



# Stairway to Excellence

Cohesion Policy and the Synergies with the  
Research and Innovation Funds

**Romania (RO)**  
**Facts & Figures**  
***Complementary Regional Indicators***



June 2015

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Please include the following information to reference this report:

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

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## Introduction

The regional indicators presented in this document complement the "National Facts and Figures"<sup>1</sup>. The regional level focussed on is NUTS2<sup>2</sup> and key indicators for the regions in the country are provided related to the macro economy, Framework Programme 7 (FP7) and the Structural Funds (2007 – 2013). The document allows the capacity of individual regions to be better understood and the regions place in the national context can be studied when used in conjunction with the national figures. The purpose of this document overlaps with the "National facts and figures" in that it provides data to address 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?
- What are the main R&I stakeholders involved in EU programmes?

These "Complementary Regional Indicators" are provided for those countries for which the regional level has some important but limited relevance. For other countries the regional level is not important and no complementary indicators are provided. For one country, namely Poland, the regional level is important and detailed "Regional facts and figures" are provided.

## Macro-economic Indicators

Disparities exist between territories within a country. These disparities impact on the capacity of participants to be involved in EU programmes such as FP7/Horizon 2020, the funding rate of EU regional funding, the funding absorption capacity and specialisation pattern at territorial level.

**Table 1** gathers some macro-economic indicators extracted Eurostat in order to characterise the regions.

**Table 1: General macro-economic indicators of the Regions in 2011**

	GDP per Capita (in EUR)	GDP per capita compared to EU average (in %)	R&D expenditure (in MEUR)	R&D exp. /GDP (in %)	Share of business sector in R&D expenditure /gdp (In %)	Share of gov sector in R&D expenditure /gdp (In %)	Share of Higher education sector in R&D expenditure /gdp (In %)	Share of Private non-profit in R&D expenditure /gdp (In %)
Nord-Vest - R011	5,300	21	71.189	0.49	0.23	0.07	0.19	0.00
Centru - R012	5,800	23	29.228	0.2	0.08	0.02	0.10	0.00
Nord-Est - R021	3,600	15	40.632	0.3	0.03	0.13	0.14	0.00
Sud-Est - R022	5,000	20	14.959	0.11	0.00	0.07	0.03	0.00
Sud - Muntenia - R031	5,100	20	62.712	0.38	0.33	0.03	0.02	-
Bucureşti - Ilfov - R032	15,500	62	379.372	1.08	0.35	0.58	0.16	0.00
Sud-Vest Oltenia - R041	4,700	19	29.639	0.28	0.06	0.13	0.07	0.02
Vest - R042	6,800	27	29.679	0.23	0.04	0.06	0.13	0.00

Source: Compiled and calculated by using Eurostat 2011

<sup>1</sup> <http://s3platform.jrc.ec.europa.eu/facts-figures>

<sup>2</sup> <http://ec.europa.eu/eurostat/web/nuts/overview>

## Framework Programme 7

Different specialisation patterns emerge from the analysis of the participation of territories in the FP7. The specialisation areas showed in the following table come up from the FP7 participation of beneficiaries based in Regions. Methodology is the following: we consider there is an FP7 specialisation in a specific area when we observe an over-distribution in this area compared to the standardized distribution of the budget in the FP7. The table is result of the comparison of the weight of each theme in the total funding received by the Region/country with the corresponding weight in the whole FP7.

**Table 2: FP7 specialisation at regional level (Nuts 2)**

	R011	R012	R021	R022	R031	R032	R041	R042	Romania
<b>Food, Agriculture and Fisheries</b>	X	X		X					
<b>Biotechnology</b>	X		X						
<b>Health</b>					X				
<b>Information &amp; communication technologies</b>	X							X	
<b>Nanosciences &amp; Nanotechnologies</b>			X			X		X	X
<b>Materials</b>	X		X	X	X	X		X	X
<b>New production technologies</b>		X		X		X			X
<b>Integration of nanotechnologies for ind.l app</b>			X			X		X	X
<b>Energy</b>									
<b>Environment</b>			X	X	X	X			X
<b>Aeronautics</b>		X	X		X	X			X
<b>Space</b>		X		X		X			
<b>Automotive</b>	X							X	
<b>Rail</b>		X							
<b>Waterborne</b>				X			X	X	X
<b>Urban transport and intermodalities</b>			X	X			X		X
<b>Socio economic sciences and humanities</b>	X			X		X		X	X
<b>Security</b>				X		X	X		X

Source: EC FP7 contract database June 2014

The following table show the four first organisations based in each Region in terms of number of funded participations in the FP7.

**Table 3: The 4 first organisations at regional level**

Region	NAME	TYPE
Nord-Vest - R011	UNIVERSITATEA TEHNICA CLUJ-NAPOCA	HES
	UNIVERSITATEA BABES BOLYAI	HES
	TECHNOSAM SRL	PRC
	TRITECC SRL	PRC
Centru - R012	UNIVERSITATEA TRANSILVANIA DIN BRASOV	HES
	ROPARDO SRL	PRC
	SIEMENS PROGRAM AND SYSTEM ENGINEERING SRL	PRC
	UNIVERSITATEA LUCIAN BLAGA DIN SIBIU	HES
Nord-Est - R021	UNIVERSITATEA ALEXANDRU IOAN CUZA DIN IASI	HES
	INSTITUTUL DE CHIMIE MACROMOLECULARA PETRU PONI	REC
	UNIVERSITATEA TEHNICA GHEORGHE ASACHI DIN IASI	HES
	UNIVERSITY STEFAN CEL MARE SUCEAVA	HES
Sud-Est - R022	INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE MARINA GRIGORE ANTIPA	REC
	UNIVERSITATEA DUNAREA DE JOS DIN GALATI	HES
	INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE DELTA DUNARII	REC
	Universitatea Ovidius Constanta	HES
Sud - Muntenia	NAME	TYPE

- RO31	REGIA AUTONOMA TEHNOLOGII PENTRU ENERGIA NUCLEARA - RATEN	PRC
	UNIVERSITATEA VALAHIA TARGOVISTE	HES
	GREENTRONICS SRL	PRC
	ANA ASLAN INSTITUTE OF GERONTOLOGY AND GERIATRICS	HES
București - Ilfov - RO32	NAME	TYPE
	UNIVERSITATEA POLITEHNICA DIN BUCURESTI	HES
	Ministerul Educatiei Nationale	PUB
	Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii	REC
	UNIVERSITATEA DIN BUCURESTI	HES
Sud-Vest Oltenia - RO41	NAME	TYPE
	UNIVERSITATEA DIN CRAIOVA	HES
	BLUE POINT IT SOLUTIONS SRL	PRC
	SC IPA SA	REC
	NATIONAL RESEARCH AND DEVELOPMENT INSTITUTE FOR CRYOGENICS AND ISOTOPIC TECHNOLOGIES ICSI RM VALCEA	REC
Vest - RO42	NAME	TYPE
	UNIVERSITATEA POLITEHNICA DIN TIMISOARA	HES
	UNIVERSITATEA DE VEST DIN TIMISOARA	HES
	INSTITUTUL E-AUSTRIA TIMISOARA	REC
	UNIVERSITATEA DE MEDICINA SI FARMACE VICTOR BABES TIMISOARA	HES

Source: EC FP7 contract database June 2014

The following table shows the four first partners of the Region based outside of the Country.

**Table 4: The 4 first EU partners**

	NAME	TYPE	REGION
Nord-Vest - RO11	BIOZOOM GMBH	PRC	DE50
	KATHOLIEKE UNIVERSITEIT LEUVEN	HES	BE24
	FUNDACION TECNALIA RESEARCH & INNOVATION	REC	ES21
	Masarykova univerzita	HES	CZ06
Centru - RO12	NAME	TYPE	REGION
	UNIVERSITY OF SURREY	HES	UKJ2
	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	REC	DE11
	TECHNISCHE UNIVERSITEIT DELFT	HES	NL33
Nord-Est - RO21	UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	HES	IT14
	NAME	TYPE	REGION
	UNIVERSITAET FUER BODENKULTUR WIEN	HES	AT13
	UNIVERSITEIT GENT	HES	BE23
Sud-Est - RO22	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	REC	FR10
	HELINGIN YLIOPISTO	HES	FI1B
	NAME	TYPE	REGION
	HELLENIC CENTRE FOR MARINE RESEARCH	REC	EL30
Sud - Muntenia - RO31	INSTITUTE OF OCEANOLOGY - BULGARIAN ACADEMY OF SCIENCES	REC	BG33
	MARINE HYDROPHYSICAL INSTITUTE - UKRAINIAN NATIONAL ACADEMY OF SCIENCES	HES	UA
	MIDDLE EAST TECHNICAL UNIVERSITY	HES	TR51
	NAME	TYPE	REGION
București - Ilfov - RO32	CENTRE D'ETUDE DE L'ENERGIE NUCLEAIRE FONDATION D'UTILITE PUBLIQUE	REC	BE21
	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	REC	FR10
	NUCLEAR RESEARCH AND CONSULTANCY GROUP	REC	NL32
	JRC -JOINT RESEARCH CENTRE- EUROPEAN COMMISSION	REC	EU
Sud-Vest	NAME	TYPE	REGION
	TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU	REC	TR51
	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	REC	FR10
	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	REC	FR10
	JRC -JOINT RESEARCH CENTRE- EUROPEAN COMMISSION	REC	EU

Oltenia - RO41	SINGULARLOGIC ANONYMI ETAIRIA PLIROFORIAKON SISTIMATON KAI EFARMOGON PLIROFORIKIS	PRC	EL30
	AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA	REC	ITI4
	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	REC	FR10
	ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS	REC	EL12
Vest - RO42	<b>NAME</b>	<b>TYPE</b>	<b>REGION</b>
	UNIVERSITA DEGLI STUDI DI VERONA	HES	ITH3
	EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZURICH	HES	CH04
	SIEMENS AKTIENGESELLSCHAFT	PRC	DE21
	TECHNISCHE UNIVERSITAET WIEN	HES	AT13

Source: EC FP7 contract database June 2014

## Structural Funds

There are no regional operational programmes for Romania in 2007-2013. Therefore, the funding for Research and Technological Development, Innovation and Entrepreneurship (RTDI) is associated with National OPs and is addressed in the "Romania: Facts and Figures" report.

However, **Table 5** shows estimations for regional funding by priority themes. 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

Regional analysis is undertaken at the NUTS2 level. The Operational Programmes (OPs) can be national, regional and in some cases multi-regional. This can present problems as while the regional OPs mean that the funding can be assigned to the NUTS2 region for the national OPs this was frequently not the case with only the national level indicated or a NUTS1 region.

In order to have an idea of the total RTDI funding allocated to projects in a region the national or NUTS1 funding was disaggregated based on the appropriate population proportions for the NUTS2 region. Therefore, the figures in **Table 5** are based on the assumption that the funding allocated is proportional to the population and are therefore estimations intended to provide an approximation of the funding breakdown.

**Table 5: Estimated funding allocated to projects by region and priority theme**

Region	Estimated funding by priority theme M€										Regional Total M€
	01 R&TD activities in research centres	02 R&TD infrastructure and centres of competence in a specific technology	03 Technology transfer and improvement of cooperation networks	04 Assistance to R&TD, particularly in SMEs	05 Advanced support services for firms and groups of firms	06 Assistance to SMEs for the promotion of environmentally-friendly products	07 Investment in firms directly linked to research and innovation	08 Other investment in firms	09 Other measures to stimulate research and innovation	10 Developing human potential in the field of research and innovation	
Nord-Vest - R011	6.1	61.1	0.0	2.3	0.0	51.4	21.8	104.7	12.1	37.9	297.4
Centru - R012	5.6	55.6	0.0	2.1	0.0	46.7	19.9	83.3	11.0	34.5	258.6
Nord-Est - R021	7.8	77.2	0.0	2.9	0.0	64.9	27.6	99.5	15.3	47.9	343.0
Sud-Est - R022	6.0	59.4	0.0	2.2	0.0	50.0	21.2	71.5	11.8	36.9	258.9
Sud - Muntenia - R031	7.4	73.2	0.0	2.7	0.0	61.5	26.2	112.0	14.5	45.4	342.9
Bucureşti - Ilfov - R032	5.4	53.8	0.0	2.0	0.0	45.2	19.2	63.4	10.7	33.3	233.0
Sud-Vest Oltenia - R041	4.9	48.3	0.0	1.8	0.0	40.6	17.2	71.3	9.6	29.9	223.5
Vest - R042	4.3	43.0	0.0	1.6	0.0	36.1	15.4	70.8	8.5	26.6	206.4
<b>Priority Total M€</b>	47.4	471.6	0.0	17.4	0.0	396.4	168.5	676.5	93.4	292.4	2163.7

Source: JRC/IPTS calculated from the Operational Programmes and funding allocated to projects in AIR 2013