

# The Romanian-EEA Research Programme 2012 - 2017

## 1. Programme proposal

### 1.1 Executive summary

The Romanian-EEA Research Programme aims to contribute to the reduction of economic and social disparities in the European Economic Area and to strengthen the bilateral relations by enhancing research cooperation between the scientific communities of Romania, Norway, Iceland and Liechtenstein, stimulating long-term cooperation and equal partnerships between the research institutions.

The Programme responds to the Romanian scientific community's demand for more international integration and cooperation with colleagues from Western Europe in particular. It does so by mobilizing research capacities in Norway, Iceland, Liechtenstein and Romania, and by supporting scientific cooperation in the form of Joint Research Projects (JRPs) between countries through the provision of grant assistance. The Programme is also open to participants from third countries using their own contribution.

The total Programme budget under the Programme Area "Research within Priority Sectors" is 23.529.412 EUR out of which 22.072.981 EUR is allocated for joint research projects selected on the basis of calls for proposals. Maximum grant amount will be 1,5 mill. EUR for 3-year projects, with up to 100% coverage of eligible costs.

Proposals for JRPs will be reviewed according to international peer review standard procedures, using as main criterion of evaluation the scientific quality of the projects and for applied research, development and innovation projects – additionally – the socio-economic impact (the significant contribution to solve/improve on a quantifiable social need will be also taken into consideration). Relevance, quality and efficiency of implementation will also be evaluation criteria.

The Programme beneficiaries are public and private research organizations (including universities) and small and medium sized enterprises from Romania, Norway, Iceland and Liechtenstein.

In order to make targeted use of the financial resources available, the following **thematic areas** will be addressed:

- Climate change and renewable energy;
- Health and food safety;
- Environmental protection and management.

Interdisciplinary approaches and projects addressing the societal challenges in the thematic areas from the perspectives of social sciences and humanities will also be eligible for funding.

### 1.2 Basic information

- Name of the Programme: Romanian-EEA Research Programme
- Name of Programme area addressed: Research within Priority Sectors
- Name of the Programme Operator: National Authority for Scientific Research (ANCS)
- Name and country of origin of Programme partners: Research Council of Norway – RCN and the Icelandic Centre for Research – RANNIS (Iceland)
- Name of the Implementing Agency: the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI)

### 1.3 Relevance of the Programme

The main objective of the Programme is to enhance research based knowledge development in Romania through increasing research cooperation between Norway, Iceland, Liechtenstein and Romania. The Programme is complementary to the national budget for

research, development and innovation and with the objectives of the National Research, Development and Innovation Plan II 2007-2013<sup>1</sup>, the main instrument for the implementation of the National Strategy for Research, Development and Innovation 2007-2013<sup>2</sup>. It will contribute to further integration of Romanian researchers within international networks and it will facilitate the exchange of knowledge and know-how among researchers and all project partners. The Programme shall prepare participants for further research cooperation within the European Framework Programmes for Research and Innovation and other European programmes, and shall contribute to the development of the European Research Area. The research Programme shall strengthen capacity and build competence of the Programme Operator and the Implementing Agency, project partners as well as researchers.

The European Strategy 2014-2020<sup>3</sup> emphasizes also the importance of investment in research for new knowledge and innovation in economy and for increasing of social conditions.

The Programme has a strategic significance for the national scientific research especially for its **thematic areas**:

- Climate change and renewable energy;
- Health and food safety;
- Environmental protection and management.

The division into thematic areas should not prevent the joint research projects (JRPs) from being **interdisciplinary** in character. They should be able to approach several of the thematic areas, and/or combine input from several disciplines, including social science and humanist perspectives. Research addressing **societal challenges** related to the thematic areas could be addressed by the JPRs.

### **1.3.1. Climate change and renewable energy**

All four countries which support the Programme have strong common points of interest in the field of climate change and renewable energy sources. From the point of view of resources, institutional structures, consumption pattern and research objectives, Romania is in position to cooperate on a multitude of aspects, including micro hydro power generation (MHG) and wind, solar and geothermal energy, along with biomass, bio-fuels and alternative low-carbon fuels, and also in all other aspects mentioned in the Memorandum of Understanding (Annex 2 of EEA Grants Regulations) related to climate change and renewable energy.

The overall **objectives** of this thematic area are:

- to reduce emissions of greenhouse gases and air pollutants;
- to increase of share of renewable energy in energy use;
- to strengthen of knowledge base on the environment and climate change in order to increase the application of environmental technology.

It is expected that the focus of projects in this programme area will be on **applied research**.

### **1.3.2. Health and food safety**

Research in the field of health and food safety aims to promote activities which will improve the quality of life and wellbeing of the society.

Thus, the overall **objectives** of this thematic area are:

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<sup>1</sup> Government decision nr. 217/2007 concerning the approval of the National Strategy for R&D, for the period 2007-2013

<sup>2</sup> Government decision nr. 475/2007 concerning the approval of the National Plan for R&D, with the subsequent modifications

<sup>3</sup> European Commission. Europe 2020. A strategy for smart, sustainable and inclusive growth. EUROPE 2020 A strategy for smart, sustainable and inclusive growth. Brussels, COM (2010) 2020

- to stimulate multidisciplinary research (eg medical and engineering) for improving the quality of life and wellbeing (including for elderly people);
- to promote mechanisms of governance in order to improve public health, health information and health system governance;
- to improve the health status of the population to add value to society;
- to provide new and to improve the existing methods to enable access to medical monitoring and expert medical diagnosis;
- to increase the trust in food industry;
- to reduce the risk contamination of food;
- to adapt systems in the context of climate change for environment hazard prevention;
- to create workplaces in environment friendly fields.

Both **applied research** and **basic research** will be supported in this area.

### **1.3.3. Environmental protection and management**

The projects must improve the national expertise in monitoring and data processing for supporting the improvement of environment quality, particularly ambient air quality and water quality.

The overall **objectives** of this thematic area are:

- to improve compliance with environmental legislation;
- to prevent injury and adverse environmental effects caused by chemicals and hazardous waste;
- to develop a sustainable management of the nature resources while preserving biodiversity;
- to develop and implement the modern technologies for environmental monitoring and risk assessment; prediction of the regional impact of the climate changes, based on numerical data;
- to increase application of research results in planning and control of the environment, and adaptation to climate change.

Both **applied research** and **basic research** will be supported in this area.

The thematic areas are in full compliance with the needs and gaps identified so far and with the outcomes and recommendations received from several events with participants from science field and local administrations.

#### **Legislation and national priorities:**

- Government decision nr. 475/2007 concerning the approval of the National Plan for R&D, with the subsequent modifications;
- Government decision nr. 217/2007 concerning the approval of the National Strategy for R&D, for the period 2007-2013;
- Government Ordinance no. 57/2002 concerning scientific research and technological development, approved with modifications through Law no. 324/2003, with the subsequent modifications;
- Law no. 1/2011 of National Education.

## **1.4 Programme motivation and justification**

### **1.4.1 Challenges and needs analysis**

The National Research, Development and Innovation Strategy 2007-2013 is based on the vision of Romanian society concerning the role of science, technology and innovation for the

development of the knowledge-based society in Romania, targeting the economic and social progress. The strategy is implemented through specific instruments. Among them, the National Plan for Research, Development and Innovation plays the key role. The National Strategy and Plan had been developed in parallel and complementary to the economic competitiveness and human resources development operational programmes of the structural funds for the 2007-2013 period.

The RDI system has three strategic objectives:

- knowledge creation;
- increase competitiveness of the Romanian economy;
- increase social quality (quality of social institutions and wellbeing of citizens).

Romania faces the challenge of a highest share of outgoing researchers and a no relevant share of visiting researchers. The number of researchers, as percentage of population, is still far from the EU average and, in the same areas, with at high average age.

Data shows a low level of international cooperation with impact on scientific output, researchers' mobility, co-publishing profile (**Annex 1**). Romania lags behind EU countries in number of patents.

Understanding the challenges the RDI Strategy and Plan 2007-2013 create mechanisms for international cooperation and partnerships, and for researchers' mobility, have opened the research grants for the international scientific community. Access to the research grants is solely based on scientific quality proven by international evaluation. There are no barriers for researchers coming from abroad, including the standard procedures in place for obtaining the scientific visa. There are research grants schemes for young researchers and young researchers' teams as well as mechanisms for stimulating grain gain and brain circulation. Taking advantages of high quality scientific diaspora is one of the top priorities.

There are active mechanisms for stimulating the private investments in RD.

Romania still has high quality of human resources and long tradition in certain areas of science and technology; the national strategy creates the basis for their recognition and fosters their development.

Romania has continuously invested in high class research infrastructure in defined areas of interest both for scientific research as well for more targeted applied research aiming to create capacity for knowledge development and innovation in areas of socio economic needs.

Romania participation in FP7 is moderate and declined from year to year. Projects with Romanian participation in FP7 exhibit a low success rate. The most relevant factor explaining this low success rate is that Romanian researchers collaborate with consortia that are not best suited for the projects they applied for.

Facing all these challenges and needs Romania is aware of the value of international cooperation and partnerships for training of young researchers, for the quality of scientific outputs, for better international visibility, for boosting innovation. International cooperation creates also incentives for concentration; a more focus on areas where existing resources (human, natural, infrastructures) and uniqueness could drive to a smart specialization.

In order to increase the participation of the Romanian SMEs in the research-development projects, development products and new technologies, we have to take the opportunity of this Programme which will ensure a real framework for them to contribute to the improvement and welfare of the Romanian society.

### **Climate change and renewable energy**

Challenges and needs in Romania related to the programme area refer to renewable energy sources, technology and use, as well as climate changes effects. In the area of renewable energy, there are growing needs for the use of renewable energy in integrated applications, fast adaptation to local combination of resources in a modular, repeatable way, and future

large-scale applications in less developed areas in Romania like PV cells, use of biomass, generation and use of alternative fuels (ex., hydrogen), CCS etc.

There are clear signals that, in the next 50 years, climate changes will impact the main sectors, like infrastructure and transport, power supply, water management, agriculture and forestry, fishing, healthcare and tourism. Ecosystems and biodiversity will also suffer due to climate changes. There is need to counteract climate change caused by inadequate or obsolete technologies mainly based on hydrocarbons. Thus, the Programme should contribute to sustainable economic development and environmental protection.

### **Health and food safety**

For science and policy in the field of health and food safety, the challenges were identified for long, active and independent life for people and could be approached by partnerships in order to obtain new technologies and products, innovative services, studies and improved health policies. Analysis of challenges and needs in Romania is based on national and international surveys related to health status and health determinant and on strategic documents referring to health policy or to integrated public health (National Development Plan, National Strategy for Scientific Research, National Strategy for Decentralization of the Health System<sup>4</sup>).

In terms of **health** status, Romania faces a serious gap compared to other member states, mostly due to an excess of mortality and morbidity from main non-communicable diseases. A life expectancy 6 - 7 years lower than EU average and much higher mortality rates for cardiovascular diseases, cancer or liver cirrhosis are the current challenges for the health system. The infectious diseases are also part of the problem, one of four TB cases notified in EU originate in Romania. The mortality is well registered and reported, but the morbidity is only partially known, due to weakness in the information systems. These inequalities exist on two levels: Romania compared to EU average, but also among different subgroups of Romanian citizens.

As for policy, the health system is facing a financial crisis, as well as challenges due to human resources migration and sustainability of social insurance.

A major challenge in medicine is to understand genetic, molecular and cellular mechanisms underlying common mental disorders including schizophrenia, which involve complicated genetic and environmental determinants. Schizophrenia is a common mental disorder, affecting 0,5-1% of the population. Schizophrenia mostly presents with several episodes and tends to become chronic. Approximately 30% of patients with schizophrenia require support throughout their lives and roughly 50% will have lifelong disabilities and social problems. Its direct costs in western countries range between 1.6-2.6% of total health care expenditures which account for 7-12% of the gross national product, and is the seventh most costly medical illness to western societies. Bipolar disorder (BP) (manic-depressive illness) is a chronic psychiatric disease with strong genetic component revealed by familial risk and twin concordance studies.

The **food safety** area in Romania is a very sensitive area in which people wanted to be aware about existing hazard and the way of its prevention. There were many public debates about additives used in food processing or food supplements or preservatives used in packed food or long chain distribution food. Food is a product of natural and human laboratory. It is not sufficient as food to be chosen by consumer but it is also important consumer to know where, who and how are produced and how long is distribution chain.

National economy and food industry has several challenges, one of them being the food safety supply with convenient prices and, in sufficient quantities in the context of increasing of: number of population, awareness of consumers, market competition and sustainability.

### **Environmental protection and management**

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<sup>4</sup> National Strategy for Decentralization of the Health System in Romania: <http://www.euro.who.int/en/what-we-do/health-topics/Health-systems/public-health-services/facts-and-figures/romania-2008>

In terms of environment protection and management, air pollution and water pollution caused by industry are serious environmental problems in Romania. The country's factories, chemical plants, and electric power plants depend heavily on burning fossil fuels, a process that emits high levels of carbon dioxide and sulphur dioxide - a key component of acid rain. The industrial centres in central Romania and in the south have severe air pollution problems. Much of the nation's industrial runoff ends up in the Danube river system, making water unsafe for drinking and threatening the diverse ecosystems of the Danube Delta, the largest one in Europe.

Poor farming practices, especially infrequent crop rotation, have led to severe soil degradation and erosion in parts of Romania, although today, nearly half of all Romanians still live out of farming, in rural areas. In the 1980s large tracts of marshland lining the Danube were drained and converted to cropland to aid food production. Deforestation, however, is not a serious problem in Romania, where forests cover 27.7 per cent of the land. Romania is indeed rich in biodiversity, particularly in the broad Danube Delta, which is reserve of water plants, wetland ecosystem and swamp haven for both flora and fauna. Moreover, Romania has one of the largest undisturbed forest area in the world (13% of the country – half of total forest land), and 5% of a total country area represents protected land.

### **Complementary sources of financing and any previous experience associated with acquisition of financing**

For EU 12 Member States the Structural Funds are the main source of European funding of RDI.

Romanian participation in FP7 is moderate; it declined from year to year despite the fact that there were no national calls for proposals in the respective years: Romanian **rate of participation** as a share of overall participation declined from 1.2% in 2007 to 0.9% in 2009 and 2010. The **share of financial returns** started at a low level from the very beginning and declined towards the end of the period: 0.51% (2007) and 0.34% (2010). If we compare the share of financial returns with the share of participation, we immediately find that the financial return as a share of participation ranges between 39% and 55%. As this difference can only be partly explained by differences in salaries, we can conclude that Romanian partners tend to be minor partners in consortia. From a more mercantile point of view, the Romanian balance is also negative: while its share of GDP is 0.99% of total EU, EU's contribution to Romania in FP7 is only 0.46%.

Projects with Romanian participation in FP7 also exhibit a low **success rate**, not to say the lowest success rate amongst the EU 27: The RO applicant success rate of 14.5% is lower than the EU-27 applicant success rate of 21.6%. The Romanian EU financial contribution success rate of 9.1% is lower than the EU 27 rate of 20.7%. Amongst the EU 27, Romania ranks: 27th in terms of applicants success rate and 27th in terms of EC financial contribution success rate. The most relevant explanatory factor for the low success rate is that Romanian researchers mainly collaborate with partners that – as a consortium – are not best suited for the topics they go for.

In the **Annex 2**, the Romanian participation to FP7 with submitted and retained proposals as well as the success rates per program, as of June 2012, is shown in Table 1.

Table 2 gives an overview of the level of collaboration between Romanian and Norwegian academic and business sector under FP7, which clearly indicates a rather low level of joint participation into the same networks of successful participants to the Framework Program. A percentage of 17,3 from the Romanian retained proposals have Norwegian partners. The highest share (64%) in the joint retained proposals is represented by the collaborative research under the Cooperation Program whereas at the Marie Curie Actions there is no joint project retained under the mobility schemes. As for the thematic areas of FP7 Cooperation Program relevant for this Program, the highest share is represented by the "Environment and Climate change" with 21%, followed by "Health" (10,6%), "Socio-economic sciences and humanities" (4,5%) and "Energy" (1,5%) which is the lowest share of all.

An extremely high share of EU funding for RDI allocated to the EU 12 Member States does not come from the Framework Programme but from the Structural Funds, ranging between 80% and 95%. This ratio is highly unperceived by most policy makers and research performers or managers. Moneywise, FP7 is more or less insignificant.

While some of EU 12 Member States have doubled or almost tripled their national budgets through Structural Funds, Romania has planned only for a 40% equivalent of its national RDI budget, a clear indication of a different set of priorities. But even within this reduced share, the Structural Funds play by far the most important role.

After two thirds of the planning period (2007-2013) two thirds of the available budget has been contracted, which is highly consistent. To sum up, the two main complementary sources of European funding for RDI, FP7 and Structural Funds, are not exploited, for different reasons, at their full extent by the Romanian research and innovation system. Thus, for the Romanian RDI system one of the challenges ahead is to better take the opportunities offered by different external funding sources in order to close the gaps between Romania and EU27. According to the Innovation Union Scoreboard for 2011, the indicators presented in the table below show the relative strengths and weaknesses of the Romanian research and innovation system in comparison to their average value at EU level.

Based on the average innovation performance, Romania is falling into the “Modest innovators” performance group, well below that of the EU27 average. Relative strengths are in Human resources, Firm investments and Economic effects. Relative weaknesses are in Open, excellent and attractive research systems, Linkages & entrepreneurship, Intellectual assets and Innovators. However, Romania is a catching-up country and ranks 4<sup>th</sup> amongst the highest growth leaders with an average annual growth rate calculated over a five-year period of 5%.

*Gaps compared to EU 27*

<i>Indicator</i>	<i>RO</i>	<i>EU 27</i>	<i>Gap</i>
<b>Summary Innovation Index SII</b>	0,263	0,539	1/2
<b>Human Resources</b>			
<b>New doctorate graduates (per 1000 population aged 25-34)</b>	1,3	1,5	Almost equal
<b>Population completed tertiary education (per population aged 30-34)</b>	18,1%	33.6%	>1/2
<b>Youth with upper secondary level education (per population aged 20-24)</b>	78,2%	79%	Almost equal
<b>Financial Support</b>			
<b>GERD (% GDP)</b>	0,47	1,99	~1/4
<b>Public R&amp;D expenditure (% GDP)</b>	0,29	0,76	~1/3
<b>Business R&amp;D expenditure (% GDP)</b>	0,18	1,23	~1/7
<b>Economic Effects</b>			
<b>Mid and high-tech product exports</b>	50,72%	48,23%	Higher
<b>Knowledge intensive services exports</b>	48,35%	48,13%	Higher
<b>Employment in knowledge-intensive activities</b>	6%	13,5%	<1/2

#### **1.4.2 Public and private structures relevant to the Programme area**

##### **1.4.2.1. Structure of the Romanian Research, Development and Innovation system**

The Romanian Research, Development and Innovation System, as of 2009, comprises a vast number of RDI actors represented by more than 1.300 organizations performing RDI activities, out of which 263 are public RDI organizations, as presented below:

- 197 R&D organizations within the core public administration, including:
  - 56 accredited public universities;

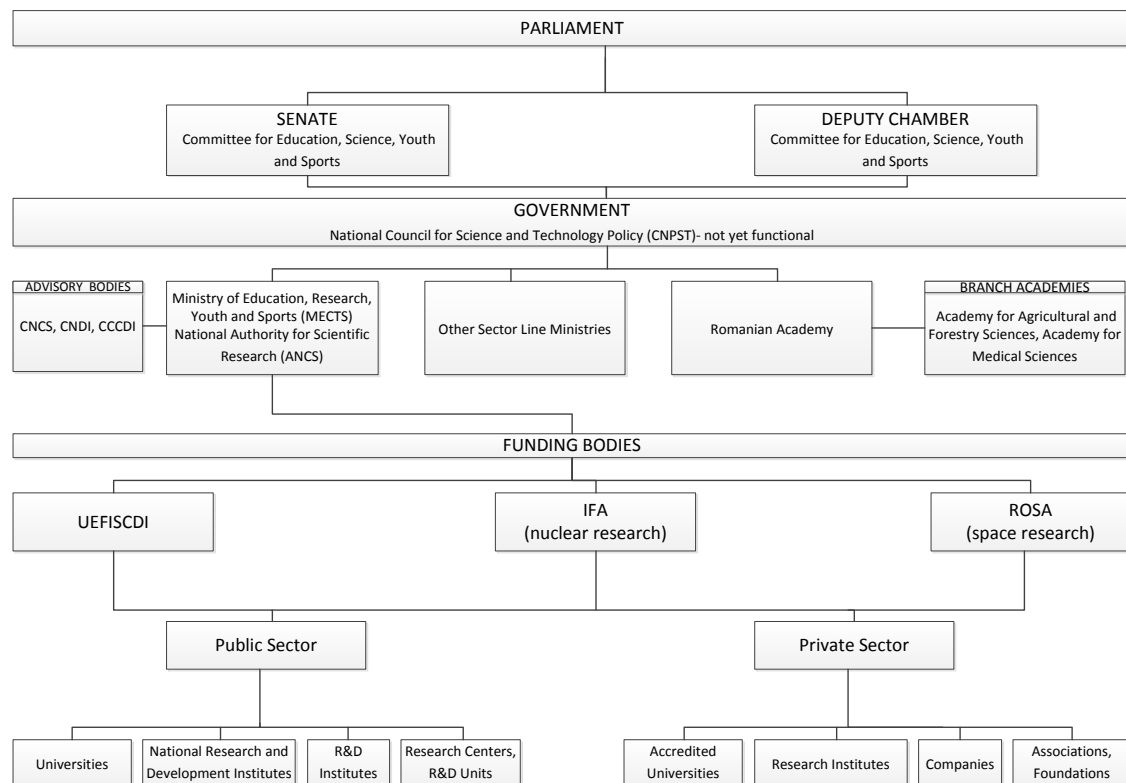
- 44 national R&D institutes coordinated by nine ministries
- 96 institutes, research centers and research-development units
- 66 organizations belonging to the Romanian Academy (research centers and institutes)
- a number of institutes organized as commercial companies, with the state as an owner or majority stakeholder
- almost 1.000 business operators in the private sector

The network of institutions specialized in technology transfer and innovation (ReNITT) in Romania, currently consists of 50 specific organizations, out of which 39 are accredited (technology transfer centers, technology info centers, technology and business incubators) and four science and technology parks.

As for the R&D human resources, 42.220 people are involved in research and development activities out of which 30.122 are researchers including 10.339 PhD students (National Statistical Institute, 2009).

In the table below, a schematically representation of the Romanian RDI system with its structure, governance and main actors is shown.

Table 1.4.2.1 Structure of Romanian RD&I System



Under the Parliament structure there are two Committees for Education, Science, Youth and Sports where laws, governmental decisions and other legislative documents linked with RD&I are debated and approved.

At the Government level, according to the relatively recent changes of the Research Law, a National Council for Science and Technology Policy has been set up under the Prime-Minister coordination as a platform for dialogue among governmental institutions and major representatives of the scientific community and business sector. Up to date, this body is yet not functional.



A key player in defining, implementing, monitoring and evaluation of the research, development and innovation strategy, policies and programs is the National Authority for Scientific Research (ANCS). On behalf of the Romanian Government, ANCS is providing support for scientific research and the transfer of its results into the socio-economic area.

According to the law (GD 1449/2005), ANCS has been assigned by the Ministry of Education, Research, Youth and Sports with the overall responsibility for RDI policy coordination and planning according to the National Strategy for Research, Development and Innovation and the Government's Program. In addition, ANCS has been charged to stimulate regional and local development, foster private sector growth and international partnerships. Another major responsibility is to conduct competitive processes to allocate national funds for RDI projects. The main funding instruments through which ANCS is providing support for RDI projects performed by academia and the business sector are the following:

- the 2nd National Plan for RDI for 2007-2013, with its 6 national Programs (Human Resources, Ideas, Partnerships, Capacities, Innovation and Institutional Performance), funded with approximately 65% of its total annual budgetary appropriations;
- the Core Program, a basic institutional funding solely dedicated to the National R&D Institutes;
- the Sectorial Plan for Research of the Ministry of Education, Research, Youth and Sport, less than 0,5% of its annual budget;

It is worthwhile to mention that ANCS, as part of its active internationalization policy of research, is providing funds within the framework of the 2nd National Plan for the support of an increased participation of the research community to prestigious international organizations like CERN and ESA and for the scientists' access to large infrastructure facilities of European value recognized as such by the European Strategic Forum for Research Infrastructures like FAIR (Facility for Antiproton and Ion Research to be built in Germany) and ELI (Extreme Light Infrastructure, 3rd pillar on Nuclear Physics to be built in Romania).

At Government level there is National Council for Science and Technology Politics, but it is nonfunctional. Research policies are developed by Minister of Education, Research, Youth and Sport with support from its advisory councils as follows:

- **National Council for Scientific Research (CNCS)** – consultative body of the Minister of Education, Research, Youth and Sport. Its mission is to promote and stimulate excellence in scientific research in Romania. CNCS is scientific coordinator for three funding Programmes from the National Plan for Research, Development and Innovation: Human Resources, Ideas, Capacities;
- **National Council for Development and Innovation (CNDI)** - is also a consultative body which operates on scientific research and technological development. Its mission is to stimulate performance in research, development and innovation in order to increase national economic competitiveness and quality of life. CNDI coordinates two funding Programmes: Partnerships in priority S&T domains and Innovation.

**Romanian Academy** is an independent institution, with its own budget. It is the highest cultural forum, having as main objectives: cultivation of national language and literature, study of the national history, research into major scientific domains, and promotion of democratic and ethical principles of free communication of ideas in Romanian sciences, arts and letters.

Branch academies: Medical Sciences Academy manages 23 institutes and research centers and 12 clinics associated to medical universities; Academy of Agricultural Sciences coordinates a network of 25 institutes and research centers and 91 research and production centers; Technical Sciences Academy.

**Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI)** is a public body of the Central Administration under the ultimate authority of the Ministry of Education, Research, Youth and Sport (MECTS).

The Executive Agency for Higher Education, Research, Development and Innovation (UEFISCDI) has the following prerogatives:

- to ensure the executive activity for the consultative councils of MECTS with attributes in the domain of higher education, research, development and innovation;
- to ensure administrative coordination of programs of the National Plan II:
  - Human Resources
  - Ideas
  - Capacities
  - Partnerships in priority S&T domains
  - Innovation
- to achieve and manage in a decentralized system and/or implements institutional development and system projects concerning higher education, research, development and innovation with internal and international financing, with MECTS advice;
- to offer consultancy and technical assistance for elaborating and managing projects of the internal and international research programs for international research, technologic development and innovation stimulation;
- to cooperate with other public or private, national or international institutions, including with professional organizations in order to achieve its activity.

#### **Research and development entities**

At the national level there are 265 public R&D units and institutions: 169 R&D units are of national interest (48 national R&D institutes coordinated by 8 ministries out of which 19 institutes coordinated by National Authority for Scientific Research, 56 public universities, 65 institutes and research centers of the Romanian Academy); 96 institutes, R&D centers or centers organized as public bodies. There are about 1000 private companies performing R&D (2010, ANCS statistics)

The network for technology transfer and innovation (ReNITT):

- 50 specific organizations (technology transfer centers, technology info centers, technology and business incubators)
- 4 science and technology parks.

R&D human resources: 42.220 people involved in research and development out of which 30.122 researchers including 10.339 PhD students (National Statistics Institute, 2009)

#### **1.4.2.2 Funding of the Romanian Research, Development and Innovation system**

The public R&D funds are distributed to Romanian Academy (8%), National Authority for Scientific Research (87%), other ministries (5%).

The second National R&D Plan (NP II) is the official document guiding the budgetary decisions and institutional set-up.

National R&D Plan has three strategic objectives:

- Creating knowledge;
- Increasing the economic competitiveness;
- Increasing the social quality of life.

In order to achieve these objectives, 6 funding programs have been developed as follows:

1. **Human resources** - Increasing the number of researchers and their professional performances;
2. **Capacities** - Developing the research capacities and opening the RDI system to the international scientific environment and national socio-economic environment;

3. **Ideas** - Obtaining outstanding scientific and technological results, comparable to the ones obtained at the European level, reflected by the increase in international visibility and recognition of Romania research;
4. **Partnerships in priority S&T domains** - Increasing R&D competitiveness by stimulating partnerships in the main S&T domains, concretized in innovative technologies, products and services in order to solve complex problems and to create implementation mechanisms;
5. **Innovation** - Increasing the innovation, technological development and production assimilation capacity of the results of the researchers, in order to improve the competitiveness of the national economy and to improve the quality of life;
6. **Sustaining institutional performance** - Sustaining institutional performance by ensuring the continuity and the stability of activities carried out by RDI activities, with the purpose of implementing own development strategies, elaborated in line with RDI national strategy.

#### 1.4.3 Legislation relevant to the Programme area

The legal acts, serving as a basis for the Programme, include:

- a) Protocol 38b to the EEA Agreement, incorporated into the EEA Agreement by the Agreement between the European Union, Iceland, the Principality of Lichtenstein and the Kingdom of Norway on the EEA Financial Mechanism 2009-2014;
- b) Decision of the Standing Committee of the EFTA States No. 5/2010/SC of 9 December 2010 by the Donor States have given the Financial Mechanism Committee, established by a decision of the Standing Committee of the EFTA States No. 4/2004/SC of 3 June 2004, a mandate to manage the EEA Financial Mechanism 2009-2014;
- c) Memorandum of Understanding of the Implementation of the EEA Financial Mechanism 2009-2014 between Iceland, The Principality of Liechtenstein, The Kingdom of Norway and the Government of Romania signed on 21<sup>st</sup> of March 2012;
- d) Regulation on the implementation of the European Economic Area (EEA) Financial Mechanism 2009-2014 adopted by the EEA Financial Mechanism Committee pursuant to Article 8.8 of Protocol 38b to the EEA Agreement on 13 January 2011 and confirmed by the Standing Committee of the EFTA States on 18 January 2011, as amended on 4 January 2012;
- e) Annex 12 to Regulation – Rules for the establishment and implementation of donor partnership programmes falling under the Programme Areas “Research within Priority sectors” and “Bilateral Research Cooperation”;
- f) HG MAEur
- g) HG MAEur
- h) Government Decision no. 1449/2005 concerning the organization and functioning of the National Authority for Scientific Research (ANCS)
- i) Government Ordinance no 62/1999 concerning the foundation of the Executive Agency for Higher Education Research Development and Innovation funding, with subsequent changes and additions;
- j) Decision of the President of National Authority for Scientific Research no 94511/2007 approving the State Aid Scheme financing Research, Development and Innovation projects according to the National Research, Development and Innovation Plan II 2007-2013.

Legislation and national priorities

- a) Government decision no. 134/2011 for the approval of the Norms concerning the categories of expenses for R&D activities, eligible for funding from the state budget;
- b) Government decision no. 1265/2004 for the approval of the Norms concerning the contracts, financing, monitoring and evaluation of R&D programs projects and actions which compose the National Plan for R&D;

- c) Government Ordinance no. 57/2002 concerning scientific research and technological development, approved with modifications through Law no. 324/2003, with the subsequent modifications;
- d) Law no. 319/2003, concerning the Statute of R&D personnel;
- e) Law no. 1/2011 of National Education;
- f) Government decision no. 1860/2006 concerning the rights and obligations of the public authorities and institutions, during the delegation to other areas, as well as during the delegation to other locations within the same area, in the interest of the employer, with subsequent modifications;
- g) Government decision no. 518/1995 concerning some rights and obligations of Romanian personnel sent abroad in the interest of carrying out missions with a temporary character, with the subsequent modifications.

Other objective sources of information on challenges and needs for Romania:

- a) Communication of the European Commission “Europe 2020 – Strategy for smart, sustainable and inclusive growth” ([http://ec.europa.eu/europe2020/index\\_eu.htm](http://ec.europa.eu/europe2020/index_eu.htm));
- b) Mid-Term Evaluation of the National Strategy and of the National RD&I Plan 2007-2013 (<http://www.ancs.ro/node/node/nid/2775>);
- c) Vision – Romanian Higher Education in 2025 (<http://www.edu2025.ro>);
- d) White Paper for Quality and Leadership in Romanian Higher Education in 2015 (<http://www.edu2025.ro>).

#### **1.4.4 State aid and public procurement**

Taking into consideration the type of projects funded through this Programme (Joint Research Projects), the partnerships that will be considered between entities from the countries involved and also the small medium sized enterprises’ access to the Programme, the co-financing is ensured through the national funding programme “Partnerships in priority S&T domains”. Thus, the State Aid for Research and Development and Innovation scheme developed and approved by European Commission for the Partnerships programme will be applied (**Annex 3**).

#### **1.4.5 Justification for the Programme strategy**

The selected priorities are based on a thorough analysis of the areas where Romania has potential on medium and long term, areas where it is already a concentration of resources (human, structural and relational), areas where private companies invest in R&D, innovate, are looking for new ideas. The selected areas reflect the idea of a SMART use of existing core capabilities, natural resources, recent scientific and technological areas where exist results of high quality.

Climate change and renewable energy has been selected due to the uniqueness of the natural capital, especially Danube Delta-Black Sea (the role wet areas are playing in climate change) as well as the immense natural capacity for producing renewable energy (wind, biomass, geothermal, solar etc.) Romania has. It asks both for innovative solutions and skilled human resources. There are areas where it is a strong need of new interdisciplinary solutions, new technologies. The Programme will foster transfer of knowledge and innovation.

Health and food safety reflects the challenges and needs of Romanian health system in terms of health status, financial aspects (impact of migration, ageing population and sustainability of social insurance), understanding of the genetic, molecular and cellular mechanisms underlying common mental disorders. Food safety is a priority, Romanian having a huge agriculture potential but facing an innovation gap with impact on the food quality, food chain control, etc.

Interest in Environmental protection and management as priority reflects the challenges and needs Romania faces on these areas. Romania has been internationally active and part of

the most important initiatives at the community level. It has already a critical mass of resources and expertise, and resources are concentrated. The diversity of topics under this priority makes it one of interest for almost all the regions in Romania, for public and private actors.

According to the MoU the Romanian part must ensure 15% of total budget of the Programme from national resources. These national resources are provided by SMEs according to the State Aid Rules (**Annex 3**) and for research organizations by the national funding programme namely "Partnerships in priority S&T domains". This existing programme has been selected after consideration of a few aspects: it has already been developed for funding RDI projects, it has a state aid scheme approved, it is not bureaucratic and uses intensively ICT tools for supporting the selection process (international evaluation), contracting, reporting, monitoring and ex-post evaluation.

## 1.5 Programme objectives and indicators

### 1.5.2 Objective of Programme (expected impact)

Programme area: Research within Priority Sectors

Programme objective: Enhanced research based knowledge development in Romania through increasing research cooperation between Norway, Iceland, Liechtenstein and Romania

### 1.5.3 Programme expected outcomes:

	Outcome	Indicator	Description	Indicator value		Source of verification
				Baseline	Target	
1	Increased research cooperation between Romania and EFTA States	The number of joint research projects between Romania and EFTA States	The Programme will fund approx 15 joint research projects. This number is the best indicator to describe the increased research cooperation between Romanian and EFTA States	0	15	Number of financed joint research projects (contracts)
		The number of internationally referred joint scientific publications	At least one joint research publication per project is expected. This number is the best indicator to describe the results of the joint research projects	0	15	Periodic/final reports of joint research projects
		The number of research partners involved in joint research cooperation	On average 3 research partners are expected to be involved per joint research project	0	45	Contracts
2	Strengthened research capacity in Romania and increased application of research results through research cooperation between Romania and EFTA States	The number of internationally refereed scientific publications	The number of scientific publications is also a good indicator to describe the results of the joint research projects	0	30	Periodic/final reports of joint research projects
		The number of patent applications	This number is the best indicator to describe the implementation of the joint research projects' results	0	5	Periodic/final reports of joint research projects
		The number of small medium sized enterprises engaged in Research Development and/or Innovative activities	This number is the best indicator taking into consideration the applied character of the research in some thematic areas	0	10	Contracts

3	<b>Increased share and role of young researchers employed in RDI sector</b>	The number of postdocs and / or PhD students funded in joint research projects	The participation of postdocs in joint research projects is an important indicator in order to increase the role and number of young researchers in future collaborations. PhD students' involvement is also important in strengthening human resources in research through knowledge transfer and providing opportunities for young researchers to foster their study and career development	0	45	Periodic/final reports of joint research projects
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The selected indicators are representative for the research activities and also for the cooperation component. The indicators are both quantitative and qualitative (publications and patent applications) and they are considered based on peer-review selection process.

#### 1.5.4 Programme outputs

Outcome	Output	Output indicator	Indicator value		Source of verification
			Baseline	Target	
<b>Increased research cooperation between Romania and EFTA States</b>	Cooperating research institutions	Number of research partners involved in joint research projects	0	45	Contracts
	Cooperating researchers	Number of researchers involved in joint research projects	0	150	Periodic/final reports of joint research projects
<b>Strengthened research capacity in Romania and increased application of research results through research cooperation between Romania and EFTA States</b>	Better use of research results in terms of cooperation between Romania and EFTA States	Number of patent applications	0	5	Periodic/final reports of joint research projects
		The number of internationally refereed scientific publications	0	45	Periodic/final reports of joint research projects
<b>Increased share and role of young researchers employed in RDI sector</b>	Increased the role of postdocs and / or PhD students in R&D field	The number of postdocs and / or PhD students participating in joint research projects	0	45	Periodic/final reports of joint research projects

The defined outputs are tangible results. The number of partners involved in each single joint research projects, both from Romania and EFTA States, was chosen as output indicator having in mind to increase the future cooperation in projects. Also, the number of researchers who will be involved in the projects, senior researchers and most important young researchers will ensure the involvement of PhD students and postdocs in research collaborations. They youngest will take the advantage of senior researchers' experience from Romania and EFTA States and will have the opportunity to work in a high-level research environment.



## **1.6 Target groups of the Programme**

### **Primary target group**

The Program is addressing both public and private research organizations (e.g. higher education establishments, research institutes, research centres, etc.) that may be qualified as such pursuant to Article 2.2(d) of the Community Framework for State Aid for Research and Development and Innovation. As stated in the “Research, Development and Innovation Sector Functional Review” performed by World Bank, Romania should foster private sector investments in R&D. Same recommendation is stemming out from the Mid-term Evaluation Report of the National Strategy and of the 2nd National Plan for RDI, 2007-2013. Therefore, the private sector and in particular small and medium-sized enterprises (SMEs), as defined in Article 2.2(a) of the Community Framework for State Aid for Research and Development and Innovation (2006/c 323/01), are encouraged to participate, provided they cooperate with a research organisation.

### **Secondary target group**

The secondary target group is composed of researchers and users of specific products and services, and of course the society at large.

### **Means to reach the target groups**

In the course of the Programme preparation, ANCS organised several working meetings with UEFISCDI. A stakeholders’ analysis on the main challenges and needs and a consultation process with regard to the terms and conditions of bilateral cooperation and thematic fields with representatives of both academia and business sector represented by members of the National Council for Scientific Research and National Council for Development and Innovation were conducted. The Donor Program Partners were involved in the process and consulted in order to give advice along the preparation of the Program.

Other envisaged means to reach the target groups and raise their awareness about the upcoming call(s) will include an informative seminar, use of regular communication channels like newsletters, links to the websites, e-mail distribution lists targeting the thematic areas involved, use of partner searching tool, tailored assistance and advice for potential applicants, etc.

The link with the potential beneficiaries (research community and research users) will be constantly ensured during the planning and implementation phase of the Program through the Program Committee. Pursuant to *Annex 12* of the Regulation on the implementation of the EEA Financial Mechanism 2009-2014 partner countries will be nominating representatives of the academia and business sector to the Programme Committee, which will serve as an important and effective means of communication between ANCS, UEFISCDI and Donor Program Partners.

## 1.7 Risk and uncertainty

Out- come nr.	Outcome	Description of risk	Assessment		Risk mitigation plan
			Likelihood [low/medium/high]	Impact [low/medium/high]	
1	<b>Increased research cooperation between Romania and EFTA States</b>	Lack of interest in the Programme by the target groups on both sides	L	H	Effective dissemination of information on the Programme and its call in Romania and Donor States among the target groups
		Difficulties related the sharing of research knowledge	M	H	Monitoring and mediation between partners
		Difficulty in the implementation phase of the Programme due to delays in reports and payments	M	H	Swift communication at all levels (PO, Implementing Agency, NFP) to remedy the bottlenecks. Close monitoring and mediation between PPs and partners done by the Implementing Agency.
2	<b>Strengthened research capacity in Romania and increased application of research results through research cooperation between Romania and EFTA States</b>	Low impact of publications; papers published mostly at national level	L	H	Advisory activities during the Programme implementation
		Failure to use the projects' results in case of the applied research projects	L	H	A strong partnership agreement related to IPR
3	<b>Increased share and role of young researchers employed in RDI sector</b>	Lack of interest in the Programme due to existing complementary funding sources for PhD and postdocs	L	H	Increase the attractiveness of the Programme through their involvement in international networks

## **1.8 Bilateral relations**

In addition to the contribution to the reduction of economic and social disparities in the European Economic Area, the other overall objective of the EEA Grants is to strengthen the bilateral relations between Norway, Iceland and Liechtenstein as Donor States and Romania as a Beneficiary State. As a result of the bilateral cooperation, concrete outcomes are expected to be generated under this Program, which could fall into the following four categories: extent of cooperation between states at different levels (institutional and individuals), shared results, improving the knowledge and mutual understanding and wider effects in the socio-economic area.

The Program is one of the key measures to strengthen bilateral relations while also achieving the overall objective of reduce economic and social disparities, contributing also to exchange of experience and capacity building both ways. The Program will promote professional cooperation between the Romanian public institutions and DPPs from Norway and Iceland. Strengthening of the bilateral relations between the Donor States and Romania will be facilitated and promoted within this Program by means of the funds dedicated to the joint research projects, funds for the bilateral relations at Program level and funds allocated for the complementary actions of the Program Operator.

The bilateral collaboration between the Donor Program Partners and the Program Operator will be enhanced through the joint events (conferences, seminars, courses, working meetings and workshops), joint promotional and information activities and regular communication channels (e-mail, phone and teleconferences) used during the planning and implementation phase of the Program, and hopefully, will continue beyond the lifetime of the Program.

Joint meetings and activities will allow for an intensive exchange of experience and expertise, knowledge, and know-how between the Donor Program Partners on one hand, and ANCS (as Program Operator) and UEFISCDI (as implementing agency) on the other hand, in order to continue building on the outcomes of the previous Financial Mechanisms for 2004-2009, for a successful and sustainable research cooperation between the involved countries.

### **1.8.1 Donor Programme Partners (DPPs)**

#### **1.8.1.1 Description of DPPs relevance to the Programme**

In order to facilitate and encourage partnerships, understood as partner projects with the donors, the National Authority for Scientific Research, as Romanian Programme Operator, will cooperate with two donor programme partners: the Research Council of Norway (**RCN**) and the Icelandic Centre for Research (**RANNIS**).

The Research Council of Norway (**RCN**) is Norway's official body for the development and implementation of national research strategy. The Council is responsible for enhancing Norway's knowledge base and for promoting basic and applied research and innovation in order to help meet research needs within society. The Research Council also works actively to encourage international research cooperation.

The three central areas of operation of the Research Council of Norway are the following:

- an advisory body on research policy issues, identifies research needs and recommends national priorities.
- facilitating the translation of national research policy objectives into practice through the establishment and implementation of targeted funding schemes.

- a forum of researchers, funders and users of research findings, as well as for the different organizations and sectors that are affiliated with the world of scientific research.

The Icelandic Centre for Research (**RANNIS**) supports research, technological development and innovation in Iceland. RANNIS reports to the Ministry of Education, Science and Culture and cooperates with the Icelandic Science and Technology Policy Council with the purpose of providing professional assistance in the preparation and implementation of the science and technology policy in Iceland.

The main functions of RANNIS are:

- Operating the financial support system for research and technological development  
Providing services and information to the Science and Technology Policy Council and its task committees;
- Coordinating and promoting Icelandic participation in collaborative international projects in science and technology;
- Monitoring resources and performance in research and innovation, evaluating the results and impact of scientific research, technological development and innovation;
- Promoting public awareness of research and innovation in Iceland.

RANNIS serves the Icelandic science community across all areas of science and the humanities.

The DPPs role is also to contribute to the preparation, implementation and a successful completion of the Programme.

#### **1.8.1.2 Description of cooperation between PO and the DPPs**

A donor partnership programme promotes professional cooperation between the Romanian Programme Operator and DPPs from Norway and Iceland, the main vehicle for this cooperation being the Cooperation Committee. In the implementation phase of the programme, a Programme Committee consists of 5 members will be established. It will include representatives from Norway, Iceland and Romania, members from research community and from significant users of research from all three countries.

RCN and RANNIS will contribute to the Programme by sharing of experience and good practice in programme administration, and assist the PO in the bilateral actions on programme level as well as actions under the complimentary fund. The DPPs will also play a role in ensuring information on the programme reaches the relevant Icelandic and Norwegian research institutions.

Donor Programme Partners will advise the Romanian Programme Operator on all aspects of the program proposal, possibility for donor partnership projects, procedures for open calls for proposals and project selection criteria, risk management, communication plan, use and management of the bilateral fund, facilitation of networking between the programme operator and potential project promoters and /or project partners from Norway and Iceland. Moreover, the RCN is the main advisor to the Programme Operator and it will contribute to the effectiveness of management and implementation of the Programme, including: annual work plans and budgets, management of the Programme, announcements on acceptance of applications, designating of external experts for assessment of applications, monitoring of progress of implementation of individual projects, development of annual reports to the Programme Committee, preparation and publication of guidelines and establishment and implementation of communication strategies. RANNIS and the RCN will participate in the meetings of the Programme Committee as observers. The DPPs will also actively support the Programme Operator in preparation of the Programme proposals, delivering information on its activity, as well as play its role in cooperation within the framework of the Programme.

RCN will serve as the central focal point for the Norwegian participants/beneficiaries of the Programme and to establish a base of all prospective partners, thus facilitating partnership-based cooperation. RANNIS will support the Programme Operator as needed and will serve as central focal point for Icelandic applicants as well.

### **1.8.2 Donor partnership projects**

#### **Identification of potential partners**

The potential applicants to the call for proposals will be identified using the following pathways:

- use of the existing contacts from previous international programs, networks, initiatives and projects like the current 7th Framework Program for Research, Technological Development and Demonstrations of the E.U., EUREKA network, EUROSTARS Program and of the EEA/Norwegian Financial Mechanisms for 2004-2009;
- collaboration with the national networks of NCPs (national contact points) to FP7 and the EUREKA/EUROSTARS Secretariats;
- potential project promoters/partners may be sought using regular communication channels between ANCS, UEFISCDI and DPPs;
- use of links to the official websites and web portals of ANCS, UEFISCDI and DPPs;
- use of the searching tool for partners made available by the Research Council of Norway;
- during the information campaign dedicated to the Program, which includes the informative seminar, press conference, etc.;
- various communication channels (e-mail distribution lists targeting the thematic areas involved, newsletters, etc.);
- direct contacts with the representatives of academia and business sector relevant for the thematic areas.

#### **Fund for Bilateral Relations**

According to Article 3.6 of the Regulation on the implementation of the EEA Financial Mechanism 2009-2014, the Program Operator shall set aside a minimum of 1,5% of the eligible expenditure of the Program in order to facilitate the following activities:

- a) seeking partners for joint research projects prior to or during the preparation of a project application, development of such partnerships and preparation of an application for projects;  
and/or
- b) networking, exchange, sharing and transfer of knowledge, technology, experience and best practice between project promoters and entities in the Donor States.

The total budget foreseen, including the national co-financing, for the “Fund for Bilateral Relations” at the Program level is 352.942 euro.

#### **Measure A: seeking partners**

Under measure A, applicants for support will use this financial contribution for establishing individual contacts, building up consortia for the joint research projects and preparing the application. As for the second type of activity that may be eligible for funding, support will be provided from the “Fund for Bilateral Relations” at the Program level for organizing info days/brokerage events for project promoters/partners and for joint seminars or training events aiming at long-term bilateral cooperation in research between the countries.

Funding from the “Fund for Bilateral Relations” at national level, managed by the National Focal Point in Romania will be also used for this purpose.

The terms and conditions for funding of such activities, as mentioned above will be specified in the Operational Rules (Annex II) of the Program Agreement that will be concluded between the DPPs and the National Focal Point in Romania, together with the split of funds in between the two categories of activity.

**Measure B: Networking and exchange** measures to facilitate networking, sharing and transferring of knowledge, technology and best practice

This measure will be used to share results of the projects supported under the Programme, transfer of knowledge, technology and best practices, sharing of experience, and training.

The measure shall also include exchange of experience at programme level, covering topics such as: research and innovation programme design and execution; best practice call procedures; international peer review; negotiation and award of grants; project management; national and international legal and financial framework for research projects; knowledge management (including intellectual property rights, dissemination and exploitation), and monitoring of project and programme results.

The following types of activities could be supported:

- Support for participation and/or organisation costs of, conferences, seminars, networking meetings, workshops, exchange of best practices, training on the EEA Grants rules and procedures;
- Support for study visits;
- Support for expertise (personnel), and experts visits.

The specific measures will be confirmed by the Programme Operator, based on recommendations of the Programme Committee.

## **Operational and information measures**

### *Selection procedure*

Project proposals will be selected based on competition. A formal eligibility check followed by a scientific evaluation will be the main steps in this selection procedure and will be described in detailed in 1.14. Management chapter. Also, all the specifications from Annex 12 will be considered.

### *Grant rate and maximum grant amount*

The amount of 22.072.981 euro will be allocated for the joint research projects selected on the basis of the call(s) for proposals.

The grant size per project is up to 1.5 mill euro and the average size should be around 1 mill euro (exceptions could be made if the project design demanded it). On the Programme level the distribution of funding will be 40-60 (40% for DS applicants and 60% for Romanian applicants). In this way we allow flexibility for the projects, depending on the role and activity the different partners have in each particular research project. The Programme Committee, the Implementing Agency and PO will be able to look at the applications and see if modifications are necessary. For joint research projects a grant rate of up to 100% of eligible costs will be possible.

The maximum duration for a project will be 3 years.

Within the framework of the Program one call for proposals is foreseen to be organized in the 1st quarter of 2013. Nevertheless, if the budget of the call will not be entirely used in the planned call, a second call could be foreseen taking into account the possible extended period for the eligibility of expenditures on projects.

### *Information activities*

In the eve of launching the call for proposals, an info-day event will be organized with the aim to provide information on the Program to potential applicants and make them aware in due time of the terms and conditions of the competition, including the available financial mechanisms, in a clearly and detailed manner. The seminar will allow clarifying any aspects related to the call or questions that might arise in relation to this. Further consultation and tailored assistance to potential applicants will be granted by phone or by e-mail. In addition to this seminar, regular communication channels (e.g. newsletters, links to the websites, e-mail distribution lists targeting the thematic areas involved, etc.) will be used in order to inform the scientific community at large and the private sector about this funding opportunity offered by the call.

### *State aid and public procurement*

The grants allocated for the joint research projects will comply with the state aid rules and regulations as stated in the Community Framework for State Aid for Research and Development and Innovation (2006/c 323/01). Support will be provided in compliance with the Commission Regulation (EC) No. 800/2008 of 6 August 2008, declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty. Beneficiaries of grants, at both Program and project level, will follow the public procurement legislation as stipulated in the Government Emergency Ordinance no.34/2006 with subsequent changes and additions.

#### **1.9 Pre-defined projects – not applicable**

#### **1.10 Small grant schemes - not applicable**

#### **1.11 Cross cutting issues**

##### **1.11.1 Good governance**

The Parties agree to provide all information necessary for the good functioning of this programme agreement and to apply the highest degree of transparency, accountability and cost efficiency as well as the principles of good governance, sustainable development, gender equality and equal opportunities.

The Programme Operator and Implementation agency engage to ensure the inclusion of good governance rules in planning and in all implementation phases of the Programme. In order to ensure this aim, the planning and all the implementation phases of the Programme and the projects will be conducted in accordance with the Regulation and its Annex 12 on the implementation of the EEA Financial Mechanisms 2009-14. The annex is based on the best practices in Europe and it describes in detail the mode of implementation of the Programme, the role and obligations of the Programme Operator, Implementation Agency, which acts behalf of the PO for the developing of the Programme, and the Programme Committee, as well as the rules of cooperation and the intellectual property rights.

The implementation will be transparent and open at all phases of the programme and project cycles and no projects are in any way contradictory to the principles of good governance.

Applications filed within the framework of the call procedure, by state and private entities, will be treated on equal basis and in accordance with the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.

The Programme Operator and Implementation Agency ensure that the principles of good governance are followed by defining a management set-up that includes establishing and maintaining procedures for preventing, identifying, and managing cases of corruption and

mismanagement, and that responds quickly and professionally to indications of irregularities, mismanagement and corruption.

Calls for proposals organized within the framework of the Programme will be conducted in a transparent manner, and in accordance with Annex 12 Call information will be published on the both web pages of the Programme Operator and Implementation Agency, in fully accordance with the provisions of Annex 12. The call rules, including the evaluation criteria, will be specified in the call documents. The documents will be generally accessible. The call results will be published as well.

Within the organization of the Implementation Agency, there is an internal audit position, which will ensure that the procedures for the prevention, detection and management of events of incompliance, poor management and bribery are being followed. There is also a possibility of sending reports for assessment to external experts, which will be the applicable rule in the case of the final report.

#### **1.11.2 Environmental considerations**

Environmental protection will also be taken into account in all phases of the implementation of the Programme (application, evaluation, funding decision, project implementation and completion). One of the assessment criteria for applications will be the environmental impact of the project. The Programme has to conduct by its research projects to protect and improve the conditions of the environment in all participating countries.

#### **1.11.3 Economic sustainability**

Issues associated with economic sustainability will be taken into account throughout all stages of the Programme creation and implementation. The Programme allows the financing of projects, in which the industry could be a partner. Thus, a better knowledge base for promotion of innovation and commercialization in all participating countries will be established.

The Programme Operator, Implementation Agency and project participants are to act on the basis of economic effectiveness, that is, rationally management of the resources and funds. In particular, a positive balance of costs to benefits acquired as a result of the project implementation.

Applied research and its commercialization will contribute to economic growth. Moreover, the project participants will ensure rational use of resources.

#### **1.11.4 Social sustainability**

The social sustainability will be taken into account throughout all stages of implementation of the Programme and it will be achieved by supporting a diverse target group in terms of age and gender. The Programme has a long-term benefit for individuals, social groups, society, etc. It will ensure development of social well-being and social policy.

#### **1.11.5 Gender equality**

Equality of chances as well as gender equality will be assured for all participants, both at the Programme implementation and project levels.

As principle for the implementation and development of the project in all its stages, all the policies and practices will be taken into account, policies and practices which will assure no differentiation, exclusion, restrictions or preferences based on: race, nationality, language, social category, beliefs, sex, sexual orientation, age, handicap, affiliation to an under-privileged category, as well as any other criterion, having as goal or effect any constraints Provision of information, administrative support and other contacts with applicants will not be affected by the applicant's gender.



For the development of the project it is taken into account the assurance of equality of chances, both at the level of the creation of the management team, as well as concerning the implication of the human resources in different moments during the project, having as main goal the increase of the permanent participation and women progress in the professional activity through specific criteria.

### **1.12 Project monitoring by the Programme Operator**

The implementing agency (UEFISCDI) endorsed by the Programme Operator (ANCS) will ensure the monitoring procedure for JRPs consisting of annual reports, final reports and site visits of experts. The Implementation Agency is to specify the procedures to ensure that at the project level, the good management principles and practices are being followed as well. Projects implemented within the framework of the programme will be subject to monitoring and supervising in accordance with the legal provisions (signed contracts), procedures and practices applicable to the organization by the Implementation Agency.

After selection of the projects for funding, the contracts between the implementing agency and project promoters will be signed. Details regarding the funds, conditions of transfers and settlement of funds, implementation conditions will be specified.

During the implementation phase of the JRPs, the beneficiaries will provide annual reports. For their scientific evaluation the implementing agency will use the expertise of external experts for each scientific domain. If it is necessary the implementing agency will either apply standard audit mechanisms of Government structures or they will mandate internationally experts to carry out the audits of the JRPs. The annual reports will be subject to verification by the implementing agency with regard to their formal, content-related and financial aspects. Based on reports of the projects, the implementing agency will provide an annual general report per programme which will be sent for approval to PO and Programme Committee. According to Annex 12, the Programme Committee should review the progress made towards achieving the objectives of the programme and the annual programme reports. If the PO and Programme Committee will request additional information related to the projects' reports, this information will be provided by Project promoters.

After the projects' completion, the beneficiaries will provide final reports which will be subject to verification by the implementing agency. The same procedure as has been mentioned for annual reports will be followed by Programme Operator and Programme Committee for the final programme report.

It is planned that the first annual report will be in December 2013 taking into consideration that the contracts will be signed in September 2013.

The monitoring plan for the first year is provide in **Annex 4**.

### **1.13 Information and publicity**

The publicity measures are in accordance with the Communication Plan and will ensure transparency by providing potential applicants with adequate and high-quality information about the Programme in general, and be designed to raise public awareness and dissemination information about the Programme.

#### **Purpose:**

The aim of this plan is to establish the main communication activities and tasks in order to promote the Programme under the EEA Grants.

The plan is based on the following structure:

- Objectives;
- Communication instruments (tactics) – audiences;

- Message – audiences;
- Implementation and monitoring of the plan.

A detailed Communication plan for Romanian – EEA Research programme 2012-2017 is developed in **Annex 5**.

## 1.14 Management

### 1.14.1 Management structure

According to Memorandum of Understanding, the Programme Operator (PO) for the Romanian-EEA Research Programme is the National Authority for Scientific Research (ANCS). ANCS, as part of the Ministry of Education, Research Youth and Sport, is a key player in developing policies and strategies for RDI Sector in Romania. In order to implement the Romanian-EEA Research Programme ANCS has delegated its tasks to an implementing agency (IA) – the Executive Agency for Higher Education Research Development and Innovation Funding (UEFISCDI) through a delegation agreement signed by both parties (the document is provided in **Annex 6**).

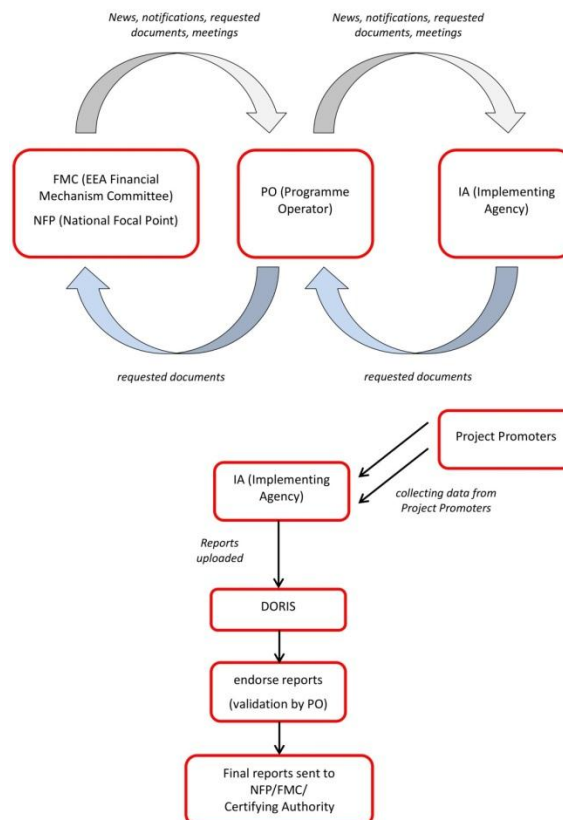
UEFISCDI is the main funding agency for research, development and innovation in Romania which coordinates 5 of 6 national funding programmes. It has a similar structure as the Executive Agency of European Research Council has. Although UEFISCDI will carry out the tasks of ANCS, the latter will maintain its role and responsibilities as Programme Operator.

The management structure chart is presented in **Annex 7**.

Both, the PO and the IA, have access to DORIS electronic system. The reports and documents will be submitted by the IA and will be endorsed by PO in order to be approved by FMC.

Two components are essential for a good collaboration between both entities in order to have an optimal implementation Programme process:

#### a) The flow of information and reports



## b) The financial flow

Both, PO and IA will open dedicated accounts for the Programme. The PO will receive money directly from FMC for management costs and call. It will make the transfer of the amount in IA's account except the money related to their personnel remuneration.

The budget for Project Promoters will be paid in max 10 days to the PPs if all the financial aspects are validated. The implementing agency, together with each Project Promoter, will sign a funding contract having two sources of funding: the EEA grants and co-funding (national contribution).

The key persons and their CVs are presented in **Annex 8** (according with the next Chapter: Budget). The Programme Operator and the Implementing agency are both public bodies and, considering their organizational and functioning rules approved by national legislation, are not able to have a separate/dedicated unit for this Programme. The human resources involved will have specific tasks in accordance with their expertise.

### 1.14.2 Timeline

Action	Date
Programme proposal preparation	April – July 2012
Programme proposal submitted to NFP and FMO	August 2012
Programme acceptance by FMO	December 2012
Signing implementation agreement between NFP and PO	December 2012
Launching the call	15 <sup>th</sup> of January 2013
Deadline for submission of applications	15 <sup>th</sup> of March 2013
Evaluation process	15 <sup>th</sup> of June 2013
Contracting phase	August 2013
First payment	1 <sup>st</sup> of September 2013

### 1.14.3 Calls

The organisation of the call, eligibility of applicants, IPR, specific rules on submission and evaluation of proposals, reporting, defining of thematic areas, will be developed in close cooperation with Programme Committee, according to the specifications mentioned in Annex 12. The call document will be developed by the Implementing Agency and adopted by the Programme Committee during the first meeting (in the first part of January 2013).

There will be one call for proposals organised which is planned to be launched on 15<sup>th</sup> of January 2013. In case of the budget not being used entirely in the planned call, a second call must be possible. The submission deadline for applications will be in 15<sup>th</sup> of March 2013.

There will be one single call for all three thematic areas but the level of grants will be specified for each domain.

#### *Application modalities:*

The only type of projects eligible are Joint Research Projects (JRPs) realized by groups of researchers from Romania jointly with groups of researchers from EFTA States (Norway, Iceland and Liechtenstein). Each application for JRP must have one single Project Promoter (PP) and this person will be from Romania.

The Romanian PP will be responsible for the submission of the application. Upon selection/approval of JRP and setting up of grant arrangements, the Romanian PP will be responsible for implementation and completion of the funded JRP.

Proposals will be jointly prepared by Romanian, and Norwegian or Icelandic or Liechtenstein applicants.

Project partners from third countries are eligible to participate with their own funds under the same terms and conditions as project partners from Romania and EFTA states. Only the Romanian PP is authorized to submit a proposal via a specific Electronic proposal Submission service (EPSS), using an id and password. After the closing date of the call, an acknowledgement of receipt is sent to the PP.

Proposals as well as all correspondence and reports will be exclusively in English.

The Programme Committee will be consulted regarding the need to place a restriction on the number of applications which can be submitted by a single PP.

#### *Beneficiaries:*

Eligible beneficiaries are:

- Universities (public and private)
- Research organisations
- Small and medium-sized enterprises
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*Information about the call* will be published jointly by ANCS/UEFISCDI, NRC, RANNIS and AIBA using regular channels to inform interested scientists in their respective countries about the call (websites, newsletters, specialized publications, other), including EURAXESS. An information event will be held in Romania as an additional measure to raise awareness of the Programme before the call is launched. All documents related to the Programme (application, reporting, operational communication and exchange, minutes from meetings etc) will be published in English.

#### *Duration:*

The projects will have a max duration of 36 months.

#### **1.14.4 Project selection**

##### *Programme Committee*

Joint Research Projects will be selected through call for proposals organized by the Implementing Agency together with the Programme Operator. The call document, Guide for applicants and Guide for evaluators will be developed by the implementing agency and adopted by the Programme Committee. The Programme Committee will be established in accordance with the requests from ANNEX 12 and its tasks will follow the specifications mentioned in the same annex.

##### *Eligibility check*

The implementing agency will determine which proposals meet the eligibility criteria of the Programme (minimum conditions as referred to in the call for proposals, completeness of the proposal, if the content of the proposal relates to the topic and the funding scheme set out in the call, eligibility of beneficiaries etc)

##### *Evaluation*

The proposals declared eligible will be submitted to independent international external peer evaluation and will be evaluated by at least three independent experts, selected from a list of suitable candidates. The Implementing Agency will use the existing data base of experts and also EC experts. The evaluation process will be carried out online using the existing platform.

Proposals will be selected and grants awarded on the basis of the following criteria:

- Scientific and/or technical excellence;
- Relevance in relation to the objectives and prioritized areas of the research programme;
- Quality and efficiency of the implementation and management including quality and implementation capacity of the applicants and contribution to capacity and competence building;
- The potential impact through the development, dissemination and use of project results.

The list of experts will consist of persons with high level of expertise and an appropriate range of competences and will be established in accordance with the Annex 12 requests. The experts will examine the proposals and will score them on a scale from 0 to 5. A panel meeting for each scientific domain will also be established if necessary and suitable.

According to Annex 12, based on expert evaluations, the Programme Committee will make recommendations on which proposals to select for funding and final awarding of grants to PO. The final decision will be taken by PO/Implementing Agency.

#### *Communication with applicants*

Information of the results will be communicated to the applicants within two weeks of the final decision of the Programme Operator (information letter containing also the evaluation reports).

#### *Appeal process*

With the decision letter, the Project Promoter will be informed that he/she has the right to appeal to the competent authority in Romania in accordance with the national legislation. He/she has the right to request a consideration of its proposal in accordance with UEFISCDI internal regulations.

#### **1.14.5 Financial management**

The Implementing Agency together with the Programme Operator is responsible for the everyday financial management of the Programme, including arrangements for payments to the Project promoters. The funds from EEA grants will be directly allocated from the certifying authority to the PO bank account in euro and the PO will send the money to the IA bank account. The co-funding rules will also be respected in accordance with the national legislation.

Based on contracts, the IA will send the money to Project Promoters institutions accounts. Payments to the Project Promoters will be made in the form of advance payments, interim payments and final payments. The payments will be registered in the internal financial system and will be checked by the persons responsible with financial matters. The entire procedure will follow the rules specified in Annex 12.

#### **1.14.6 Modification of projects**

The Joint Research projects will be financed on the basis of contracts signed between the implementing agency and the beneficiaries, specifying the conditions of modifications. The project promoters are obliged to inform the implementing agency of their intention to make any changes to the project implementation, both in terms of content, schedule and budget as well as any legal and organizational changes, which may exert direct impact on the project implementation. The Implementing Agency, together with PO will analyze the requests and will approve / not approve the modifications of the projects. Modification requests that have a more substantial effect on the content of the project shall be appraised by PO and the

Implementing Agency. Project modification may be approved only in case the project will contribute to the outcomes and objectives also after the modification.