definition of the OECD's Oslo Manual. It describes innovation as 'the implementation of a new or significant improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations'. This support contributes to transforming knowledge into growth and better jobs.

The selection of projects to implement these investments by the end 2011 stood at 62% of the financial allocation (see <u>Table 1.1</u>). This selection value is below the average rate of total allocation (71%). The average selection rate is lower in the convergence regions at 58.9% while in regional competiveness and employment regions it was 68.9%.

Regarding specific categories, a considerable amount of resources allocated is dedicated to the physical development of research infrastructures (EUR 11 billion or 20.7% of total funds for Innovation and RTD) and activities in business or science parks, incubators and centres of competence (EUR 5.9 billion or 11% of total funds for Innovation and RTD). Implementation under these R&D categories is showing good progress in selection activity until end 2011 with around 75% of resources allocated.

The main areas where slow project selection is reported at end 2011 include technology transfer (60%), assistance to R&D and eco innovation in SMES (56% and 36% respectively) and developing human potential in R&I through post-graduate studies (44%).

The category "Developing human potential in the field of research and innovation, in particular through post-graduate studies and training of researchers, and networking activities between universities, research centres and businesses' of women" is mainly ESF-supported. A total of EUR 5.5 billion of Structural Funds has been allocated to this priority and at the end of 2011, EUR 2.4 billion were reported as committed to projects. Among participations registered since the beginning of the programming period, 18% are persons with a tertiary educational level, ranging from 1% in Ireland to 50% in Cyprus.

The relative progress across countries also shows some important differences – see <u>Table 1.2</u> and <u>Graph 1</u>. While NL and IE have advanced fastest across the board and lead in project selection, GR, SK, ES, IT, HU and BG show selection rates below the average.

This data was reported by Member States as of 31 December 2011 and will have evolved with ongoing selection processes during 2012.

## 3.2 Outputs and results

The relevant core indicators for analysis are "Number of RTD projects", "Number of cooperation project enterprises – research institutions" and "Research jobs created".

The broad innovation agenda included entrepreneurship, ICT use and ESF support to innovation in the work place – see SEC(2006) 1547, 14.11.2007 - <a href="http://ec.europa.eu/regional-policy/sources/docoffic/working/doc/SEC-2007-1547.pdf">http://ec.europa.eu/regional-policy/sources/docoffic/working/doc/SEC-2007-1547.pdf</a>

#### ERDF/Cohesion Fund core indicators:

For the ERDF/CF the Commission recommends the use of "core indicators" in addition to the programme specific indicators (that vary according to national and regional practice and the specific objectives of the programmes). Use of core indicators has the advantage of allowing the possibility of aggregation but is not obligatory in this period.

The global aggregate achievements presented below are based on 2011 annual reports or, where possible, on updated values for 2011 and 2012 from the Strategic reports.

Achievements against targets are also analysed. Where no targets were set in the programmes in question, the related achievements were excluded from the analysis reducing the data available in that analysis (including in some case excluding reported achievements). From the available data it is clear that some targets were set too low or too high.

## Number of RTD projects – <u>Tables 2 and 3</u>:

- Total achievements reported by 25 MS is 53,242 projects (BG and LV did not report any achievements).
- 23 MS set targets (EE and HU did not set targets). For those programmes with targets, the average achievement ratio was 52%.
- The following MS reported the highest achievement ratios: SI (207%), LT (180%), UK (119%), and MT (110%). Target setting is probably too low in SI and LT as the amounts allocated to projects, although high, is under 80%.
- In terms of under reporting/ achieving: BG and LV (both with 0%) either had no achieved projects or there were problems with the monitoring system. With a selection rate of 44% for BG and 86% for LV, some achievements could have been expected, especially for an indicator such as number of projects supported.
- Warning signs for SK, PL, AT and GR acceleration is needed here. There are question marks for PL, AT and GR with low achievement rates if we look at the rate of project selection which is higher than 50%.

## Number of cooperation project enterprises – research institutions – <u>Tables 2 and 4</u>:

- Total achievements reported by 22 MS is 15,901 projects. DK, EE, FI, IE, SI did not use the indicator.
- 18 MS set target values, while 4 MS set no targets: CY, GR, HU and LT.
- Where targets were set the average achievement ratio is 52%.
- The following MS reported the highest achievement ratios: MT (360%), DE (323%), LU (240%), AT (190%).

• The following MS reported the lowest achievement ratios: BG and LV, (both with 0%) and CZ (7%). There is either an implementation problem in BG and LV or a reporting problem, because there is not consistency with the selection project rate of 44% for BG and LV with 86%.

### Number of Research jobs created - Tables 2 and 5:

- Total achievements reported by 18 MS is 15,622 jobs created. PT used the indicator but did not report achievements for 2011. 8 MS did not use the indicator, including some which devote significant resources to this thematic area (ES, GR, SI). It must be noted that the use of core indicators was not obligatory.
- 17 MS set target values; CY and HU did not set targets.
- Where targets were set the average ratio of achievement is 41%. The following MS reported the highest achievement ratios: SE (270%), BE and RO (122%), RO (122%), IE (110%). BG, LV, SK MS reported zero achievements.

**Table 1.1: Categories of Intervention Examined** 

Code	Category	Decided Ops - Million € (a)	% Decided OPs of Total Decided (b)	Allocated to selected projects AIR 2011 - million € (c)	% (d=c/a)
01	R&TD activities in research centres	5,873.6	1.7%	4,441.9	75.6%
02	R&TD infrastructure and centres of competence in a specific technology	11,030.4	3.2%	8,130.9	73.7%
03	Technology transfer and improvement of cooperation networks	5,052.5	1.5%	3,041.4	60.2%
04	Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)	5,370.6	1.5%	3,027.9	56.4%
06	Assistance to SMEs for the promotion of environmentally-friendly products and production processes ()	2,104.6	0.6%	756.5	35.9%
07	Investment in firms directly linked to research and innovation ()	10,385.0	3.0%	6,666.2	64.2%
09	Other measures to stimulate research and innovation and entrepreneurship in SMEs	7,953.1	2.3%	4,574.8	57.5%
74	Developing human potential in the field of research and innovation, in particular through post-graduate studies	5,451.3	1.6%	2,407.4	44.2%
	Total innovation & RTD	53,221.2	15.4%	33,047.0	62.1%
	Total all themes	346,717.2		246,983.9	71.2%

Table 1.2: 2007-2011 – Project selection reported by MS.

Innovation & RTD					
Country	Decided OPs (a) - in M.€	% of National SF/CF	Allocated to selected projects AIR 2011 (b) - in M.€	% (c=b/a)	
PL	9,309.8	13.86 %	6,144.2	66.0%	
IT	6,201.6	22.18 %	2,910.4	46.9%	
ES	5,616.3	16.21 %	2,897.5	51.6%	
DE	4,899.5	19.22 %	3,545.6	72.4%	
PT	4,505.1	21.04 %	3,447.2	76.5%	
CZ	4,009.5	15.11 %	2,774.5	69.2%	
GR	2,437.1	12.06 %	510.5	20.9%	
FR	2,240.2	16.66 %	1,488.5	66.4%	
UK	2,137.8	21.61 %	1,411.9	66.0%	
HU	2,125.9	8.53 %	746.2	35.1%	
SK	1,299.9	11.30 %	652.4	50.2%	
СВ	1,262.7	15.97 %	906.1	71.8%	
RO	1,111.4	5.78 %	728.3	65.5%	
LT	1,016.5	15.00 %	776.9	76.4%	
SI	1,012.6	24.69 %	785.6	77.6%	
LV	752.8	16.62 %	650.0	86.3%	
EE	681.3	20.02 %	542.0	79.5%	
FI	468.2	29.33 %	329.2	70.3%	
SE	404.6	24.88 %	345.8	85.5%	
AT	358.9	29.80 %	214.9	59.9%	
NL	299.6	18.05 %	373.1	124.5%	
BE	299.0	14.49 %	266.6	89.2%	
BG	293.1	4.39 %	128.5	43.9%	
DK	158.7	31.14 %	120.1	75.7%	
IE	155.2	20.67 %	228.2	147.0%	
MT	76.2	9.07 %	62.4	81.9%	
CY	70.4	11.49 %	45.3	64.4%	
LU	17.3	34.20 %	15.1	87.2%	
EU	53,221.2		33,047.0	62.1%	

## Graph 1: Rate of project selection 2007-2011

(ranked left to right in order of highest to lowest amount)

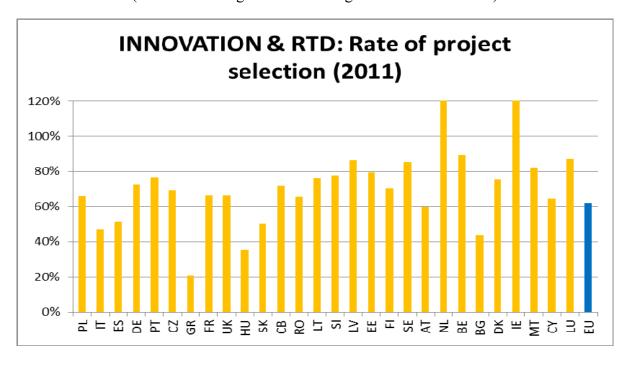


Table 2: 2007-2011 — Total achievements reported by MS

Country	Number of RTD projects	Number of Co-Operation Projects: Enterprises/Research	Number of Research jobs created
AT	164	391	141
BE	575	40	343
BG	0	0	0
CY		37	
CZ	608	26	1,365
DE	4,873	1,584	614
DK	212		
EE	1,043		
ES	30,538	5,397	
FI			
FR	2,658	1,782	2,401
GR	493	0	
HU	970	229	1,950
IE	1		806
IT	4,079	1,671	1,341
LT	468	8	133
LU	19	12	63
LV	0	0	0
MT	11	25	
NL	347	399	0
PL	360	276	2,484
PT	3,301	412	-
RO	341	32	755
SE	57	182	634
SI	476		
SK	339	217	0
UK	1,309	3,206	2,593
EU	53,242	15,901	15,622

Table 3: Number of RTD projects - target set and achievements reported based on 2011 AIRs

Country Cd	Final Target	2011	Achievement ratio
SI	230	476	205%
LT	260	468	180%
UK	1,100	1,309	119%
MT	10	11	110%
SE	62	57	92%
PT	3,840	3,301	86%
IT	4,829	4,079	84%
DK	260	212	82%
FR	3,431	2,658	77%
NL	506	347	69%
BE	904	575	64%
LU	32	19	59%
RO	600	338	56%
DE	9,661	4,873	50%
ES	50,937	23,960	47%
CZ	1,750	516	29%
IE	4	1	25%
AT	798	164	21%
GR	2,557	493	19%
SK	1,845	339	18%
PL	1,185	172	15%
BG	275	0	0%
LV	200	0	0%
Total EU	85,276	44,368	52%

Table 4: Number of cooperation project enterprises – research institutions – targets set and achievements reported based on 2011 AIRs

Country Cd	Final Target	2011	Achievement ratio
MT	10	36	360%
DE	491	1,584	323%
LU	5	12	240%
AT	206	391	190%
FR	1,713	1,782	104%
IT	1,767	1,671	96%
SE	195	182	93%
NL	469	399	85%
UK	4,832	3,206	66%
ES	14,180	4,366	31%
PT	1,341	412	31%
BE	200	40	20%
SK	1,130	217	19%
RO	200	32	16%
PL	917	115	13%
CZ	240	16	7%
BG	110	0	0%
LV	50	0	0%
Total EU	28,056	14,461	52%

Table 5: Research job created – target set and achievements reported based on 2011 AIRs

Country Cd	Final Target	2011	Achievement ratio
SE	235	634	270%
BE	280	343	122%
RO	500	611	122%
IE	730	806	110%
UK	2,828	2,593	92%
PL	5,920	2,484	42%
FR	6,224	2,401	39%
LU	200	63	32%
DE	2,244	614	27%
IT	6,206	1,341	22%
CZ	2,585	447	17%
AT	862	141	16%
LT	876	133	15%
BG	300	0	0%
LV	50	0	0%
PT	526		0%
SK	478	0	0%
Total	21.01:	1.0.61.5	4407
EU	31,044	12,611	41%