

## Identificarea nevoilor de dezvoltare pentru perioada 2014 - 2020

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## Introduction

For next programming period, 11 Thematic Objectives (TO), covering Europe 2020 priorities have to be taken into consideration. The preparation process of the TOs involves stakeholders from all sectors and the selection of priorities will be based on a thorough analysis of Romania's development needs, as well as practical experience drawn from the current programming period.

Following the request from the project beneficiary, the Department of Analysis and programming in DG ACIS, Ministry of European Affairs, the expert team has been mobilized to carry out an analysis of the sectors grouped under the 11 Thematic Objectives, analysis that will feed the elaboration of the first draft of the Partnership Agreement.

## ANALYSIS

### TO 1: Strengthening research, technological development and innovation

Science, technology and innovation are key premises for achieving competitiveness and growth, as well as for promoting sustainable development and socio-economic cohesion. Given that in 2011, Romania spent only 0.48% of its GDP for research and development activities, reaching the 2% target set by the National Reform Program in the context of the Europe 2020 Strategy seems highly unrealistic, should the current trends be maintained. A serious boost is needed in this field in order to achieve the objectives of supporting and promoting growth.

The total intramural R&D expenditure (GERD) registered an ascendant trend for the period 2005-2011 for the case of EU-27 countries (all sectors), the best-represented sector being the business enterprise sector. In Romania, the total intramural R&D expenditure has increased by almost 36% between 2005 and 2011. The evolution of this indicator for Romania shows a first period of continuing growth during 2005-2008, followed by a period of sharp decline. Romania has allocated for the intramural R&D expenditure (GERD) at most 0.58% of GDP in 2008, and this percentage declined to 0.48% in 2011. By comparison, R&D expenditure in Romania counts for only a quarter of EU -27 average spending.

Current spending is also well below the expenditure level forecasted by the National Strategy and the National Plan for RDI 2007-2013, of around 1% of GDP. Expenditure remains low in spite of active participation of Romania to the main EU research programmes including the Framework Programme 7 (FP7), Competitiveness and Innovation Framework Programme (CIP), all aiming to improve cooperation within EU in the area of RDI, increase the dynamic, creativity and excellence in research, promotion of enterprises competitiveness, innovation and eco-innovation.

Private spending for R&D remains still at low levels compared to the public expenditure (49.1% in 2011) in spite of the significant efforts to increase expenditure in this field and the slightly increasing trend over the last years.

RDI spending is characterized by significant regional and intra-regional differences, with the largest part of research being concentrated in Bucharest-Ilfov region (about

56% of the total 793 institutions operating in the field of RDI in 2010 were located here, followed – far behind – by the North-West Region, with 8.9% of the units).

Fundamental research counted for 43.4% of total expenditure in 2011, increasing slightly compared to 2010 (by 0.5%). Applied research, on the other hand, registered a significant decrease in 2011 compared to 2010, by almost 10.8%, amounting to 39.2% of total spending. The largest part of public funding used at national level went to governmental sector (55.4%) and universities (31.1%). At the same time, efforts to increase RDI activities have often failed to translate research results into applied research and innovation, with only 18% of the SMEs in Romania introducing product or process innovation in 2008, about half of the EU average (34%)<sup>1</sup>.

A tendency to scatter public resources among many actors remains. The present approach of the innovation and R&D system is to finance projects initiated by research units and universities with partners (in major cases not very active) from the private sector. This approach leads frequently to non-applicable innovation and R&D results.

The links between education, research and the business sector remain poor, with research only partially driven by real needs. **To include more details on type of spending.** A more pro-active approach on the side of Romanian enterprises should be encouraged, as to have the initiative of applied R&D projects and form partnerships with the R&D and innovation units. This way, the applied innovation would result more effectively into growth of productivity.

A series of systemic problems accompanied by the negative effects of the economic crisis – in terms of poor access to finance and revised priorities of companies - contribute to the present situation. Thus, there is a very high cancelation rate of projects selected under the operation 'Partnerships between R&D institutions and enterprises', as supported under the SOP ICE 2007-2013 (about 40% in 2011<sup>2</sup>).

Under these conditions there is an urgent need for adoption of measures aiming at improving the innovation environment, technology transfer and access to finance, by promoting adequate fiscal and legislative measures. There is also a need to revise the general framework on property rights, eliminate the barriers affecting investment in research by private companies, and promote innovation and foreign investment.

The university field is characterized by an excessive standardization and scattering of resources, with no specific approach towards becoming research-intensive institutions. Higher education has mainly local relevance and is poorly connected to labor market needs. According to the report 'Quality of higher education in Romania' (2010 Quality Barometer), both the innovation potential of Romanian universities and the communication with the business and academic environment are limited. This acts as a barrier to valorization of the regions potential. In addition, universities respond in a limited manner to the needs of the (regional) labor market and the local agenda, in spite of the fact that most of them have a purely local relevance.

Allocation of funds should be done in the framework of consistent policies at national level, identifying and directing the financing towards the fields in which Romania, or a region within Romania, possesses strengths and could gain a competitive advantage, in the fields that might contribute to address societal problems, and those in which business involvement could be enhanced. A project aiming at identifying and analyzing the areas with growth potential (smart

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<sup>1</sup> SBA Informative Fiche, Romania, 2012 – Enterprises and Industry

<sup>2</sup> As per the information included in the AIR 2011 for SOP IEC

specialization) is currently under development with JASPERS support. Its results will be further included in the future National Strategy for RDI 2014-20 and will be used to direct resources in the highly relevant fields with growth potential, in order to direct financing for research towards supporting specific areas which can produce more efficient and targeted actions towards growth.

Research<sup>3</sup> shows that the highest multiplication effect is registered in relation to the number of employees in the private sector on the level of high-tech exports and on the number of EPO patents registered, together with the increase of the total RDI expenditure, as share of GDP.

Excellence centers, competitiveness clusters, connection with growth poles

A number of 27 innovative clusters and regional competitiveness poles have been created in different economic sectors, such the automotive industry, ICT, innovative industries, renewable energy, aviation, maritime river transportation, food industry and tourism. The clusters and the competitiveness poles have no juridical personality in Romania but in 1<sup>st</sup> July 2011 was created The National Association of Clusters, which has juridical personality, therefore can manage projects and contract any kind of financial support. Moreover, support for developing clusters is also available since November 2012 within the SOP "Increase of Economic Competitiveness".

Excellence centers have also been established by the universities (an example is the Institute for Research, Development and Innovation: High-Tech Products for Sustainable Development, established by Transylvania University of Brasov) and facilitate complex projects, inter, multi and trans-disciplinary, according to the R&D needs of the business in line with European priorities and attract talented researchers from the country and abroad.

### Research in agriculture

Currently agricultural research is conducted both in agricultural universities as well as in a number of research institutes, research stations and national institutes. The theme of their research was guided rather by goals of different financing programs, and not seen as an active contribution on how to achieve regional objectives.

Given the EU focus on the Regional innovation strategies for smart specialization and considering the specific nature of our agricultural regions, it is very important to establish solid partnership between public authorities and universities, into a coordinated framework, in order to derive greatest benefits from the mobilization of the regions' main research assets.

The multiplier effect of agronomical universities in regional and agribusiness development, is especially important in Romania considering the low level of development compared to other EU regions, with a weak or relatively small private sector, with low levels of research and development activity.

In agriculture, we are talking not only of the existence of an innovation gap, but also a very low absorptive capacity of the private agricultural sector. Therefore, the smart specialization strategy has to address both the supply side but also the demand one, to effectively translate research and knowledge into innovation and growth. This can be done in the agricultural sector by focusing efforts, especially in this time of resource constraints, on regional research and technological centers/ clusters, as important tool in transferring research into the local and regional business and communities. Their development around the universities (taken their research and human development functions) can contribute to both increasing the absorption

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<sup>3</sup> Study CNP: Role of the private sector in developing the competition in the RDI sector

capacity of the private sectors/ SMEs, but also to address grand societal challenges in the coming years.

## Innovation

The report 'Innovation Union Scoreboard' (IUS) for 2010 includes Romania in the last group, of poor innovators, together with Bulgaria, Latvia and Lithuania. The aggregated innovation score decreased in 2010 compared to 2009 and it is at about half the level of EU-27 (0.237 compared to 0.516). Romania scores higher than its European counterparts in terms of sales to new-to market and new-to firm innovations (as % of total turnover): 15% compared to 13% (EU average).

In Romania, 42 entities are accredited for innovation and technological transfer activities and another 3 are now in the process of accreditation. Beside these, there are a number of companies, included in the category of 'innovative companies' (defined as companies that have launched new or significantly improved products or processes).

In terms of regional distribution<sup>4</sup>, the Southern part of the country concentrates the innovative companies that sell most products to the market. Bucharest-Ilfov region leads in terms of turnover (2010), with 45.1% of total turnover, followed by South-Muntenia region (12.6% of total) and South-East region (11.6%). The results however, look totally different when looking at the industrial sector only, where the regional distribution is more balanced. On the other hand, for the services sector, Bucharest-Ilfov has the majority, with 73.44% of the total turnover of innovative companies and South-West Oltenia and West regions being the least represented (1.23% and respectively, 1.84% in 2010).

In terms of company size, the largest part of innovators is large enterprises<sup>5</sup> (70.32% of total no of companies between 2008 - 2010), while the SMEs count for only 19.27%, followed by small companies with 10.40% during the same period. The share of large companies decreased by almost 9% compared to 2004-2006, while the share of SMEs and small companies increased by almost 5% and respectively, 3%.

Most of the small companies are non-innovators (67.33% in 2008-2010), while the situation is more balanced for the SMEs (with 44.11% of the companies being classified as innovative)<sup>6</sup>. The opposite situation is recorded for large companies, with 73.63% of the companies being innovative. An increasing tendency towards innovation is registered for all categories of companies (with increases of more than 10% in the share of innovative companies).

Most innovative companies are in the processing sector (41% of the private expenditure in 2011 was in this sector), especially in the food industry, the metal constructions, as well as rubber and plastic industry. Next is the transport and communications sector, while the energy and extractive industry occupy only a marginal position.

According to the data provided by NIS, within 2004-2012, the most common type of innovation in the private sector is the process innovation, aiming at improving the processing and production of goods and services. No significant differences can be observed depending on the company size. Innovation results mainly from inside the company or the holding, as well from the cooperation between the companies and

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<sup>4</sup> Study CNP: Role of the private sector in developing the competition in the RDI sector

<sup>5</sup> Idem 3

<sup>6</sup> Idem 3

their suppliers of equipment and software. On the other hand, studies<sup>7</sup> show a weak cooperation with the academic field, which is poorly connected to the RDI needs on the market and consequently, important resources allocated to these institutions remain either unused or do not have direct applicability on the market. The role of the state or consultants is also marginal.

The economic crisis reduced significantly the number of innovators (which decreased by almost 40% between 2006 and 2010), for all categories of companies.

The number of registered patents, as indication of how the innovation potential is valorized, has been on a decreasing trend over the last years (from 699 in 2008 to 447 registered patents in 2010)<sup>8</sup>. The average number of requests for patents<sup>9</sup> for the period 2006-2011 was 56.84 for 1 million inhabitants. The highest number of requests comes from individuals (33.20), while only on average 7.6 requests/1 mil. Inhabitants come from the private companies and 11.22 requests/ 1 mil. Inhabitants are from the research institutes.

As regards the international patents, a very small number of requests are registered with EPO. Moreover, though the number of requests increased during the last years (from 29 in 2002 to 37 in 2011), the number of patents granted reduced continuously with only 2 patents granted in 2011. Under these conditions, reaching the objective set in the National Strategy for RDI 2007-2013, 'increase by 10 times the number of EPO patents compared to 2003 (1.72 patents for 1 mil inhabitants) seems highly unrealistic. The possible explanations include the high costs associated with patenting at EU level, as well as the fact that at national level, registration is just a purpose in itself and patents are rarely exploited through transfer of intellectual property rights or in consultancy. The very low number of EPOs also reveals the fact the Romania currently imports new technologies and equipment, rather than developing at national level.

#### Innovative industries

The role of the industries that produce goods incorporating high technologies (high-tech industries) and medium to high technologies (medium high-tech industries) has increased during 2008-2011, with the share in the total gross value added created by industry, increasing from 20.8% in 2008 to 25.9% in 2011<sup>10</sup>. This happened in the context of higher investments in these industries as well as support from society in general and for the labour market.

With increasing employment, the prospects for these industries are also positive. The number of radiations was low for these sectors, while the rate of newly founded companies was positive during the analyzed period, with an overall positive balance until 2010.

#### **RDI Infrastructure**

The RDI results depend directly on the quality of the related infrastructure its level of accessibility. In Romania, according to the national legislation currently in force, entities performing R & D are included in a national system. National R & D system consists of all establishments, public and private entities developing research and development activities.

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<sup>7</sup> Idem 3

<sup>8</sup> Annual report of the State Office for Inventions and Trademarks

<sup>9</sup> Idem 3

<sup>10</sup> CNP study: New directions in the industrial policy

Scientific research and technological development of national and economic interest includes the following categories of public establishments, accredited for this purpose:

- 5 national research and development institutes: Physics and Chemistry, Medicine- Biology, Micro-technology, Geology and Technic;
- 60 centers and research centers belonging to the Romanian Academy, two of which are recognized by EC as centers of excellence.
- 4 Industrial and technological parks located in Iasi, Timisoara, Bucharest and Galati
- 42 accredited centers accredited for Innovation and technological transfers and 3 centers under accreditation

Moreover, the most powerful laser in the world will be built in Romania, in the Bucharest-Ilfov region, under the ELI Project – Nuclear Physics (Extreme Light Infrastructure) and will benefit of 180 million EUR financing under the current SOP ICE. Part of the project needs to be supported under the 2014-20 programming period, in relation to the gamma laser light. This project represents a complex research infrastructure that will position Romania on the world research map and will have a major impact in terms of applied and general research. In the perspective of the year 2015, this will be the most advanced infrastructure at global level in the area of extreme light and will be distributed in Romania, as well as in the Czech Republic and Hungary.

The new trend in Europe, to which Romania is taking part fully is the integration of R&D activities with ensuring efficient access to existing RDI infrastructure in the member states and the creation of virtual, ICT based infrastructures. Romania could greatly benefit of such initiatives, given the relatively poor stage of development of the existing RDI infrastructure. The development of ICT infrastructure and adoption of the necessary legislative measures in the field of property rights, patents and use of research results, are essential in order for such an undertaking to be effective.

### Human resources in R&D

At the end of December 2011, a total of 42,363 persons were active in the R&D sector (increase by 1.1% compared to 2010), counting for 6.7‰ of the total occupied population (in 2009). This is almost half of the EU 27 level of 11.7‰.

The distribution of the number of RDI employees in different sectors reveals the fact that largest number of employees is in the innovative enterprises (37%), followed by 31% in the research centers established by the universities, 31% in national research institutes established by National Authority for Scientific Research and Romanian Academy, and only 0.5 % are active in the non-profit sector.

About half of the employees in research (43.3% in 2010) were concentrated in the Bucharest-Ilfov Region, followed by the West and North-West Region (with 10.4% and 10.3% respectively), where the university sector is very well represented.

Researchers count for 60.2% of the total number of employees in R&D sector, but their number is significantly decreasing (by almost 5.000 between 2010 and 2011), because of comparatively low wages and scarce research resources, e.g., in terms of research infrastructure.

The analysis of the number and characteristics of the personnel in the research sector reveals a continuous decrease of the number of employees in the sector, in general a fair distribution on age with tendencies of aging, and an increase of the



level qualification especially in the private research sector. At the end of 2011, 83.1% of the employees in RDI had university studies.

The number of persons working in the R&D sector decreased significantly between 1993 and 2010 (by 61%), with the highest decrease being recorded in the private sector (88%). The only sector with increases was the university field, where the personnel increased 5.5 times (from 3,329 employees in 1993 to 21,235 in 2010)<sup>11</sup>. This is mainly the effect of migration of experienced, valuable researchers working in applied research (in the enterprises) to other countries or other sectors of the economy.

A common problem for almost all sectors is represented by the relative lack of highly quality labor force. Romania has a relatively high share of graduates in the field of science and technologies in comparison with other Member States, and high quality education in areas such as Math or Science. These strengths are, however, insufficiently exploited and rarely translate in competitive advantage, mainly because of the systemic problems of university education (subject in recent years to repeated institutional changes) and to brain drain. There is an urgent need to improve career prospects in the field of research and development, as well as in the field of university education, in order to improve attractiveness for young researchers and qualified employees.

#### Administrative capacity

The analysis of expenditure in the R&D sector reveals the fact that the salaries are the main expenditure in the sector (2/3), while acquisition of equipment and assets counts only for one third.(34.4% in 2011)<sup>12</sup>. During the economic boom (2005–2008) there was a significant increase (211%) of the expenditure with salaries but the tendency changed during 2009 – 2011, mainly due to the cuts in the private RDI sector. The salaries however remain low in comparison with the potential payment that experienced researchers can obtain in other countries. The low payment, together with the reduced opportunities in the context of poor collaboration between private sector and academic field, as well as underfinancing of research, remain the main reasons for the significant brain-drain during the last years (in the private sector the number of researchers decreased by 80%).

## TO 2: Enhancing access to and use and quality of information and communication technologies

It is estimated that the IT&C sector contributes directly to the increase of the EU GDP by almost 5%. In order to benefit from the advantages of the information society, in the context of both personal life and economic activity, it is essential to have a good access to modern IT&C technologies and services.

In spite of the progress registered during the last years, Romania still faces large inequalities in terms of digital literacy and access to modern information technologies. Only about half (46.8%) of the households in Romania had a computer at home in 2011, showing an increase of 2.6% compared to 2010. Urban-rural discrepancies are significant, with 3 quarters of households with computers being located in the urban areas.

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<sup>11</sup>Exonet research published on Dinu Patriciu Foudation website: [https://www.fundatiadinupatriciu.ro/ro/media\\_room/stiri/613](https://www.fundatiadinupatriciu.ro/ro/media_room/stiri/613)

<sup>12</sup> Idem 3

In addition, the percentage of people between 16 - 74 that have never used a computer as a share of the total population is almost double than the EU average (it varies from 35% in Bucharest-Ilfov to 58% in South-Muntenia Region).

In 2011, 43.3% of the households at national level had access to Internet at home, the majority (78.6%) being located in the urban areas. By comparison, 74.6% of households in Europe have access to Internet.

In spite of significant increases between 2008 - 2011 (50-100%), the share of households with broadband access at national level was only 31% in 2011 (half of the EU 27 average of 67%). The situation at regional level is even more restrictive, with coverage varying from 17 to 38%. The only exception is the Bucharest-Ilfov region, with values above the national average (54% in 2011). The broadband coverage is particularly low in rural areas, with only 60% of the rural population having access to the broadband connections (compared to 82.5% at EU level). As regards the broadband connections in mobile points, the share in Romania is 4.3% compared to 7.2% in EU 27.

In every region there are areas with market failure<sup>13</sup>, including 'communities with less than 10.000 inhabitants and less than 2 ISP', or even 'white areas' with no ISP. As result of a mapping exercise completed in 2008, a number of 9.315 (19% of total localities) were classified as 'white areas', out of which 3.648 localities (counting for 5% of total population) didn't meet the necessary conditions (in terms of infrastructure endowment) to develop a broadband infrastructure. Problems with electricity supply there are registered in some areas also contribute to this situation. According to the EU Report on Digital Competitiveness from 2010, the DSL coverage in Romania is 74% at national level and only 45% for the rural areas. The same pattern can be observed in other less developed European countries, such as Poland, Slovakia or Bulgaria.

Internet usage is also low with an average of 37% in 2011 the number of persons that use Internet on a regular basis (at least once a week, according to the definition at EU level). Although this share has increased significantly (42.3% increase during 2008-2011), the figures are still low compared to the EU average of 60% (2009).

#### Aspects related to PC and Internet literacy – training

**Electronic commerce** is still underdeveloped in Romania, with 6% of people ordering goods or services on the Internet. Romania still has a long way to go when comparing to the EU average of 43%. Problems with property rights, issues related to the security of online payments or use of credit cards and similar instruments contribute also to the poor development of this sector.

Data on electronic commerce for businesses provided by Eurostat, in 2011, show that only 13% of EU-27 companies were selling online and 19% were making online acquisitions. Romania is well behind this average, with only 4% of the business sales and 9% of the acquisitions being done online.

There is a need to enhance Internet usage, both at the level of individuals and business-wise, in order to exploit the exiting potential in this area related to software and applications development, as well as Internet based services. Investments in hardware and infrastructure still need to be combined with soft measures, aimed to enhance PC and Internet related skills, such as training and certification. ICT investments will need to be directed towards supporting the

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<sup>13</sup> As identified by the study realized by ANCOM in October 2010

development in those sectors with potential (such as energy, to improve energy efficiency, or competitiveness) and to promote innovation.

Romania proved to be an attractive place for **investments in the field of IT&C**, due mainly to the existence of a pool of qualified labor force in this field. However, in the context of the economic crisis but also due to effects of globalization, the number of companies active in the field of IT&C decreased by 11.5% between 2008-2010. To include details on regional concentration (North-West, West and Bucharest-Ilfov regions) + details on specialization and growth potential.

Structural and Cohesion Funds can play an important role in the development of the sector in Romania. Due to different factors impeding efficient and effective implementation of the measures foreseen, as well as the extensive needs of the sector, significant efforts are still needed in order to enhance growth and achieve cohesion with the other EU regions.

There is also a very low recourse to **e-government**, both by individuals (8% compared to EU average of 50% in 2010) and companies (50% compared to 75% in EU 27) with negative effects on the modernization process of public institutions. An emphasis on e-government and on open government might contribute to reduce corruption, ease the high level of administrative burden for policy beneficiaries and decrease inefficiency of public resources use. It also represents an important factor for SMEs development and, thus, for economic growth.

New Generation Access Points – option analysis (public support/ license obligations for operators)

Measures to support demand side

Important efforts are also needed in order to improve use of electronic instruments and tools, such as e-Education or e-Health. Actions in the IC&T field should support measures implemented at sector and regional level. Interoperability between different systems should also be ensured, so as to promote efficiency and coordination of work across institutions and partners (including private partners) involved. The safety and security level in relation to the functioning of the systems created should also be enhanced, together with the adoption of the necessary legislative measures in order to fight cybernetic criminality, as well as adequate measures in the area of consumer protection and property rights.

Link with the research sector

Strengthening the institutional and administrative capacity – details on mapping tools at the level of MCSI

### **TO 3: Enhancing the competitiveness of SMEs, the agricultural sector (for the EAFRD) and the fisheries and aquaculture sector (for the EMFF)**

SMEs represent a key factor in the economic landscape of EU, employing millions of people, promoting innovation and generating economic growth and social benefits. In Romania in 2010, SMEs accounted for 99.71% of enterprises and employed 72.41% of total labor force. The number of SMEs relative to the population (23 per 1,000 inhabitants), however, is still very low, at about half of the EU average.

There are high inequalities in terms of regional distribution of SMEs, with 52 SMEs per 1,000 inhabitants in the Bucharest-Ilfov (over the EU and national average) and even less in the North East region. Urban-rural differences are even more prominent.

Out of the total number of SMEs, 89.42% are microenterprises, which – with an average of 2 employees (a large share of SMEs have no employees) – are far more exposed to economic instabilities and crisis than large, well-established companies.

To include info on large companies – reduced share, concentration in a few sectors

Due to their relatively small size, compared to their European competitors (give figures), Romania's enterprises suffer from low competitiveness – in terms of low value added operations, lack of R&D, labor intensive fields of operations, lack of high technology investment as well as lack of productive assets. They are currently in a rather alarming bad shape and exposed to a serious danger of further reducing their activity.

During 2003-2010, the number of SMEs had different evolution, from the constant increase between 2003 - 2008 (in 2008 the number of SMEs reached the maximum level, 485,417 companies, 50% higher than in 2003). In 2009, with the economic crisis, the number of active SMEs decreased by almost 5% compared to the previous year and the decreasing tendency continued in 2010, when the decrease was even higher (8% compared to 2009). As a result, only 423,236 SMEs were active in 2010, a level similar to that in 2006.

This evolution had negative effects on the economic growth and development and contributed to increasing unemployment (with the loss of a total of 628,390 jobs in the 2 years of economic recession, out of which 73% in SMEs). Most of the companies that closed their activity were operating in the field of trade, as well as in the processing industry and in real estate.

The number of cancellations from public registries varied among regions, with the highest rate of de-registration (17.2%) in North West region, while at the opposite end were South West and West regions (less than 8.5%). In addition, an increase of the share of microenterprises in the total number of SMEs could be observed starting with 2008, due to the reduction of the activity and the numerous lay-offs.

The SMEs sector is still affected by the negative effects of the economic crisis, though during 2011-2012 the number of companies stabilized, and so were employment and value added. The level for these indicators is, however, much behind the values recorded in 2008.

The SMEs sector in Romania contributes, on average, less than its EU counterpart to gross added value, but equally to the employed labor force. This shows a good indication of the lower productivity of the Romanian SMEs, which, in spite of the increases registered in the recent years, is still far behind the EU average.

According to the study produced by Ecorys for the European Commission<sup>14</sup>, Romania is on the last position as regards economic competitiveness, measured in terms of real value added and employment, as well as in terms of productivity. This can be partially explained by the industrial structure<sup>15</sup> of the Romanian economy, where the commercial sector has the majority (with 42% of the total number of SMEs, compared to the EU average of 30%). The remaining SMEs are divided between services (34%), processing industry (10%) and constructions (13%).

From the point of view of the competition structure<sup>16</sup>, although in Romania the labour productivity is well below the EU average, the hierarchy of the industrial sectors is similar to that in other EU member states. There are two industries that are specific to Romania, with a good productivity rate compared to other sectors and

<sup>14</sup> "EU SMEs in 2012: at the crossroads, Annual report on small and medium-sized enterprises in the EU, 2011/12)Structural weaknesses on competitiveness factors"

<sup>15</sup> European Commission Informative paper SBA 2012 - Romania

<sup>16</sup> Idem 16

where a comparative advantage could be obtained, namely the sector for non-metal mineral products and the production of computers and electronic products.

During 2000 and 2009<sup>17</sup>, the sectors of the processing industry have had a stable tendency in terms of development potential between 2000-2006, followed by a significant improvement during 2006-2008 and a decrease in 2009, in the context of the economic crisis. Two sectors (food and beverages industry and transport equipment) that count together for about 45% of the total GAV of the processing industry in 2009 have progressed significantly. Moreover, the productivity for all sectors increased two to four times between 2000 and 2009 and the unit costs had a decreasing tendency.

In terms of contribution to GAV, services were the highest contributor, with 54.38% in 2009, followed by industry (26.75%), constructions (11.71%) and agriculture (7.16%). This structure varies at regional level, in the context of agricultural regions (such as the North East and South East) or more industrialized regions (such as South Muntenia, Center or West region). For only two regions (Bucharest-Ilfov and North East region), the share of services is above the national average.

SMEs contributed to approximately 54% of total GAV in 2009. The structure by sectors is quite different from the EU average, with the SMEs in Romanian industry developing less on innovation and technology and the economy as a whole being characterized by a slower orientation towards the services sector<sup>18</sup>. By comparison, at EU level, the SMEs contribution the sectoral GAV<sup>19</sup> was 36% for industry, 10% for the constructions sector, 20% for trade and 43% for services.

The sectors considered essential at EU level for competitiveness are high technology production and sectors based on intensive use of knowledge. The companies active in these sectors in Romania count for less than 23% of the total number of SMEs, a level not much lower than the 26% EU level). Their contribution to the total added value created by the Romanian SMEs is 25%, demonstrating a slightly higher productivity.

### Companies with rapid growth

A total number of 34,596 companies (8% of the total number of companies active in 2010) with rapid growth have been identified<sup>20</sup>, out of which 58% have been in the SMEs category for at least one year in the analyzed period. These counted for a significant concentration of employment (45-47% of total jobs). Only 4-4.5% of these companies were SME's, however they counted for 26% of all jobs created by SMEs, which shows a special potential to create employment.

The companies with rapid growth generated 54% of the aggregated turnover of all companies in Romania, during 2008-2010, a concentration that is even higher than that for employment. Moreover, the labour productivity in these companies was 40% higher than in case of normal companies.

### Competitiveness and resilience on the basis of employment structure

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<sup>17</sup> CNP study: New directions in the industrial policy

<sup>18</sup> CNP study: The contribution of SMEs to economic growth – present and trends

<sup>19</sup> Idem 18

<sup>20</sup> Idem 18

In 2010<sup>21</sup> there were 2,535,348 employees in the Romanian SMEs sector, 34.3% of jobs were in the micro-enterprises, 33.6% in the small enterprises and 32,1% in the medium enterprises.

The employment structure of Romanian enterprises (give details on number of persons employed) makes them more sensitive to market changes and to the economic crisis (provide a comparative analysis). Only 1% of the Romanian employees are working on the basis of a fixed period contract, compared to 15% in the EU 27. This is due also to the difficult and restrictive provisions of the existing fiscal regime.

The educational level of the employees remains low. Only 27.44%<sup>22</sup> of SMEs have declared that 75-100% of their employees have a university degree, 21.76% of the SMEs have up to 50% of their employees with university degree and 18.19% of the SMEs have declared that none of their employees have university degree.

The largest number of employees with university degree in micro enterprises-32.82% and the lowest in the medium enterprises 7.14%.

Romania remains attractive for investments on the basis of a medium-skilled, but relatively cheap labor force. Only 14,9 % of Romanian population had, in 2011, a tertiary education degree, which is far below from the EU average (2011: 26,8%). Significant differences can also be seen among the different regions with the Bucuresti-Ilfov region (2011: 31,4 %) being above and other regions such like South East (11.6%) and South Muntenia (11.2%) being far away from the EU average.

There continues to be a mismatch between the education and training systems and the needs of the labor market. Participation of the population in life-long learning is among the lowest in Europe: Only 1,6 % of the population participated in life-long learning in 2011, only slightly higher than the 2007 value. The enterprises' participation in vocational training of employees is also very low: only 20% of Romanian enterprises provided training for their staff in 2011. What is even more concerning is that the diminishing interest of enterprises in enhancing their employees skills (the enterprises participation rate is 13% lower than in 2005).

In the context of increasing unemployment since 2008, especially among young people (give %), there should be more targeted actions to remedy these problems, due to raising pressure on the labor market. Creating and developing the necessary skills for people is a key priority and should be done both in the context of specific investments – in the context of work-based learning or apprenticeships – as well as in the more organized context of formal training and education.

### Entrepreneurship and business environment

In terms of entrepreneurship, Romania is ahead of many EU member states, with 18% of the Romanian population acting independently in business life. This remains an encouraging factor to be built upon even though, at a more careful analysis, this high share seems to be caused by lack of alternatives for many of the existing entrepreneurs. Entrepreneurial education is seen as important in Romania, and forms a part of educational curricula as a priority-learning subject. Other programs have been implemented as well in this field, aimed to develop entrepreneurial skills among young people and to facilitate access to finance. These are also complemented by a program launched in 2011 aimed at setting-up and developing business incubators at regional level.

<sup>21</sup> Source: Post Privatization Foundation \_Current status of Romanian SMEs

<sup>22</sup> White Book of Romania SMEs (2011)

In spite of the progress registered, Romania is still confronted with excessive bureaucracy, especially in relation to fiscal management, with complicated procedures and unjustifiable long durations for registration and other procedures. This creates additional problems affecting SMEs, because the current regulation system makes no distinction of treatment (in terms of administrative burdens, as well as regarding accounting and reporting requirements) between large companies and SMEs, especially micro-enterprises. The SBA principle 'think first at a lower scale' has not been systematically applied in the Romanian administrative and judiciary systems.

In 2011, the One Stop Shop was created, aiming to reduce the costs and the time spent for registering a new company, acting also as an information point. The effectiveness of such initiatives is, however, limited. The levels of indicators on administrations' responsiveness are similar to the EU average values. They have, however, deteriorated during 2011-2012. The time necessary to start a business has increased by 4 days. There was, by contrast, an improvement in the procedures for property transfer, which is less costly and less time-consuming than in the EU. The annual number of tax payments has been reduced at half (from 113 to 66), but there are still significant differences compared to the EU. The number of taxes has also been reduced by almost a half since 2009.

The excessively complicated procedures, including public procurement procedures, high level of taxation, and red tape contribute to maintain a large share of activities outside the formal economy, with negative effects on achieving economic growth and social cohesion. The poor development of infrastructure, with negative effects on accessibility and mobility, also puts its mark on the realization of the development potential of the Romanian economy.

In addition, Romanian companies (especially SMEs) are confronted with various obstacles hindering their development, such as poor access to support structures, poor access to finance, shortage of medium and highly skilled labor force, excessive bureaucracy, etc.

Business support structures play an important role in attracting investments for exploiting the regional potential. In 2012, there were 52 authorized industrial parks (44.5% more than in 2005), out of which 19 private and 6 public-private partnerships. Their regional distribution is highly unequal, varying from 2 parks in each of the North East, South East, South West and Bucharest Ilfov Region to 20 industrial parks in South Muntenia region.

In addition, 7 (out of the 10 registered<sup>23</sup>) business incubators were active in 2012. This number decreased significantly compared to 2006, when there were 21 functioning incubators. Moreover, these are unequally distributed at regional level, with 4 such structures being located in the Center Region and none in South Muntenia, South West or Bucharest Ilfov. There are also 4 scientific and technological parks, functioning in 4 different regions, hosting companies active in research and development in the medical and construction field, electronics, IT or biochemistry.

Many of these structures are still underdeveloped and insufficiently functional, offering a limited number of services to the occupants and being often located in unattractive areas. Only a limited number of companies are located in such structures.

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<sup>23</sup> structures monitored by The National Agency for Small and Medium Enterprises and Cooperation (NASMEC)

Clustering, though not a new concept, is still underdeveloped in Romania. There are some industrial clusters, such as those in the automotive industry or in the IT industry, but efforts still have to be made in order to promote this form of collaboration at a larger scale. Promoting development in order to create synergies, including the context of growth poles should be a target.

### Access to finance

A good access to finance is another premise for growth and development. In theory, Romania offers reasonable conditions as regards access to different financing sources. World Bank's Easy doing Business report 2011, ranked Romania on 7th place (out of 183) in SMEs access to finance, mainly due to the well-developed non-bank financial sector consisting from Microcredit, Micro-leasing, Credit unions, mortgage financial companies.

In practice however, banks are still reluctant to grant credits to business owners. Besides, the conditions for accessing a loan are restrictive, especially for the smaller companies. A series of measures have been adopted to improve access to finance, including the set-up in 2011 of the SME Guarantee Fund (including beneficiaries of Structural Instruments).

The other instruments available, such as financial engineering instruments or micro-finance, are less developed, due mainly to limited resources. On the other hand, the experience gathered and lessons learned through the implementation of the EU/Romanian Government funded Romanian microcredit scheme, implemented by EBRD and Kogalniceanu Programme, funded by the Romanian Government proved to be useful and could be used in the future.

The EU/EIF financial engineering instruments under JEREMIE programme<sup>24</sup>: subsidized credit-lines for SMEs and exporting ESMs, equity investment in SMEs etc. launched in 2000 through banks, are still not fully used. At the opposite end, the funds allocated for Romania within the Microcredit Progress and JASMINE facilities' were fully used by MFIs and the financial engineering instruments developed by banks for the SMEs. In this framework, 20 million Euro worth loans, guarantees and technical assistance for Microfinance Institutions (MFI), enabled an improved access to large diversity of financial products targeting mainly the micro-enterprises and private farmers.

It is thus very important to design and implement efficient financial support instruments, that could be used in practice and could thus respond to the high financing needs and contribute thus to economic growth and development.

### Foreign direct investments (FDI)

The FDI is a viable vehicle towards economic growth and development. A significant volume of FDI was attracted by Romania during 2007-2008, supporting the economic development of the country. However, the FDI decreased severely in Romania in 2012. According to NBR statistics FDI decreased with 45% last year from 849 million Euros to 465 million Euros.

FDI concentrates towards regions with a good accessibility to international markets. Thus, Bucharest-Ilfov concentrates 62.22% of the total FDI realized in Romania up to

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<sup>24</sup> Source; EIF – European Progress Microfinance facility:  
[http://www.eif.org/what\\_we\\_do/microfinance/progress/index.htm](http://www.eif.org/what_we_do/microfinance/progress/index.htm)



2010. The North East region (with only 2.37% of the total) has maintained the last position in terms of its capacity to attract FDI over the years, while the second performer is the South West region, with around 8% of total FDI. The majority of investments are in industry (43.9%), followed by trade (12.4%). Only 1.1% of the total capital contributions are represented by green-field investments.

## Agriculture

With a 6.5% contribution to the national GAV<sup>25</sup> (3 times higher than EU average), agriculture has always played an important role for the Romanian economy. Its economic potential is, however, significantly underexploited, with large unused resources. The population occupied in agriculture, forestry and fisheries is very high. According to the national legislation in force, rural area covers 87.1% of the national territory and population living in rural areas amount to 44.9% of the population (1<sup>st</sup> of July, 2010). This area has a significant growth potential and plays an important social role. However, at the present moment, with 19% of the total population occupied in agriculture in 2010, very low incomes and labor productivity in the agricultural sector, there is still a long way to go in achieving social and economic convergence.

In 2008, only 3.25% of the total number of SMEs was active in the field of agriculture, hunting and related services<sup>26</sup>. The labor productivity in agriculture is 4 times less than the EU average<sup>27</sup> (2008) and although it registered slight increases, it has one of the lowest increase rate at EU level (only 1%). Low productivity is mainly caused by outdated technology and equipment. Agricultural machinery park remains weak, most farms in Romania, faced with a very low degree of mechanization, poor agricultural inventory. Specific farms structure in Romania perpetuates a special situation among EU countries, i.e. 31.1% of total holdings not used tractor and 91.1% of holdings do not have a tractor generating dependency services to small farmers' holders of mechanized tractors, less common situation in other countries<sup>28</sup>. Capital shortage is reflected in lower agricultural yields compared to the EU average: 35-40% of primary agricultural production (800-900 € / ha in Romania, comparing with 1800 to 2000 € / ha in the EU). The fixed and operating capital (assets) is on average 16-17 times lower than a farmer EU (540 € / farmer in Romania to 9000 - € 9,200 / farmer EU), bank loans for Romanian farms are 15-16 times lower than EU farm loans (110 € / ha in Romania and 1700-2000 € / ha in the EU)<sup>29</sup>.

Moreover, the lack of financial resources is also the cause of significant underuse of the agricultural land. In 2010 the Ministry of Agriculture estimated that 55.9% of the total surface of Romania could be used for agricultural purposes, however 20% of this land remained unused as farmers did not have the resources to exploit it<sup>30</sup>.

Only one third of agricultural production is used by the food industry compared to 67.8% in France, 62% in Poland. 70% of exported production represents raw or

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<sup>25</sup> source: study of the National Commission for Prognosis, 2011

<sup>26</sup> Source: the White Book of SMEs in Romania, 2010

<sup>27</sup> DG Agri annual statistical book (2011)

<sup>28</sup> CNP study "Strengthening Farm" 2012

<sup>29</sup> National Strategic Framework for Sustainable Development of the Romanian rural area 2014 - 2020 - 2030

<sup>30</sup> Estimate based on Ministry of Agriculture data and Unworked agricultural land will decrease in 2011, article published on May, 30, 2011 <http://www.wall-street.ro/articol/Economie/103961/Suprafata-agricola-nelucrata-va-scadea-anul-acesta.html>

primary processed production (livestock, grain, oil plants, tobacco, vegetable fats and oils), products for which Romania, has not yet developed manufacturing.

In 2009, the penetration rate (value of agricultural imports relative to the agricultural production value) was by 7.8%, while the rate of effort (value of exports relative to the agricultural production value) reached 11%. Food imports amounted to 26.3% of the value of industry while the rate of effort (exports / production) was 6.1%.

Both the processing sector and agricultural production are characterized by a low degree of specialization, low labor productivity and low use of innovation.

Performance in agriculture is hampered by the excessive fragmentation of properties (3.859 thousands holdings in 2010, only 2% less than in 2007), with the majority of holdings being small and low performers, leading to very high administration costs at the level of the responsible institutions. Thus, around 90% of the total number of holdings in 2010 is under 5 Ha (compared to 70.4% at EU level) and cover 29.7% of the total agricultural area.

The sector confronts itself with significant problems. First, a complex legislation prevents the simplification of procedures, insufficient support for the creation of more cost-effective arrangements – such as groups or associations for the producers or distributors, larger farms etc., as well as a difficult access to finance (banks are still reluctant to give credits to farmers, in spite of the existing guarantee arrangements in the framework of the National Guarantee Fund for Agriculture). During 2006 - 2009, the agricultural loans were below 3% of total loans to non-governmental sector in the economy.<sup>31</sup>

Association in agriculture remains limited. Approximately 150 agricultural cooperatives are registered in Romania, active mostly in the South East part<sup>32</sup>. This number is considerably lower than other countries, in particular well-developed countries such as France (3500 entities), Spain (4200) or Italy (5.000), US and even Japan.

The reasons are both socially based, linked with the negative collective memory in the rural areas regarding the former communist cooperatives and with the feeling of mistrust among the rural households, as well as financial, in the context of very limited resources available for farmers to invest in their business and the additional costs related to registering and operating a cooperative (accounting, VAT, etc.). Membership in agricultural cooperatives is very low, with associations and coops accounting for only 13,2 % of total agricultural land in 2010, decreasing from 15,7% at the Agricultural Census in 2002<sup>33</sup>. By comparison, in France, 38% of the population and 75% of the agricultural producers are members in a cooperative<sup>34</sup>.

A large part of the population occupied in agriculture is highly socially vulnerable, generally old and with a low education level (only 21.5% of the population with higher and medium education was living in rural areas in 2011). National Advisory services are insufficient and cannot compensate for the low education level: 850 employees in the national advisory network in 2012, with one consultant for 3,636

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<sup>31</sup> National Strategic Framework for Sustainable Development of the Romanian rural area 2014 - 2020 - 2030 CNS, March 2012

<sup>32</sup> Cooperația agricolă, condiție fundamentală pentru dezvoltarea agriculturii românești, paper presented at the Postdoctoral Studies School for Biodiversity and Food Biotechnologies 2010 Dr. Ing. Alexandru Lăpușan,

<sup>33</sup> Source [www.ies.org.ro](http://www.ies.org.ro) Institutul de Economie Sociala – estimates based on Agricultural Census data 2002-2010

<sup>34</sup> Cooperative movement in Romania 2011 – dimension, performances, tendencies and challenges. Preliminary report. Claudia Petrescu, Institute for Research of the Quality of Life -ICCV, 2011

beneficiaries of the agricultural consultancy (including subsistence farming) or, in terms of geographical covering, 1 consultant for 6 villages, with a negative influence on the efficiency of services to farmers.

## Fisheries

Fishing and aquaculture play an important place among the areas of national interest<sup>35</sup>. Although it has a low contribution to the national economy (0.0086% contribution to GDP and 0.0049% contribution to the GVA in 2008), the fisheries sector is of particular importance, especially in the food resources offered, the active role in creating environmental value, by generating and maintaining the wetlands and biodiversity of fish and bird, for many species.

Romania's fishing heritage, consisting of the surface temporarily or permanently covered with water, is considered as having an area of about 500,000 ha stagnant water, 66,000 kilometers streams of rivers in mountain, hill and plain and 25,000 km<sup>2</sup> of marine waters in the Exclusive Economic Zone of the Black Sea. The surface waters in the public domain are: 300,000 ha of natural lakes and ponds; 98,000 ha lakes and polders; 47,000 km of rivers in hilly and plain areas; 18,000 km of mountain rivers; 1,075 km the river Danube. In Romania there are 100,000 ha of fishery arrangements structured as: fish farms on 84,500 ha; 15,500 ha of fish nurseries and 25 ha of trout farms.

Fisheries and aquaculture, along with fish processing and trade in fish and fish products are activities present in all regions. However, in remote areas such as the Danube Delta, Danube wetlands and Closure of Danube, large communities depend on the fishing activity that provides jobs and income for local people.

In 2005, there were about 100,025 ha of fishery arrangements structured as follows: 84,500 ha (84%) fish farms, 15,500 (15%) fish nurseries and 25 ha (about 1%) salmon farms (in 2012 their area has increased to 83.08 ha for a total number of 160 units recorded in the Register of Aquaculture Units - RA).

In 2011, the NAFA statistics shows that there are aquaculture licenses for an area of 98,232.78 ha: 8617.55 (9%) ha of nursery and 89.615.23 (91%) ha of farms. The number of aquaculture farms registered at NAFA in the Register of Aquaculture Units has increased from 381 in 2005 to 940 in 2012, (257 nurseries and 693 farms). Following implementation of Operational Programme for Fisheries 2007-2013, a production capacity of over 9,200 tons (new and upgraded units) is being implemented.

Romania's fish production recorded a maximum of 17,151 tons in 2009, after which, due to the economic crisis, it fell to 15,184 tons in 2010 and down to 11,593 tons in 2011.

In the aquaculture sector the predominant activity is freshwater fishery, while growing freshwater or seawater aquatic organisms (crabs, shellfish, and aquatic plants) is virtually non-existent.

Balance of trade in the foreign trade with fish and fish products is deficient. If in 2005 there were imported 80,160.60 tons (worth 72110.40 thousand Euro) while 815.70 tons (worth EUR 4,089.7 thousand) were exported, in 2011 there were

<sup>35</sup> Analiza socio-economica a sectorului piscicol, MADR, 2012 (Socio-economic analysis of the fisheries sector, MARD, 2012)

imported 94,935.52 tons (valued at 94935.19 thousand Euro) and exported 5,648.08 to. (worth 13,172.56 thousand Euro).

The Romanian market for fish and fish products is growing, but there are few connections between market and the primary producers<sup>36</sup>. Increased consumption of fish products is a must. This should be achieved by reducing dependence on imports and increasing the local fish production coverage of domestic demand. Marketing of fishery products should be adapted to market expectations: new species, semi-finished and quality products, in conditions of traceability. It is also required a better market monitoring, in order to anticipate market evolution and adapt production capacity to consumer demands. Fishery products are distributed mainly by manufacturers and importers and less by specialized intermediaries, finally reaching consumers through supermarkets and specialized stores.

Adapting the fisheries product to consumer needs and requirements is a prerequisite for the successful modernization of the fisheries sector in Romania

#### TO 4: Supporting the shift towards a low-carbon economy in all sectors

Energy efficiency is at the heart of the European Union's strategy towards a sustainable energy system and a resource efficient economy by 2020. Energy efficiency is one of the most cost-effective ways to enhance security of supply, as well as to reduce emissions of greenhouse gases and other pollutants.

Romania remains a highly energy intensive economy, in spite of the decreasing trend over the last years (36.4% decrease between 1999 and 2010, data on effects of the crisis). The Romanian economy is about 2.6 times as intensive as the EU average (2010), with negative effects on the economic competitiveness and growth, as well as on the environment.

According to the targets set in the National Reform Program, Romania aims to achieve a 19% reduction in the primary energy use comparing to the projected levels by improving energy efficiency, to reduce the GHG emissions by 19% compared to 1990 levels, as well as to achieve a 24% share of the renewable energy sources in the total consumption.

There were improvements in regard to the energy intensity in the industrial sector (63.4% decreases during 2002 - 2010). This is mainly due to the structural change in the industry, towards less intensive production. The trend is expected to continue in the context of the continued deregulation of gas and electricity prices<sup>37</sup>. In addition, dedicated measures should be designed as to promote energy efficiency, especially at the level of the large consumers. In order to ensure effectiveness of such measures, the causes of the limited efficiency of support granted during the current programming period (under SOP IEC) should also be explored and conditions improved.

On the other hand, no significant progress was registered in the transport sector, for which energy intensity has remained practically unchanged since 1999. With the road sector counting for 90% of the total energy consumed, the sector needs a coherent energy efficiency program to reduce energy intensity. Investments are needed in relation to renewal of rolling stock, as well as for improving the traffic

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<sup>36</sup> Programul Operational pentru Pescuit, 2007-2013, [www.ampeste.ro](http://www.ampeste.ro) (Operational Programme for Fisheries 2007-2013)

<sup>37</sup> JASPERS study (draft 07/12/12) – Energy efficiency programmes for Romania 2014-2020

management and logistics. In addition, fiscal measures should also be implemented in order to promote energy efficiency (such as variable taxes, according to the fuel consumption) together with pricing and tolling systems, to encourage collective transport and improve logistics.

The energy consumption in the housing sector remains also very high in Romania (36% of the total consumption in 2010). Some progress was registered regarding energy audits, as well as for the thermal rehabilitation of buildings, but there is still a long way to go, given that more than 85% of the housing stock was built before 1989 and needs serious investment in thermal rehabilitation in order to limit the energy consumption. These measures should be implemented together with the enforcement of Energy performance certificates in order to achieve sustainable savings.

The energy efficiency of the Romanian electricity generation, transmission and distribution systems is relatively close to the EU averages. The related energy losses were less than the EU average in 2010 (13.1% compared to 15%<sup>38</sup>). The connection ratio to the electric energy distribution network is quite good at national level (96.3%), with some discrepancies at regional level, especially in the rural areas. A national program has been designed to remedy this problem, but efficiency in implementation is limited so far. **Include data/ info on consumption and problems in relation to the urban electricity networks.**

By contrast, the efficiency of the district heating transmission and distribution systems is very poor, in the context of highly depreciated equipment, threatening the very existence of the systems in many cities. In 2010 the average heat losses in the distribution networks were 29%<sup>39</sup>, in the context of an efficiency baseline value of maximum 10%. Considerable investment is needed in order to ensure an efficient functioning of the system. The thermal energy is distributed in only 95 urban localities out of the total 320 cities existing in 2010. The total length of the distribution network and the number of connections is decreasing due to the increasing prices and the low incomes of the population.

There is also a need to increase co-generation of electric and thermal energy and high efficiency co-generation, as well as to increase and improve usage of renewable energy sources. The use of RES should be promoted, together with awareness campaigns in relation to the RES benefits and potential, as well as on the importance of preserving the non-renewable resources.

The gas transport and distribution network is also in an advanced stage of depreciation, with 64% of the total gas network length being older than 25 years and almost 46% of the distribution equipment being more than 15 years old. In 2010, there were 866 localities (% of total) - out of which 72% in the rural areas – not connected to the gas networks. **Stats should be presented in relation to the population coverage (as %).**

It's important to increase energy efficiency both in economic sector, by investing in equipment and installation with low energy consumption, as well as in agriculture, especially by promoting use of biofuels for mechanical agricultural works. Efficient energy management systems should be promoted at all levels. It is also important to have all the concerned stakeholders aware of the importance of using energy efficient equipment, as well as the risks of keeping things unchanged.

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<sup>38</sup> Source: Enerdata

<sup>39</sup> Source: Provocări și oportunități pentru sistemul de furnizare centralizată a energiei termice din România, PwC 2011

A crucial barrier for energy efficiency improvement in Romania is the continued subsidizing of energy prices. The financial feasibility of the energy efficiency investments remains artificially low, blocking a high share of investments that would normally be feasible in market conditions. Energy efficiency is an important factor that can help improve competitiveness of the Romanian companies on the international market. It should be treated with priority, especially in the context of increasing competitiveness and globalization.

As long as the regulatory and market failures continue to prevail, the energy efficiency measures will have to be based on solid economic analysis and investment type subsidies need to be used in order to cover the gap between the economic and financial feasibility.

At the same time, the applicable EU legislation is not fully transposed into the national legislation and some of the applicable requirements are not fully implemented and enforced. Very little has been done for the development of the market of energy services, and particularly of ESCOs and of alternative financing mechanisms, such as soft loans, public grants, commercial debt financing, PPP arrangements etc. that will need to be developed in order to improve energy efficiency.

Actual implementation of the EE legislative framework and of the National Energy Efficiency Action Plans (NEEAP) requires institutional and capacity development and commitment of resources by all involved institutions, together with the establishment of efficient monitoring and verification mechanisms. Moreover, in the buildings sector, the Energy Performance of Buildings Directive (2010/31/EU) is yet to be transposed, with several important basic elements of energy efficiency measures and investments still missing (energy performance certificates, boiler efficiency inspections, air conditioner efficiency inspections etc.).

Energy production from renewable energy sources is an essential component of the EU energy policy and can lead to important savings in regard to the non-renewable sources and primary energy. Valorization of RES is an important component of the national and sector/regional strategies and can impact considerably the efficiency in different sectors (industry, agriculture, or even in services). The share of electric energy produced from RES in the total electricity consumption of Romania was 35.24% in 2010, higher than the 35% target assumed for 2010.

At country level, almost 36% out of the electricity produced comes from hydro sources, 33% from solid non-renewable sources and around 19% from nuclear sources. Wind resources are used to produce only 0.54% of the total electric energy delivered and biomass for 0.41%. Solar energy produced is almost invisible in the total quality of electric energy delivered.

The usage rate for the hydro potential was only 54% at the end of 2009. Maps are developed at national level including the territories and regions with high and average potential in relation to the different types of RES resources (solar, wind, biomass, geothermal energy etc.). Adequate measures, including improvement in functioning of the market for green certificates need and integration of the RES in the structure of the national energetic system need to be implemented in order to fully valorize the existing potential. **Associated legislation – danger of illegal practices.**

Structural Funds have given an important boost to the investments in the field of RES, however efforts need to be continued in order to exploit the potential Romania has in this field, especially in regard to the less valorized resources, such as wind, biomass and solar energy. Use of RES will need to be intensified in order to ensure

energy supply for the isolated communities, but also to support the economic activities, in order to reduce the economy dependency from imports of primary energy.

Romania has committed to reduce GHG emissions by 19% compared to the 2005 level. The main sources of GHG emissions are the energy and processing industry, as well as transport and agriculture. According to the estimates made in the National Inventory of GHG emissions elaborated in 2012, the GHG emissions in the transport sector have increased 3 times in 2009, compared to 1989 (reaching a level of 8.8% of total emissions). The reduction of emissions in this sector needs to be realized through an integrated approach that will combine use of innovative and modern technologies, with a change in attitude of all those involved. The emissions of the industrial processes in 2010 represented about 13% of total emissions. Emissions from agriculture (14.28% of total GHG emissions in 2010), though lower than the EU average, are still at quite a high level. The low mechanization level of the Romanian agriculture compared to the EU average, as well as the relatively small area covered by greenhouses, are the reasons for the relatively reduced effects of agriculture to the climate change. However, the agricultural machinery is old and needs to be modernized in order to maintain a low level of polluting substances. The poor farm facilities in regard to waste management and sewerage, but also in relation to manure management, the increased use of fertilizers and the current animal housing systems also contribute to the increase of GHG emissions. Other forms of air pollution include the various nitrogen oxides and ammonia, resulting mainly from the surplus of fertilizers and inappropriate use of such substances or, in case of ammonia, from the intensive use of animal breeding.

Emisiile din sectorul deșeurilor reprezintă 5.73% la totalul emisiilor de GES (excluzând LULUCF) și sunt reprezentate în principal de metanul rezultat din descompunerea anaerobă a deșeurilor solide eliminate prin depozitare de deșuri și tratarea apelor uzate.

Evidence from research already undertaken in this area indicates that the greenhouse gas emissions reductions achieved through improved waste management are aligned with the waste hierarchy. Thus waste recycling using yields turns in a greater GHG reduction in comparison to those achieved through residual waste treatment options such as incineration. The implementation of a range of initiatives aimed at all levels of the waste hierarchy will ensure that Romania maximises the climate change benefits that can be achieved through improving its waste management activities – in line with its ambition to achieve high-end performance in respect of Resource Efficiency.

Dedicated strategies at sector level are needed in order to minimize the total emissions and reduce the impact on the environment. Improving the use of RES is extremely important in this undertaking, as well as the large-scale use of modern, energy efficient techniques and technologies.

The high potential Romania has in relation to the production of energy from sources such as residues and waste from agriculture, but such practices (if not done in an environmental friendly manner) could lead to depletion of soils and increased erosion. There is a need to identify measures to fight efficiently against the risks posed by agricultural intensification, such as planting energy crops or implementing protective measures for soils.

Forests cover an important part of the Romanian territory (26.7% in 2006), but still behind the EU average and behind actual potential. The optimum increase rate, as calculated by the researchers, should be around 32%. A special attention should be

paid to the plain areas, where protection curtains should be created for fields and communication routes, as important elements against natural disasters (draught and floods).

Afforestation needs to be intensified in order to increase absorption and retention of greenhouse gas emissions, given also the capacity of younger forests to absorb higher quantities of CO<sub>2</sub>. Given the current rate of forest depletion and the problems associated with such a phenomenon, there is a need to implement an efficient forestry management and modernize forestry practices, as well as implement effective legislation against illegal practices.

To add something on the need to strengthen administrative capacity in relation to the sustainable development of forests.

## **TO 5: Promoting climate change adaptation, risk prevention and management**

Romania has been confronted with extreme weather conditions in the last years, consisting of floods both on the Danube and the majority of internal rivers, as well as with extreme draught. Thus, in the last 8 years (2000-2007) two opposite extreme rainfall events were recorded in Romania (droughts of 2000 and 2007 and floods in 2005)<sup>40</sup>. The year 2000 had the lowest annual precipitation amount and 2005 was the third wettest year over Romanian territory in the interval 1901 - 2010. Moreover, between 1860 and 2004, the level of the Black Sea increased by 34 cm, leading to alarming coastal erosion. Other risks such those related to heat waves, forest fires, landslides, earthquakes or new Industrial risks, also affect the Romanian population and the economy..

According to the evaluations presented in the 4<sup>th</sup> IPCC (2007), Romania expects an average temperature increase at the same magnitude as the one projected at European level from baseline to the years 1980-1990, with small differences between models the first decades of 21<sup>st</sup> century and much more by the end of the century: between 0.5°C and 1.5°C for the period 2020-2029 and between 2.0°C and 5.0°C for 2090-2099, depending on the scenario approach.

Global warming will continue to influence the amount of precipitation in Romania, which is expected to decrease in warm season, as well as to determine significantly increased temperatures all over the year, which will continue to affect the natural balance of the environment and human activities. As a result of the summer warming in the south-eastern part of Romania, there was an increase in aridity phenomenon in this region.

One of the most visible effects is that on agriculture, where the vegetal production has varied significantly from one year to another, in the context of variable climate conditions.

The period 2007- 2012 was very dry; the drought had a negative effect on the agricultural productivity, the average production per hectare decreased with over 50% on land without irrigation systems. According to data centralised by the Ministry of Agriculture and Rural Development, the drought of 2011 -2012 produced damages on a surface of 5,883,466 ha at national level; the level of damage differed from region to region or type of crop. The most affected agricultural crops were those of corn, wheat, barley and two-row barley, potato, sun flower and canola. As compared

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<sup>40</sup> Guideline on climate change effects adaptation / 29/09/2008



to 2009 -2011, the crops production 2012 decreased significantly in 2012, with 15,7 in the case of sun flower up to 80,2% in the case of canola.

According to the official information provided by the Ministry of Agriculture and Rural Development, a surface of 143,795 ha was affected by floods in 2010. The most damaged crops were: wheat, rye, triticale, corn, sun flower, canola, pasture and hayfield.

The lack of technology for rational production in smallholding (such as cropping and crop rotations), reducing the amount of fertilizers needed to ensure the soil nutrient balance, as well as of the necessary amendments to correct soil acidity have led to a lower quality of the soil in some areas of the country.

Acute soil degradation, illegal lodging, and unhealthy environmental, industrial, and agricultural practices compound the fragility of rural environments, of agricultural activities, of settlements, and of other human activities. Furthermore, they adversely impact the environment.<sup>41</sup>

Through the EU co-financed project "Agriculture and Climate Change: How to Reduce Human Effects and Threats" in which Romania has participated, "Attitudes code for reduction the impact of climate change in agriculture " was developed. The document includes recommendations on adapting agricultural technologies and specific activities of all agricultural production process to climate change, as well as examples of best practices that lead to the reduction of greenhouse gas emissions. " Other economic fields and human activities have shown to be fragile and to suffer from the vagaries of climate, such as transport, constructions, energy or services supply (water, sewerage etc.).

Romania has faced major floods during the last 40-50 years on most river basins, however during the past 100 years the floods were not so stretched for such a long period of time (February to September) and such a huge area so as in 2005. The flood on the Danube that took place from April to May 2006 was the largest flood produced during 1840-2006 observations period and had a maximum flow rate of 15.800 m<sup>3</sup>/s in Baziaş, which is very close to the highest flow recorded so far in 1895 (15,082 m<sup>3</sup>/s)<sup>12</sup>

Regarding the impact of climate change on water supply and sewerage systems, two major issues have identified:

- Warmer and shorter winters lead to lower snow volume and early snow melting at a high rate;
- Extreme temperatures and dry summer days generate quantitative and qualitative reduction of water resources and increasing water demand.

Due to water excess (flooding) a rapid growth in suspension content in water sources has been recorded, affecting the water treatment process; this causes other problems related to the sewer network lack of capacity to take over the waters and creates damages to the waste water treatment process.<sup>42</sup>

Measures have been taken to adapt to this situation, out of which could be mentioned:

- elaboration of hazard and flood risk maps in large river basins;
- Including the risk maps in the regional development plans and in general urban plans in the area;
- Development of new water infrastructure (new reservoirs, new connections between water basins etc.);

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<sup>41</sup> EU co-financed project "Agriculture and Climate Change: How to Reduce Human Effects and Threats"

<sup>42</sup> Guideline on climate change effects adaptation / 29/09/2008

- Modification of the existing infrastructure to regulate the flows whose distribution changes over time due to climate change (increase the height of the dams, retrofitting with new constructions etc.).
- Design and implementation of solutions for the collection and use of rain waters

As regards prevention against flood risks, investment has been initiated in the current programming period on the main rivers exposed to such risks as a result of increased rainfall due to climate change.

Within SOP Environment – Priority Axis 5 “Implementation of adequate infrastructure of natural risk prevention in most vulnerable areas” 15 projects have been contracted with a value of 137,349.040 euro, focused on investments on protection against flood and reduction of coastal erosion.

In order to ensure an adequate protection against floods, there is a need to continue and develop such investments.

The rehabilitation and protection of the coastal zone is currently a priority for Romania. In this regard, a study<sup>43</sup> was initiated by the National Administration "Romanian Waters", aiming at developing a plan to protect the southern part of the Romanian seaside, as well as conducting preliminary actions to promote projects and transfer of knowledge and technologies in the protection and management by the Romanian coastal zone.

In addition, joint use of aquatic territory and resources by all the countries of the Black Sea region requires the development of collaborative international activities oriented to the conservation and restoration of the Black Sea marine living resources and their environment. Cooperation between the Black Sea riparian countries for knowing and rationally managing the marine ecosystem and its resources, carrying out diagnostics of fish stocks status as well as advice on management strategies need to be strengthened.

Other risks such as forest fires, earthquakes or new industrial risks, such as effects of the global warming, also affected the Romanian population and the economy.

Tourism is also affected by problems such as coastal erosion, floods or extreme meteorological conditions, as well as by temperature increases that have negative effects on skiing resorts and water related problems (since full availability of basic services is a key to ensure a successful tourism). The effects on the industry and the economy as a whole are also significant, increasing the need to use environment friendly technologies and promote a sustainable development.

The Romanian population, especially the vulnerable groups, is exposed to the risks represented by climate change and the poor infrastructure and poor management of emergency situations are main causes. Heat wave impact lead to increased health risks for an aging population living in urban agglomerations whose unsustainable development makes the situation worse by adding the effects of local heat island to that of climate change. Droughts are severally impacting the rural development due to the risks associated with subsistence agriculture performed by a large number of farmers over small and fragmented areas. Wild fires, which are more frequent in a warmer and droughty environment, pose increased risks to biodiversity. As for floods and landslides, the climate adds its impact to other factors related to local and national management of land use and other natural resources (e.g. afforestation/deforestation, water management). Climate change related risks are higher for: (1) human health (increased frequency and persistence of heat waves

<sup>43</sup> Study supported by the Japan International Cooperation Agency - JICA, initiated the project "Study on the protection and rehabilitation of the southern part of the Romanian Black Sea coast."

impacting aging population covered by a health system which is falling apart even in normal weather conditions); (2) food security (agricultural problems induced by drought in an unsustainable approach of cultivating the land at the subsistence level); (3) biodiversity (wild fires, disruptions of ecosystem dynamics due to increasing temperatures and changing of precipitation patterns); (4) energy security (drought conditions impact both hydropower facilities and Cernavoda nuclear plant which depends on Danube levels). There coupling between natural hazard probabilities of occurrence and the socio-economic consequences is less studied in Romania so it's hard to assess at this moment the damages caused by them and reveal trends, in this regard. However, there is an urgent demand for making this type of assessment

Climate change is also a threat to biodiversity. It leads to change in habitats and the way of life, and also – in some cases – to extinction of some species. The loss of the functional equilibrium of life can even affect the survival capacity of the human species.

Romania has ratified the United Nations Framework Convention on Climate Change (UNFCCC) by Law no.24/1994 and the Kyoto Protocol by Law no.3/2001. Moreover, in response to the EU Green Paper "Adapting to climate change in Europe - options for EU action", in 2008 the Ministry of Environment and Forests developed the [Guide on the adaptation to the climate change effects](#) approved by Ministerial Order (no 1170/2008). This guide provides recommendations on measures which aimed to reduce the risk of the negative effects of climate change in 13 key sectors as follows: agriculture, biodiversity, water resources, forests, infrastructure, construction and urban planning, transportation, tourism, energy, industry, health, recreational activities, and insurance.

The Romanian National Strategy on Climate Change (2013-2020)<sup>44</sup> which takes into account the EU policy on climate change and documents developed at European level, as well as the experience and knowledge gained within common actions with foreign partners and international institutions, targets mainly the reduction of GHG and the adaptation to climate change. The Adaptation component aims to provide an action framework and guidelines to enable each sector to develop an individual action plan in line with national strategic principles.

A series of measures have been adopted at national level in order to improve the response capacity to natural disasters. The meteorological system has been already modernized, while the hydrologic system (SIMIN, WATMAN and DESWAT) is still in process of modernization. Further to the severe floods in 2005, the National Strategy for Management against Floods Risk was put in place, aiming to answer to the new changing climate conditions. The strategy aims to reduce the impact produced by floods by adequate planning that would respond to the expectations and needs of communities, by protecting also the environment. Also, in order to improve the flood management at local level, the Prefect Manual has been elaborated for the management of emergency situations in case of floods and draught.

At national, regional and local level emergency management procedures for hydrological drought situations are established, such as:

- The Regulation on management of emergencies generated by floods, hazardous meteorological phenomena, hydraulic structures accidents and accidental pollution. The Regulation sets out measures to be taken by all holders to operate the irrigation system at full capacity during the periods of

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<sup>44</sup> Romanian National Strategy on Climate Change (2013-2020)

prolonged drought, as well as to adapt the irrigation systems supplied from the Danube;

- Water basin plans for restrictions during deficient periods, elaborated for each of the 11 river basins in Romania, updated, completed and approved in 2006;
- Rules for dams and reservoirs operation in drought periods made by each holder and updated in 2006.<sup>45</sup>

An action plan, with 2015 as target year, has also been developed in order to prevent coastal erosion. The Plan aims to define the necessary measures, as well as the associated implementation costs and related conditions (including necessary legal framework).

Other studies have been conducted and legislative measures have been designed as strategic and management instruments for planning and implementing the necessary measures in order to fight against natural disasters, such as floods, draught or coastal erosion, and their negative effects on the population and on the economy as a whole. Their effects remain however limited (why).

The support should be targeted to improve the disaster responsiveness of the economy and society. Adequate measures have to be designed and investments have to be supported in order to effectively respond to the needs. Soil degradation, erosion and landslides are phenomena that need dedicated actions in order to ensure an efficient adaptation to climate change. The investments in the field of irrigation will be done in strong synergy with the protection measures against floods, to maximize efficiency and effectiveness.

Romania has elaborated a Project for irrigation rehabilitation and reform and a new strategy in irrigation field has been developed in order to encourage economic irrigation and optimal utilization of available resources. In concrete terms, this strategy aims to maximize the surface where irrigation is economically viable, given the amounts current subsidies<sup>46</sup>. The total cost for the rehabilitation of the irrigated areas, including small systems is estimated at 158 million Euros.

The development of the infrastructure needed to ensure access to irrigation water needed those areas where there is a chronic shortage of water resources and where droughts ever manifested more acute in recent years should be a priority for the next programming period.

In Romania, around 3 million hectares are equipped with irrigation infrastructure, but only about 1.5 million ha is considered viable and partially viable from an economic point of view. In the next period, Romania is interested in modernizing the viable irrigation infrastructure on an area of 800,000 ha, in order to reduce water and energy consumption.

It is also of interest for Romania to put into practice environment protection works (drainage – drainage and prevention of soil erosion on an area of 425,000 ha) in the areas near Siret – Bărăgan channel. The non-execution of these works could lead to damages on significant areas, due to high humidity, water erosion and landslides, with socio-economic effects for 113 municipalities. One of Romania's major priorities for the programming period 2014-2020 will be focused on developing infrastructure to ensure access to irrigation water needed those areas where there is a chronic shortage of water resources and where droughts ever manifested more acute in recent years.

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<sup>45</sup> Romanian National Strategy on Climate Change (2013-2020)

<sup>46</sup> Project for Irrigation Rehabilitation and Reform- Economic Analysis of the Irrigation Sector

In addition, there is a need to promote and enhance use of environment friendly technologies and promote a sustainable development, by reducing greenhouse gas emissions and by improving the quality and resilience of housing, industrial buildings and areas, and infrastructure. Adaptation requires development of dedicated measures for all sectors, both at local, regional and national level, as well as at international level.

It is foreseen that in the future programming period focus should be also on the development of the necessary tools (systems and early warning detection, mapping and risk assessment), together with increased investments in disaster management systems in order to improve the resistance to disasters and to prevent and manage natural risks (including risks related to weather conditions and geophysical risks) and to support the company's responses to industrial risks (early warning systems, risk mapping).

An integrated approach is needed to adapt to the effects of climate change, as well as for efficient risk prevention. Measures need to be adopted at the level of all sectors, including both hard investments (energy efficient technologies) and soft type measures (such as prevention and management plans, methodological tools, good practices to reduce GHG emissions etc.) need to be developed.

Inter-institutional cooperation is essential for ensuring the effectiveness of the measures defined, together with developing the necessary skills at the level of relevant institutions for developing and implementing the most appropriate solutions. This will, however, require the construction of specific incentive systems for each institution. Dedicated research and innovation can support: there may be a need to devote resources to research and innovation in this field and in the related ones (such as construction materials and procedures).

More details on the administrative capacity on design and implementation of risk prevention plans/activities, including mapping and evaluation of risks and risk management plans.

The cooperation between regions and Member States should be enhanced, especially in relation to the adaptation and prevention activities, as well as risk management, in order to better fight against the effects of cross contamination, especially regarding flood protection, protection of forests against fire and pest and protect the coastline.

Actions aimed at raising awareness of all stakeholders on the importance of preventive measures should also be supported as to create synergies of the measures adopted and improve effectiveness.

## TO 6: Protecting the environment and promoting resource efficiency

### Water sector

#### Water supply

Although the coverage ratio almost doubled during the last 25 years, in 2010 only 53% of the country's population benefit of water supply<sup>47</sup>. 70% of the total amount of water supplied comes from surface waters. The uneven distribution of water resources at country level, the flow regulation on watercourses and the significant pollution of internal rivers influence water supply. The draught periods in summer or

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<sup>47</sup> According to the data provided by the Ministry of Health

very low temperatures in winter create problems in water distribution. This results in interruption of water supply for days in some areas, or in significant reduction of flows.

56.5% of the country's population benefitted in 2011 of public water supply services. The regional operators cover 87.5% of the population served (2011).<sup>48</sup>

The water consumption decreased during the last years (3.8% in 2011 compared to 2010), due to the reduction of industrial activities, but also in the context of increased water metering. Household consumption remains high, at about 67% of total water supplied.

Water metering at country level was 86.7% in 2010, slightly higher in case of regional operators (90%), but with large variations between the regions, with counties that have a metering level of only 67-74%. Even in the context of increasing metering, there are significant losses in relation to water supply, around 46% within the distribution networks (calculated as a difference between the quantity produced and the invoiced quantity) in 2010.

Approximately half of the population 52% (mainly from urban areas) is connected to large centralized drinking water systems (supplying over 5,000 inhabitants or providing over 1000 m<sup>3</sup> / day). On the other hand, approximately 30% of the population is drinking water supply from individual sources (public and individual wells, drilled wells).

According to Law no. 458/2002 on drinking water quality, republished, the Ministry of Health is the competent authority in the field of drinking water quality (quality monitoring, setting up remediation actions, public information and reporting to EC). The drinking water supplied by the centralized system operated by regional water operators is monitored at a satisfactory level. By contrary, the drinking water provided by small systems, usually administrated by local councils is insufficiently monitored and individual water sources are sporadically monitored, at the request of consumers.

The out-dated and insufficient laboratory equipment for monitoring the drinking water quality at the level of the regional and county level public health institutions is the main impediment to the analysis of all necessary parameters of drinking water. Financing the modernization of such equipment, together with acquisition of mobile laboratories for monitoring the quality of drinking water in the rural areas need to be supported as to improve the water quality and minimize the negative effects on the population health.

The refurbishment and development of drinking water treatment plants, together with measures for increasing safety and risk reduction in water supply systems, increasing the number of water services users and introducing the most advanced technologies and materials in the rehabilitation / extension of water supply systems represent priority issues.

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<sup>48</sup> Water supply and sewage services status in 2011/ ARA

## Wastewater collection and treatment

### Wastewater treatment plants

Wastewater treatment continues to be a challenge for Romania. In spite of the improvements during the last years (in particular at the level of the regional operators), this remains a significant problem.

In 2011, 75% of the wastewater resulted from the main pollution sources have been discharged untreated or insufficiently treated into natural recipients, especially rivers<sup>49</sup>. The sector for production of electricity and heat has the largest contribution to the total volume of wastewater discharged (including conventional clean waters) with approximately 69 % from the total quantity. Other sources are represented by water catchment and treatment to deliver drinking water (25%), metallurgical and machinery industry (2%) and chemical processes (around 2%).

The wastewater resulted from urban agglomerations (there are 22 largest agglomerations in Romania, with a population equivalent – PE of over 150,000 ) has the greatest impact on the pollutants content in terms of organic substances, suspended matters, nutrients, detergents and extractible. The progress achieved in completing the wastewater treatment plants for 20 of these agglomerations (with EU funds in the framework of ISPA and SOP Environment) is thus important.

Some of the existing wastewater treatment plants are not functional or not efficient at the required level due to high depreciation, while some others are still on technical tests (there are 66 wastewater treatment plants to which the population is not yet connected). Out of the total number of 1,637 wastewater treatment plants investigated in 2011, 69.5% are inappropriate<sup>50</sup>. According to the report elaborated by the National Administration "Romanian Waters"<sup>51</sup>, in agglomerations with 2000-10000 PE, the degree of connection to the municipal waste water treatment plants increased from 3.95% in 2007 to 7.56% in 2011 while for the agglomerations of more than 10,000 PE, the degree of connection was 10.56% in 2011.

Given the Romania' positioning in the Danube basin and the Black Sea basin, as well as the need for environmental protection in these areas, Ministry of Environment Romania declared its entire territory as nutrient sensitive area (2005). As a consequence, agglomerations with more than 10,000 PE should provide urban wastewater treatment infrastructure enabling advanced treatment (minimum secondary treatment at biological stage), especially regarding nutrients (nitrogen and phosphorus)<sup>52</sup>.

It is therefore compulsory that the agglomerations with over 10,000 PE to be connected to municipal wastewater treatment plants equipped with tertiary treatment in order to remove nutrients (nitrogen and phosphorus compounds). The obligation to achieve the advanced treatment implies additional financial efforts, considering that ISPA projects and other European funds financed wastewater treatment plants with biological treatment stage only. At present, only 16 urban wastewater treatment plants introduced the advanced (tertiary) treatment and it is

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<sup>49</sup> Sinteza calității apelor din România în anul 2011/ [www.rowater.ro](http://www.rowater.ro)

<sup>50</sup> Sinteza calității apelor din România în anul 2011/ [www.rowater.ro](http://www.rowater.ro)

<sup>51</sup> Status of the works for urban wastewater treatment plants and the operation of the WWTP in agglomerations"

<sup>52</sup> Governmental Decision 352/2005 Art. 3 (1).

necessary to increase the number of such plants, especially for agglomerations with over 10 000 PE, in order to comply until 2015 with the European directive provisions. As to agglomerations with a PE under 10000, the secondary treatment (biological treatment) is required.

The sludge resulting from the wastewater treatment plants is mainly deposited in urban waste landfills and a small amount is used in agriculture or incinerated. Through future EU financed integrated projects for large cities solutions should be found for sludge management.

### Water collection including sewerage systems

In Romania, the degree of connection of the PE to the sewage system is 56.96%.<sup>53</sup> For the agglomerations with 2000-10000 PE<sup>54</sup>, the degree of collection increased from 4.42% in 2007 up to 11.25% by the end of 2011, while for agglomerations with more than 10.000 PE the degree of collection significantly increased by 12.3% in 2011 compared to 2007. However, only 516 agglomerations (from a total of x agglomerations) are provided with sewage systems, out of which only 21 agglomerations comply with the requirements of Directive 91/271/EEC (95% of the PE of agglomeration connected to the sewage system).

### Regionalization

The need for technically and economically strong operators able to implement large investment projects financed from European funds imposed the regionalization of water and sewage services operation.

There are in total 42 regional operators at each country level for (water supply and sewerage), covering a number of 251 cities and 901 rural localities in 2011, a significant increase in coverage compared to 2010 (246 cities and 761 rural localities). All regional operators are authorized from management of water point of view. Regional operators ensured 89.1% of the sewerage services in Romania in 2010. There are differences, however, in the coverage ratio, even inside the area covered by regional operators. For some regions, such as Bucharest-Ilfov and South Muntenia Region, the coverage ratio is between 28 and 42% of the total population<sup>55</sup>.

In the last 4 years (2007-2011) a total amount of approximately 3 billions Euro was invested at national level in the expansion and rehabilitation of water infrastructure. During the 2007-2013 programming period, 41 projects, with a total value of 5,422,077,255 Euro, have been contracted in the water sector under SOP Environment.

Significant financial resources are needed in order to ensure an adequate water infrastructure endowment in Romania and to meet EU environmental requirements to, especially in the context of large regional differences and huge needs.

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<sup>53</sup> Stadiul realizării lucrărilor pentru epurarea apelor uzate urbane / [www.rowater.ro](http://www.rowater.ro)

<sup>54</sup> Status of the works for urban wastewater treatment plants and the operation of the WWTP in agglomerations"Water supply and sewage services status in 2011, report elaborated by the National Administration "Romanian Waters"

<sup>55</sup> Water supply and sewage services status in 2011/ ARA



## Surface waters

According to the provisions of the Water Framework Directive, only 79.55% of the total water surfaces evaluated in 2011 meet the environmental requirements. As regards the Danube, 52.59% of the total monitored length of 1,070.5 km can be classified in the 'good ecological potential', while the rest is considered as having only a moderate potential.

The quality of water surfaces is influenced by wastewaters evacuated; in cases these are either treated inadequately or untreated. The volume of municipal wastewaters treated adequately has increased by 14.6% during 2007-2011,<sup>56</sup> however the quantities of untreated waters remain high.

A database has been designed through the Integrated Water Monitoring System, at the level of the National Administration 'Romanian Waters' and includes information on the quality of surface waters, as well as the waste waters evacuated in the rivers. Necessary measures, as well as estimations of associated costs, have been defined in the Basins Management Plans and important financial resources are necessary to meet the environmental objectives in relation to the quality of surface waters.

## Underground water

The 2011 evaluation of the annual chemical status of the 139 underground waters shows that 80.58% of waters are in good state, while the rest are in a poor chemical condition<sup>57</sup>.

The pollution of the aquifer, the pollution with substances used for soils fertilizing or fighting against pests is present either in the production areas of such substances or in agricultural areas, where 'concentrations' (translating in additional pollution) are produced, due to the incorrect administration of such fertilizers. This has a negative impact on the waters in the individual fountains in the rural areas, but also on other catchments of underground waters.

## The marine environment

The marine environment is faced with numerous threats, mainly with loss and degrading biodiversity, loss of habitats, contamination with dangerous substances and nutrients, as well as the negative impact of climate change.

Reducing or even eliminating such negative impact requires the development of a marine strategy aiming at promoting the sustainable development of the marine environment and protecting the marine ecosystems.

As a member state of the EU, Romania has the obligation to implement the Directive of the European Parliament 2008/56/CE on setting up a framework for community action in the field of policy regarding the marine environment. An additional obligation arising from this Directive is the existence of a common strategy of the Member States for the protection and preservation of marine environment, in the context of sustainable development.

The integrated maritime policy of the EU aims at the sustainable development of all marine regions, including the Black Sea region, aiming at improving employment in

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<sup>56</sup> Sinteza calității apelor din România, elaborată anual de Administrația Națională "Apele Române"

<sup>57</sup> Environmental status report 2011

these areas, in the context of sustainable development and preservation of marine environments.

In order to ensure a good ecological status for the Black Sea eco-system, Romania will intensify its collaboration with the other states in the Black Sea region, within the existing institutional framework created.

A special attention will be paid to the restoration of the coastal area source. In 2011, the SEA for the Master Plan for the Protection and rehabilitation of the coastal area was performed. The Plan targets the priorities for the restoration of the coastline: restoration and improvement of the environment, the development of a program for the rehabilitation and protective works for coastline erosion protection and prevention, protection of the economic infrastructure and the social objectives affected by the marine erosion, as well as implementation of an integrated monitoring programme for the coastal area to support the maintenance works and the elaboration of the Integrated Management Plan in the field of protection against coastal erosion and definition of rehabilitation and protection priority areas, is also targeted through the Plan.

## Solid waste sector

### Municipal waste

In 2010, the total quantity of municipal waste was 7.07 million to. (16% lower than in 2009), out of which 5.82 million to have been collected through the specialized services of the City Halls or by the authorized companies. From the total quantity of municipal waste collected, 78,5 % is represented by household and similar waste<sup>58</sup>.

For the population which is not served by sanitation services, generated waste amount (and not collected) is calculated according to the generation indices established by the Regional Waste Management Plans, namely: 0.9 kg/person/day in urban areas and 0.4 kg/person/day in rural areas.

The responsibility for waste collection stays with the local public administrations. In terms of population coverage, in 2010 approximately 70% of the population is connected to solid waste collection services at national level, out of which 85% in urban area and 52% in the rural area.

Almost the entire quantity of waste (95% in 2010) – excluding the waste in the construction field or resulting from demolitions - is disposed of in landfills. The depositing of municipal waste in 2010 was done both in compliant landfills (27), as well as in non-compliant landfills (106), which will start operation according to the transition periods approved by the EU.

The closure of non-compliant landfills was accompanied by the set-up of transfer and sorting stations that took over the collected waste from the localities affected by closure of non-compliant landfills. In 2010, a number of 70 transfer and storing stations were operational and an additional 23 such stations have been authorized in the 2011. In order to meet the obligations assumed in regard to the reduction of biodegradable waste stored, at the beginning of 2011, a number of 70 installations and composting platforms were finalized at national level, being either authorized or in the process of authorization.

For the remaining non-compliant municipal landfills, with transition period until 16th of July 2017, improvements are currently carried out for operating and monitoring activities. Also, necessary measures were taken to set up closure and post-closure

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<sup>58</sup> Environmental status report 2011

monitoring fund (at the request of regulatory documents, deposit holders were required to submit proof of funds for closure and follow up post/closure of the landfill).

Romania is still in an early stage of implementing separate waste collection system and therefore problems occurred from the lack of infrastructure and the needed time to change the natural person mentalities. Thus, still approximately 96% of the household and similar wastes are collected in a mixed bin), without separation at source<sup>59</sup> and further investments are necessary in order to achieve the European requirements.

In 2010, 698 localities implemented the selective waste collection system. Thus, the selective waste collection system is expected to expand more rapidly in the next period, once the integrated waste management systems are implemented, thereby providing the recycling industry with clean materials, the amount of which is constantly increasing. All these will create premises for the development of this sector, with opportunities for an increase in the number of jobs.

Construction and demolition waste generated in 2010 was 497,510 tons, out of which 145,900 tons were further used.

According to the requirements of the new Waste Framework Directive, minimum 50% of the different types of waste should be recycled and reused.

## Industrial waste

In 2010, the total quantity of waste generated by the extractive, energy and processing industry was about 191 million tonnes, out of which 90% is represented by waste resulting from the extractive activities.

The hazardous waste generated by the main economic activities (with the exception of the extractive industry) amounted to 13.4 million tonnes in 2010. On the other hand, the dangerous waste generated in 2010 represented about 0.3% of the total waste generated (including the waste in the extractive industry). The majority of the waste generated has been eliminated by landfilling, the rest being processed or eliminated by co-incineration or incineration.

In 2010, a number of 40 landfills for industrial waste were operational out of which 8 for dangerous waste. In 2011, an additional number of 25 installations (of different types) were put into function.

Another important environment problem is represented by the waste dumps and mine tailing ponds (some of which are included in the Accession Treaty of Romania to the European Union) which must be closed and rehabilitated due to potential risk. Until now, due to insufficient funding, authorities reported only to put them in safety and conservation.

At the same time, it should be also noted that the energy production sector is a major source of pollution, due to the mining, processing and burning of fossil fuels. In 2005, the burning of fuel for energy production resulted accounted for 88% of the total national emissions of nitrogen oxides, 90% of SO<sub>2</sub> and 72% of the particulate matters released into the atmosphere.<sup>60</sup> Thus, environment protection investments

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<sup>59</sup> Romania - Identification of future waste management projects (2014-2020)-Task 1 Baseline report

<sup>60</sup> Strategia energetică

for the modernization of some plants are also necessary in this area, in order to comply with the EU regulations.

### Healthcare waste

In 2011, the amount of waste produced by the most important medical units in Romania was 34,511 tons/year, out of which: 25,663 tons/year non-hazardous waste, which can be assimilated to household waste, 7,497 tons/year hazardous infectious waste, and 1,351 tons/year stabbing and cutting waste. In conclusion, the amount of hazardous waste generated by the health care activities in 2011 was 8.848 tons/year, which represents a 17% decrease compared to 2010.

The final disposal of hazardous waste generated by health care activities is done by incineration or disposal in municipal landfills for stabbing and cutting waste, after being treated by means of heat sterilization. Another alternative for the treatment of waste is the neutralization of hazardous waste through heat sterilization within the medical unit (using own equipment). Once treated, the now non-hazardous are stored in the municipal waste landfills in the respective region.

### Conclusion

During the programming period 2007-2013 within Priority Axis 2- "Development of integrated waste management systems and rehabilitation of historically contaminated sites" a number of 25 project have been approved with a total value of 979,029,576 euro out of which 5 projects addressed the rehabilitation of historically contaminated sites (100,800,104 Euro).

In the waste sector, investments made during the first programming period should be continued and extended in order to meet the recycling target for 2020, as set out in Directive 98/2008/CE, which encourages different treatment methods using specific waste streams.

Romania is also faced with a poor infrastructure (in terms of selective collection /recycling/reuse) which hinders the adoption of a waste hierarchy system. Therefore, encouraging investments aimed at reducing resource consumption and promoting the practical implementation of waste hierarchy (prevention; preparing for reuse; recycling, other recovery, e.g. energy recovery; disposal) shall provide the premises for reaching European strategic objectives.

Significant investments are needed also in relation to other types of waste, such as industrial or healthcare waste

This is a huge challenge for Romania considering the current practice of mixed collection and storage. Moreover, the implementation of the waste hierarchy concept, together with the other legislative provisions will require significant investment in waste infrastructure for the coming period and a deep reorganization of the sector. A number of actions are needed in order to ensure compliance with the new requirements, including consolidation of integrated waste management systems, support of transition to low carbon investments and systems, promoting of energy efficiency, reduction in the total resource consumption by increasing the waste recycling ratio as well as promotion of a more efficient use of resources. These actions, however, are also going to create opportunities for the private sector.

## Air Quality

### Air Emissions

Romania has the obligation to limit annual emissions of acidification, eutrophication and ozone precursor's greenhouse pollutants under the values of 918 thousand tons/year of sulphur dioxide (SO<sub>2</sub>), 437 thousand tons/year for nitrogen oxides (NO<sub>x</sub>), 523 thousand tons/year for non-methane volatile organic compounds (NMVOC) and 210 thousand tons/year for ammonia (NH<sub>3</sub>), values that are national emission ceilings.

In 2010, the sulphur dioxide emissions, were 42% lower than in 2005, mainly due to emissions reduction from metallurgical industry and electricity production. The major contribution to the total amount belongs to large combustion plants.

The total NO<sub>x</sub> emissions in 2010 amounted to 272.237kt, compared to 309.056kt as in 2005 (NO<sub>x</sub> emissions come mainly from sectors like "Road transport" – 48.87% and "Production of heat and power" – 19.80%).

NH<sub>3</sub> emissions have decreased in 2010 by 18.74% compared to 2005. The most important share in the national total is represented by the manure management from dairy cows breeding (22.60%), sows (24.55%) and laying hens (13.24%).

VOC emissions increased slightly in 2010 compared to 2005 by 4.85%. The largest increase is due, especially by the "Road transport" sector (30.96%) and "Residential burning" (23.79%).<sup>61</sup>

Total lead emissions decrease by 49.24 % in 2010 compared to 2005 mainly due to emissions reduction in metallurgy while cadmium and mercury emissions level had no significant deviations from previous years.

In 2010, the total dioxide emissions decreased by 9.93% compared to 2005 due to the decrease of the amount of industrial and healthcare waste incinerated as well as due to the reduce activity within metallurgical sector.

### Ambient air quality

In 2011, the air quality in Romania has been permanently monitored through 139 automatic measuring stations, assigned on the entire territory, part of the National Air Quality Monitoring Network (RNMCA). Stations are equipped with automatic analyzers that continuously measure the ambient air concentrations of pollutants: sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>2</sub>, NO<sub>x</sub>), carbon monoxide (CO), benzene (C<sub>6</sub>H<sub>6</sub>), ozone, particulate matter (PM<sub>10</sub> and PM<sub>2,5</sub>). Additionally, laboratory equipment is used to measure heavy metals concentrations: lead (Pb), cadmium (Cd), arsenic (As), nickel (Ni), in particulate matters (PM<sub>2,5</sub> or PM<sub>10</sub>) and settled matters.

In 2010 the ambient air quality remained constant in zones and agglomerations where levels of pollutants were below the limit values for human health protection.

At the rural background stations no exceeding of the critical level for vegetation protection was recorded for NO<sub>2</sub>, SO<sub>2</sub>, O<sub>3</sub> and CO.

The concentration of particulate matters (PM<sub>10</sub>) remains high in agglomerations such as Bucharest, Iasi, Timisoara, Brasov and Baia Mare) where the exceeding of daily

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<sup>61</sup> Environmental status report 2011

limit values were recorded at some traffic and industrial stations. For these agglomerations air quality management programs were developed including measures for pollution reduction that have had a significant positive impact on the concentrations of particulate matter.

The concentration of particulate matters (PM<sub>2.5</sub>) the annual average concentration in 2010 was below the limit plus the tolerance.

The concentration of the heavy metals analyzed in particulate matters (PM<sub>10</sub>) during 2011, respectively lead (Pb), cadmium (Cd), arsenic (As), nickel (Ni) were below the annual limit value.

Regarding the concentration of NH<sub>3</sub> in the ambient air, exceeding of the maximum allowable daily concentration were recorded in some counties.

## Quality of soils

In respect of land distribution in 2010 as in previous years the main share is represented by the agricultural soil (61.39%), followed by forests and other lands with forest vegetation (28.35%). The remaining 10.26% of the land is covered by water, pools, courtyards, buildings, roads, etc.).

Romania has good quality agricultural soils, but their fertility is strongly affected by phenomena such as soil erosion, drought, salinization, acidification, alkalinity or compaction. The impact on the agricultural activities is increasing. Due to demographic growth index in the last 65 years, arable land per capita decreased in Romania from 0.707 ha in the year 1930 to 0.439 ha in 2009.

The quality of soils is affected in various degrees by pollution, industrial activities and natural phenomena. The data obtained following a partial inventory show that 410,121 ha soil are affected by pollution resulting from industrial and agricultural activities.<sup>62</sup>

The contamination from coal heating plants is also high, especially in the areas near the plant itself, with a high risk of pollution by heavy metals and acid emissions.

In spite of the significant needs in the area, the actions undertaken so far are limited, due especially to the relative legislative vacuum in regard to the management of contaminated sites

## Biodiversity

With its particular geographical position and complexity, its radial distribution of heights and relief forms, Romania has an incredible biodiversity. The natural and semi-natural ecosystems cover approximately 47% of the country territory, 45% of the territory is covered by agricultural ecosystems, while buildings and infrastructure occupy the remaining 8%. The ecosystems and habitats diversity is completed by the remarkable diversity of species of plants and animals.

Except for the big agricultural areas and some terrestrial and aquatic ecosystems that are under the negative impact of sources of pollution and consequently changes to structure and biodiversity dynamic occur, the rest of the natural environment offers natural parameters and thus the necessary conditions for conservation of the specific biodiversity.

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<sup>62</sup> Environmental status report 2011chapter 4

As a member State of the European Union, Romania has obligations referring to the establishment and strengthening of Natura 2000 network on the Romanian territory. In Romania 383 areas have been declared sites of community importance and 148 areas of special avifaunistic<sup>63</sup>.

Of a total of 978 areas on national interest and 531 Natura 2000 sites, up to the end of 2011 more than 50% of the total protected natural areas in Romania were taken in a form of management, administration or custody.

A particular case is Danube Delta Biosphere Reservation whose management is performed by the Reservation Administration, public institution with legal personality with headquarters in Tulcea city under the subordination of the central public authority for environmental protection.

The bio-productive capacity of Romania's biodiversity (2.17kg x ha/person) represents only about half of the estimated potential. This reflects the numerous transformations in regard to the different components of biodiversity, especially for the agricultural and forestry sector. The gap between reality and existing potential is caused mainly by the insufficient incorporation of the principles of sustainable development in the existing sector and regional development policies. The pharmaceutical industry, tourism, fisheries, agriculture and forestry, could all be enhanced in the context of an adequate and efficient management of the existing resources and potential.

Aggression over the environment and habitats affects biodiversity. In addition, the significant decrease of livestock and cultivated areas, the abandon of traditional farming practices, together with land abandonment represent significant threats to biodiversity.

According to the provisions of EU regulations (Directive 79/409/CEE on the conservation of wild birds and Directive 92/43/CEE on the conservation of natural habitats and of wild fauna and flora) in the Romanian marine area the national legislation set up 9 natural protected areas.

Within SOP Environment- Priority axis 4: "Implementation of adequate management systems for nature protection" a number of 146 projects has been contracted, with a total value of 180,905,215 euro.

### Cultural patrimony

### Environment in urban areas

Actions for urban environment – including rehabilitation of polluted sites and reduction of air pollution

## TO 7: Promoting sustainable transport and removing bottlenecks in key network infrastructures

In spite of Romania's advantageous geographical position, as a potential regional relay between East-West and North-South, its underdeveloped infrastructure continues to be a significant barrier to economic development and growth. Accessibility to international markets, as well as within the country remains very limited.

With only 504 km of motorways in 2012, The road network is in a very bad shape, with only 32% of the total length of public roads (26.791km) having been

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<sup>63</sup> Environmental status report 2011 chapter 5

modernized at the end of 2011 and 41.8% of the roads still covered with gravel and soil. In addition, the lifespan for the majority of roads (47.8% of the modernized roads and 56.2% of the un-modernized ones) is exceeded.

The road transport increased exponentially from 1 million vehicles (cars) in 1990 to 5.42 million units at the end for 2010<sup>64</sup>.

Road safety – National Strategy for Road Safety 2011-2020. Though on a decreasing trend starting with 2008, the number of road accidents remains high, with almost 4,000 severe accidents causing 846 deaths in 2011. The number of road accidents in Romania exceeds the European average.

In the absence of a viable and efficient alternative, road transport is the main modality both for persons and goods traffic, even though it is more polluting than other transport modes, often creates traffic congestion in urban areas and causes a high number of accidents. In 2011, 77% of person's traffic and 58% of goods traffic was done by road, while the rail transport counted for only about 20% of the traffic.

With a total length of 10,785km, the rail network has a rail density of 45,2‰ per 1000km, lower than in Central and Western Europe. Only 37% is electrified (data on double track needed), as opposed to the EU average of ##%. Maintenance capacity is very low, stressing the need for improvements in this area. The network has continuously degraded over the last 20 years, with numerous operating restrictions that impede on the quality of traffic. More than half (55%) of the existing rail bridges need serious repairing and the rolling stock (80%) is more than 20 years old Need more data on rolling stock. With low speed, very long travelling times and poor travelling services, the passengers and goods transport by rail has decreased dramatically starting with 1989, when it registered record values.

In order to revive the rail transport, there is an urgent need to improve the quality of services and to reduce travel times, including by ensuring adequate infrastructure and rolling stock. The rail transport infrastructure on TEN-T network must be upgraded for 160 km/h for passengers and 120 km/h for goods.

The rehabilitation of stations, bridges and tunnels and elimination of speed restrictions are also important for improving the quality of transport. Reducing operational costs is also essential, by eliminating the energy-inefficiency and old rolling stock (add data).

A special attention has to be paid to the maintenance of roads and railways.

Modernization and development of TEN-T Priority Axis for road and rail transport, will lead to finalization of Corridor no. IV which links Western Europe and Constanta port. While rehabilitation and modernization of the national road network is a component towards improving accessibility, it should focus on eliminating bottlenecks. It is, however, of the outmost importance to develop alternative means of transport such as river and maritime transport, as well as to promote inter-modality.

Air transport remains at a reduced level, counting for only 3% of the traffic for persons and 2% of the goods transport. Air connections are insufficient relative to potential demand (give data). Regional airports are insufficiently developed relative to..., with negative effects on the economic development of the regions needs further data.

The inland water transport is done on the Danube and the Danube-Black Sea/ Poarta Alba – Midia Navodari channel and on fluvial and maritime ports (Braila, Galati and

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<sup>64</sup> Data from the Direction of Driving Licenses and Vehicles Registration



Tulcea). With x traffic in 2011, inland navigation remains far below its actual potential, mainly in regard to the traffic on the Danube.

#### Inter-modality

Accessibility is strongly linked to economic and social development. The underdeveloped transport network and the low quality of services are an obstacle in the development process of small and medium cities, as well as of villages and communes. The potential advantage represented by the significant labor force in small cities and rural areas cannot be exploited due to reduced mobility. Moreover, without adequate transport connections and limited interconnection, cities cannot fulfill their role to catalyze and promote growth. Negative effects are bigger at the level of entire economy, in terms of limited access to basic services, high transportation costs and long transport durations, hindering tourism development and competitiveness results for industrial and agricultural products.

#### Transport in urban areas

##### Public transport

Urban planning is insufficiently developed and implemented. There is a need to develop and promote public transport, in the context of carefully designed urban development plans, aiming to exploit the full potential of the Romanian cities and promote sustainable development.

Strengthening the administrative capacity of the responsible authorities in the field is a key for development of transport network and sustainable development. The high level of corruption, not very clear public procurement legislation, poor interferences among line ministries, public authorities and implementing agencies, weak administrative and implementation capacity of the responsible bodies contribute to the status-quo.

#### Urban strategies

Urban issues cut across sectors (and TOs): transport, infrastructure, human resources, industrial development, vulnerability to human-made and natural disasters, research, ICT, and services (and internal markets) for agriculture are all issues which should be dealt with through an integrated strategies in the context of the EU-drive for smart cities. to be developed.

Human resources –supply of qualified labor force for construction (workers and civil engineers)

#### TO 8: Promoting employment and supporting labour mobility

With 62.8% employment rate in 2011 and serious labour market problems in the last years, Romania is still far from reaching the EU 2020-target set by the National Reform Programme, of 70% employment rate by 2020. In the context of an increasing difference to the EU average and the current employment trends, it is quite unlikely that the national 2020 target will be met, if economic performance and national policies are not improved considerably.

In this context, the World Bank's "Country Development Programme" defines a "key challenge for the Government [...] to address the existing institutional weaknesses"<sup>65</sup>, aiming – among others – at a reduction of "excessive and inefficient government bureaucracy"<sup>66</sup>.

Improving the functioning of public administration and especially of the relevant stakeholders for HRD strategies within and outside public administration, both on central and local level, is therefore a crucial need for implementing an effective and efficient HRD strategy. A number of reforms and legislative initiatives have been promoted in the last years - aimed at reforming the public sector, rebalancing the foundations of growth and enhancing competitiveness, as well as for promoting social and spatial inclusion - but their efficiency to date remains limited. A series of EU or World Bank funded programmes (including SOP HRD), have also been designed and implemented in order to respond to the defined objectives, however – though theoretically they respond to the needs identified – their implementation largely failed.

Moreover, from a genuine HRD perspective, besides a weak public administration, the low education level of the population is striking, with *only 14.9% of the Romanian population having a tertiary education degree in 2011*, much lower than the EU average of 26.8%. The significant regional differences add to the problem: Bucharest-Ilfov region (31.4% in 2011) is much above the other regions such as South East or South Muntenia, with only 11.6% or respectively, 11.2%.

*Only one fifth of the population aged 30 to 34 years in Romania has attained tertiary education.* Considerable progress has been made over the last years (increasing from 13.69% in 2007 to 20.4% in 2011), but still the education attainment is far away from the EU 2020 target and from the EU 27 average of roughly 35%. The participation of the population in the life-long learning which is the lowest in Europe and the low enterprises' participation in the vocational training of employees don't compensate for this extremely low level of education.

An additional important need within human resources development policies can be seen in the relatively low participation of the population in the employment system, as well as in the huge disparities on regional level. With reference to the labour market participation, only 62.8% of the Romanian population was active in the employment system in 2011. The participation was slightly inferior to the EU average, which reached, in the same year, an employment rate of 68.6%.

## Employment

The lowest employment rates are recorded in the age group 15 to 19 years (8%), 60 to 64 years (22.9%) and 20 to 24 years (34.9%). Apart from this, striking differences can be seen for *men and women* with a distance of 13 percentage points between employment rates of women and men. The highest gender employment gaps have been recorded in 2011 for 55 to 59 years old persons (19.1 percentage points), for 50 to 54 years old persons (16.7 percentage points) and for persons aged 40 to 44 years (14.0 percentage points).

<sup>65</sup> The World Bank, Country Development Program, p. 7; URL: [http://siteresources.worldbank.org/ROMANIAEXTN/Resources/275153-1253883114942/CPS0913\\_Country\\_Development\\_Program.pdf](http://siteresources.worldbank.org/ROMANIAEXTN/Resources/275153-1253883114942/CPS0913_Country_Development_Program.pdf)

<sup>66</sup> The World Bank, Country Development Program, p. 4; URL: [http://siteresources.worldbank.org/ROMANIAEXTN/Resources/275153-1253883114942/CPS0913\\_Country\\_Development\\_Program.pdf](http://siteresources.worldbank.org/ROMANIAEXTN/Resources/275153-1253883114942/CPS0913_Country_Development_Program.pdf)

A close look at the employment rates (population aged 15-64 years) in the *regions* reveals significant regional disparities with more than 12.4 percentage points difference between the national maximum in Bucharest-Ilfov (64.7% in 2011) and national minimum in Center region (52.3%).

Disparities can also be seen between *rural and urban areas*: According to INS In 2011, particularly large differences were recorded for the age groups of persons between 15 to 19 years with an employment rate of 1.9% in urban and 13.8% in rural areas, persons between 20 and 24 years with an employment rate of 27.5% in urban and 44.7% in rural areas, and for persons aged 60 to 64 years with an employment rate of 13.4% in rural and 48.2% in urban areas.

Similar regional disparities can be found for all relevant indicators of economic, educational and labour market performance, which are also subject to a negative evolution in the context of the economic crisis.

Taking account of the different *age groups*, considerable differences in the economic activity is especially obvious for younger people in Romania: Whilst the overall employment rate of people in work (15-64 years) fell by 0.3 percentage points from 58.8% to 58.5% between 2006 and 2011, the employment rate of persons aged 20 to 24 years decreased by 3.9 percentage points and the one of persons aged 15 to 19 years by 2.8 percentage points in the same time-span.

### Young people not in employment and not in any education and training (NEET)

The other side of the decreasing employment activity of young persons in Romania is the increasing share of *young people not in employment, education and training (NEET)*: Whilst in 2006, 18.2% (men: 15.2%; women: 20.7%) of the persons aged 18 to 24 years belonged to the NEET-group, their share increased to 20.9% in 2011 (men: 19.2%; women: 22.8%). Being excluded from employment, education and training is in Romania a bigger problem than in the average of the European Union, where – in 2011 – only 16.7 % of young people between 18 and 24 years fell into the NEET-definition (men: 16.0%; women: 17.4%).

### Economic development

The Romanian economy after 2000 has experienced three major evolutionary periods: the first period of growth 2000-2008 culminating in a "boom that led to overheating and unsustainable equilibriums during 2003-2008"<sup>67</sup>, followed by a second period of severe recession during the global financial crisis 2008-2009, and completed the third period 2010-2012 as a period of "restoration of macroeconomic sustainability"<sup>68</sup> and "modest growth, with modest economic recovery prospects in the future."<sup>69</sup>

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<sup>67</sup> \*\*\*, Staff Report for the 2012 Article IV Consultation, Sixth Review Under the Stand-By Arrangement, and Requests for Waiver of Nonobservance of Performance Criterion and Modification of Performance Criteria Prepared by the European Department in Consultation with Other Departments, Approved by Poul M. Thomsen and Vivek Arora, INTERNATIONAL MONETARY FUND, ROMANIA September 13, 2012 pg.5

<sup>68</sup> \*\*\*, Staff Report for the 2012 Article IV Consultation, Sixth Review Under the Stand-By Arrangement, and Requests for Waiver of Nonobservance of Performance Criterion and Modification of Performance Criteria Prepared by the European Department in Consultation with Other Departments, Approved by Poul M. Thomsen and Vivek Arora, INTERNATIONAL MONETARY FUND, ROMANIA September 13, 2012 pg.5

<sup>69</sup>\*\*\*, European Economic Forecast, Autumn 2012, Statistical Annex, pg. 154, **TABLE 13: Potential GDP, volume (percentage change on preceding year, 1993-2014), 19.10.2012**, [http://ec.europa.eu/economy\\_finance/eu/forecasts/2012\\_autumn/ro.html](http://ec.europa.eu/economy_finance/eu/forecasts/2012_autumn/ro.html)

The Romanian model of economic growth until 2008, based on internal consumption, but at low levels of employment, was not sustainable, with consumption being generally driven by additional resources provided by bank loans rather than earnings.

The economy recovered in 2010 (with a 1.6% increase of GDP in 2010 and 2.5% in 2011) boosted also by a good harvest, but the country's economy continues to be driven by domestic demand<sup>70</sup>. Even with these growth rates, Romania still lags behind most other European emerging economies. .

Even if during 2000-2008, the economy recorded high economic growth, this was not accompanied by an increase in employment corresponding to the favorable context. The occupation rate for the population aged 15-64 decreased by 5.4% during that period.

The low unemployment registered during the period of economic growth is not an indicator of efficiency, as long as there are economic areas that confront themselves with insufficient personnel at the desired quality. In addition, there were negative effects on productivity, as well as on the quality of CVT system, as the most important vehicle to counteract such a phenomenon. Furthermore, the private sector's labour demand focused on lower skills (this issue has been dealt with in the TO enterprise).

The continuous population decrease (4.6% reduction between 2000 and 2011<sup>71</sup>, which in absolute terms equals a total of 1 million persons), the demographic ageing and increased dependency rate for the elder are important phenomena that affect the labor market. This trend is more pronounced in the southern part of the country (South Muntenia and South West Oltenia Regions).

Moreover, while in EU 27 the natural increase of population has been on a positive trend since 2000, stabilizing after 2006, Romania has faced a negative natural increase during the entire analyzed period. The population over 60 has continuously increased over the last years, reaching a share of 20.5% in the total population (2011) and 27% for persons over 55. This is due to both population ageing (a phenomenon common to all EU countries) and to out-migration of younger people. This places a huge pressure on the national social protection system and requires consistent measures to promote active ageing and involvement of senior citizens in the labor market. The larger ageing population is also decreasing its activity rates. In 2011, the activity rate for the persons in the 50-54 *age groups* was only 50%. This was significantly lower (20%, going down to 10%) for the age group 55+. At the same time, in 2011, only 5.7% of the total number of employees belonged to the 55-64 age group. Moreover, there are significant disparities on the activity rates (population aged 55-64 years) in the regions with 17.92 percentage points difference between Nord-Est region (56.94% in 2011) and Bucharest-Ilfov region (where the minimum activity rate of 33.8% is registered). The employment rates (population aged 55-64 years) in the regions follow the same trend, 56% employment rate in North-East region versus only 32.2% in Bucharest-Ilfov Region in 2011. This is due to the Metropole effect of Bucharest. The important opportunities offered by the biggest urban agglomeration attract people from all over the country, especially those belonging to the active age 25-44 years; however the offer for job places is not up to the demand.

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<sup>70</sup> \*\*\*, COMMISSION STAFF WORKING DOCUMENT, European Economic Forecast, Autumn 2012, EUROPEAN, European Commission, Directorate-General for Economic and Financial Affairs, EUROPEAN ECONOMY 8/2012

<sup>71</sup> [give source: estimates 2011 Census](#) (also check if these estimates are correct)

## Migration and workers mobility

The explosive growth in terms of workers mobility after accession to the EU is another major issue, with strong implications on the social protection, education, and health or pension systems. At the beginning of 2010, almost 1.85 million<sup>72</sup> Romanian citizens were working in other EU Member States. Such a phenomenon created a strong imbalance on the internal labor market (for example, in the context of significant personnel reduction in the health sector) and requires adoption and implementation of adequate policies to reestablish and maintain an adequate balance between supply and demand, in the context of increased migration and demographic ageing of the population, as well as considering the need to foster progress and improve productivity level. On the other hand, migrants return to Romania, with improved skills and financial resources could have positive effects on the economy, provided that an adequate response is ensured both in terms of recognition of skills and competences and alignment with the national legislation, as well as ensuring a friendly business environment.

Mobile workers coming from EU2 (Romania and Bulgaria) are employed mainly in occupations with average skill level. Only 7.3% of the workers coming from EU 2 are skilled, 52.4% are medium skilled, while the rest (40.4%) is represented by persons with a low level of qualification. The employment structure for the EU 2 residents shows a different pattern with 24.9% of the workers being highly skilled, 63.6% being included in the medium skilled category, and only 11.8% with low-skills level.

The differences to the EU 15 remain high in regard to the share of the highly skilled workers in the total employed population (41.4% of EU residents versus only 24.9% in the EU 2). On the other hand, the numbers for medium and low skilled are comparable, with differences of only 2% on average between EU 15 and EU 2 levels. Romanian citizens working abroad are seen an important source of income that could support economic growth. The total remittances of Romanian residents count for important amounts, in spite of the decreases during the last years. In December 2012, Eurostat reported a decrease in Romanian workers' remittances from 206 million euros<sup>73</sup> in 2010 (0.17% of Romania's GDP) to 168 million euros in 2012, count for important amounts.

On the other hand, studies<sup>74</sup> show that the external workforce flow has a negative impact on the source country, by a potential reduction of GDP per capita (for countries like Romania, Bulgaria, Latvia, Lithuania etc.) between 0.5 to 3pp, a phenomenon that cannot be compensated in the long-term by remittances.

Another very important effect of this massive labor migration took place in terms of sustainability of social protection of the labor market in Romania and EU27, conditioned by integrating active and effective participation for Romanian workers working within other countries in the EU27 area by contributions at these systems. Thus, around 300 thousand persons<sup>75</sup> are connected to the social protection system in Spain, but there are also many persons that don't have a job and think about

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<sup>72</sup> Give source: according to EU statistics 1.85 mil persons, according to other research around 2.1 mil.

<sup>73</sup> [http://epp.eurostat.ec.europa.eu/cache/ITY\\_PUBLIC/2-11122012-AP/EN/2-11122012-AP-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/2-11122012-AP/EN/2-11122012-AP-EN.PDF)

<sup>74</sup> Brucker et al., 2009

<sup>75</sup> Declarația din data de 28 iulie 2011 a ministrului muncii, din Spania, Valeriano Gomez. <http://www.mmuncii.ro/ro/articole/2011-07-28/comunicat-de-presa-2259-articol.html>

returning to the native country, in the context of restrictions to the labour market and financial difficulties.

Labor mobility is strongly influenced by the persistence and deepening economic crisis. In this perspective the risk of returning home to large groups of Romanian citizens call for coordinated management of this phenomenon.

### Employment by sectors

One of the major objectives of the national employment strategy and other existing policies in the field was the reduction of employment in agriculture. The efforts made in this regard, together with the significant migration of self-occupied persons from the rural areas to the more developed EU Member States after 2007, have contributed to a reduction by more than 2.3 million workers (a 20% decrease) of the population occupied in agriculture (from 46.3% in 2000 to 25.7% in 2010). This is still high compared to the EU level of x%.

The decrease in employment has also resulted in a significant increase in productivity (more than 3 times increase between 2000 and ..., from 0,9 thousands euro to 3,1 thousands euro/year/employed person) and an increase of the agriculture contribution to GAV (from ...to ...). However, the gaps to the corresponding EU average values remain high (give figure on productivity and share of agriculture in GAV in the EU). Consequently, in order to reduce disparities to the other EU regions, efforts must concentrate on the industrialization of and adoption of innovation in agriculture.

Industry counted in 2010 for the largest share of employment following agriculture (23.3%), increasing continuously between 2000 and 2009, with only a slightly decrease during 2009 - 2010, as result of the economic crisis (an overall 2.5% increase between 2000 and 2010). The productivity of the industrial branch tripled since 2000 (give data compared to EU average).

The sector with the highest dynamic however, is represented by the constructions sector, which doubled its contribution to the national GAV and increased its share in occupation by more than 5% between 2000 and 2010 (from 3.6% to 8.9%).

The financial sector registered the highest increase in productivity (an increase by 64%, from 21.3 thousands euro/year/ employed person in 2000 to 34.9 thousands euro/year/employed person), but this was not accompanied by a corresponding increase in employment (the share of this sector in total employment increased only by 3.4%, from 2% in 2000 to 5.4% in 2010).

In terms of contribution to the national GAV, Romania registers significant differences compared to the EU average. The only sector that has a comparable contribution to GAV as the EU average is 'the trade and telecommunications sector'. Industry, agriculture and constructions count for more than EU average, while the services related sectors, even though on an increasing trend during the last years, register significant negative differences compared to the EU values.

The analysis of the economic performance based on the contribution to GAV shows the structural differences and of potential compared to the EU 27. Modernization and restructuring of agriculture, as well as the industrial development, especially in the food sector, could represent important sources of competitive advantage and economic growth, given the effects of climate changes and the increasing demand for food security at global level.

There is a need to promote the necessary measures for ensuring qualified labor force for the identified growth sectors. Moreover, mobility of labor force needs to be

enhanced, both to respond to the needs of the economy, and to respond to the need of balancing working life and family and enhance job satisfaction.

### Entrepreneurship and flexible forms of employment

Romania scores well for the indicators on entrepreneurship, with 18%<sup>76</sup> of the Romanian population acting independently in business life. However, this seems to be driven by the lack of alternatives for many of the existing entrepreneurs. There are 280,377 private entrepreneurs in 2011, with 17,767 family entrepreneurs and 262,610 individual entrepreneurs (INS Tempo). The share of newly set-up enterprises in the total number of companies was 9.5% in 2009 with each new company employing on average 2.3 persons. The radiation rate however is higher, with 10.4 % of the enterprises closing their activity in the same year<sup>77</sup>. Give info on regional and urban-rural differences.

The number of self-employed workers (including unpaid family workers) is very high in Romania: 33-35% of the occupied population and with a maximum of 64% in rural areas. By comparison, only 15-16% of the population (EU 27 average) is self-employed. This is strongly connected with employment in agriculture, especially in rural areas (33% in Romania compared to 5% in EU27 in 2011).

To respond to this situation, there is a need to adopt adequate measures to promote employment, enhance flexibility, as well as create real opportunities for business creation and growth, with a special attention to the population in rural areas.

The incidence of temporary occupation and fixed term contracts is extremely limited compared to the EU average (1.5% compared to 13.1% in 2011 for the population aged 20-64 years). This type of employment is more frequent for the 15-24 years age group (5 times higher than for the 20-64 age groups) for whom it should act as a 'waiting room' to the entrance on the labor market. Often, however, this type of employment doesn't translate into an open-ended contract and acts as more like a barrier towards entry into the labor market for the young people.

The necessary measures to address this issue and promote temporary occupation and flexible employment arrangements include revision of the current practices regarding the labor contracts, support for qualification and training programs, specific support measures to the member of the vulnerable groups etc.

### Informal economy

An important issue that represents a serious challenge for the Romanian authorities is the reduction of undeclared and informal work, as well as reduction of the negative effects of an increasing shadow economy. Schneider (2012) estimated for Romania the shadow economy dimension at 2012 as 29.1% from GDP and for undeclared work for the period 1995-2006 as 16-21% from GDP.<sup>78</sup>

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<sup>76</sup> SBA Informative Fiche, Romania, 2012 – Enterprises and industry

<sup>77</sup> Eurostat (online data code: bd\_9b\_sz\_cl\_r2)

<sup>78</sup> Schneider (2012), European Commission (2004, 2007) and Pedersen (2003). Quote from Tax reforms in EU Member States Tax policy challenges for economic growth and fiscal sustainability 2012 Report, EUROPEAN European Commission Tax reforms in EU Member States, European Commission Directorate-General for Economic and Financial Affairs, Directorate General for Taxation and Customs Union, European Economy, 6/2012

Studies performed <sup>79</sup> estimate a total of 2.9 million people (that is, 31.4% of the total employed population) were involved in informal employment in Romania in March 2011. The distribution of this informal employment was 75.3% in the household sector, 24.0% in the informal sector and 0.7% in the formal sector. Informal employment is much more common in rural settlements (88.4%) than in urban communities (11.6%). Informal employment in rural areas involved about 2.6 million people, equivalent to 27.8% of overall employment in the Romanian economy. In urban areas, informal workers accounted for only some 3.6% of total employment.”<sup>80</sup>

As regards the rural areas, though the vast majority is represented by persons occupied in family households, it is estimated that about 1.2 million persons are employed based on verbal agreements, without any labor contract and with no benefits from public social insurance and, also, not paying taxes. **Add regional/sector estimates.**

In order to reduce undeclared work by transforming it into registered work, the Romanian Government in 2011 approved a General Electronic Register of the Employees, which shall lead – once functioning in future – to a complete database reflecting the employees’ activity in the labour market. Another law, also adopted in 2011 and also aiming at reducing undeclared work concentrated on the simplification of employment procedures of daily workers.

All a series of laws was adopted in 2012 on the reform of pension schemes, but more important for the labour market development seems the modification of Law 76/2000 aiming at facilitating the transition from unemployment or inactivity to employment, which is still under consultation.

## Unemployment

The unemployment rate was in 2011 lower than the EU average (7.4% compared to 9.6%). Center region (11.1%), South Muntenia (10.4%) and South East region (10.1%) have higher rates than the EU average, while at the opposite end stays North East region with only 4.8%. **Connect unemployment with activity rates and with informal employment.** There are high urban rural disparities. Thus, at the end of 2010, the unemployment in the urban areas was 9.1%, with an unemployment rate of only 5% in rural area.

The rural areas however, tend to concentrate low employment performances and high level of informal employment and low levels of GDP/capita with high risks of poverty, as a consequence of “overdependence of rural areas on agriculture and lack of alternative employment. Agricultural productivity is often low, because it is influenced by unfavorable investment environment, low levels of modernization in the processing industry, limited land market, poor technical and environmental status of water management systems (canals, drainage systems, hydraulic structures). Small farmers may represent **a group at risk of poverty and social exclusion** in rural areas”<sup>81</sup>

<sup>79</sup> Voinea, L. and Liviu Albu, L. (2011)

<sup>80</sup> Voinea, L. and Liviu Albu, L. (2011), *Economia informală și impactul ei asupra pieței muncii* (7.56Mb PDF) [Informal economy and its impact on the labour market], BNS, Bucharest. Constantin Ciutacu, Institute of National Economy, Romanian Academy, <http://www.eurofound.europa.eu/ewco/2012/02/RO1202019I.htm>

<sup>81</sup> \*\*\*, *POVERTY AND SOCIAL EXCLUSION IN RURAL AREAS FINAL STUDY REPORT*, European Commission Directorate-General for Employment, Social Affairs and Equal Opportunities Unit E2 Manuscript completed in August 2008



In the context of the economic crisis, many companies reduced or even closed their activity. Between 2009 and 2010 were lost around 48,000 enterprises with a decrease from 495,228 enterprises in 2009 to 447,091 in 2010, corresponding to a loss of around 10%.<sup>82</sup> Between 2008 and 2010, the employed population decreased by 704 thousands persons. This decrease affected all types of companies, regardless the companies size, with the following distribution: 20,8% staff in microenterprises, 16.6% staff in small enterprises, 29% staff in medium enterprise, and 33.6% staff in large enterprises. The trend was reversed starting 2010, with the exception of microenterprises, but still cannot compensate for the decreases. The employees in the non-agricultural sector were more affected by such behavior, with a reduction by 15% at national level. The private sector was most affected, with a decrease by half a million workers (give period), especially in the processing industry, constructions and trade.

The current numbers on unemployment however, don't reflect the reality on the labor market, given the large share of population occupied in agriculture for which the effects of the economic crisis were less visible, as well as the high number of persons working abroad, which – in the context of the persisting economic crisis – could return home, placing an almost impossible pressure on the social protection system in Romania.

The unemployment rate among young people (15-24 age group) however, has registered a significant increase (5.1%) starting with 2008, reaching 23.7% in 2011. The data at regional level are even more concerning, with 36.3% as a regional maximum registered in Center region, South Muntenia with 32.9% and South Est with 30.7% - regions with young unemployment above mean. At the opposite end we have the North East region with a rate of 11.9%, with the regional gaps being on an increasing trend. As a comparison, the unemployment rate for the 15-24 age group is 5.5 times higher than that of the persons older than 25 years in the North-West Region, 5.3 higher in Bucharest-Ilfov and 3 times higher in the North East region.

Similar to data above, the long-term unemployment has decreased both in percentage (decrease by 1.5%, reaching a level of 3.1% in 2011, lower than the EU 27 average of 4.1%) and in absolute figures between 2002 and 2011, but is on an increasing trend starting with 2008. There are high disparities at regional level; Bucharest-Ilfov counts for only 1% of total long-term unemployed, while the leader remains South-Muntenia region (with 20.9% of total long-term unemployed at national level).

The share of long-term unemployed in the total number of unemployed persons (15-64 years old) is 41.9% at national level (lower than the EU average of 43.1%). Important disparities can be observed at national level, with South East (50.1%), South West (49.4%), Center (44.9%) and West Region (43.6%) recording higher values than the EU and national averages.

There are no significant variations of this indicator depending on the age group. This however, leads to a significant gap to the EU average for the 15-24 age group (41.5% in Romania compared to 30.1% EU average).

In order to remedy the persisting problems on the labor market, there is a need to initiate and implement a coordinated reform of the labor market and the social assistance system, as to increase the flexibility of the labor market and promote employment. Reforming the labor market is of outmost importance, in order to

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<sup>82</sup> Eurostat: Annual enterprise statistics for special aggregates of activities (NACE Rev. 2) [sbs\_na\_sca\_r2], Last update: 27-11-2012

ensure the necessary support to the development of the economy and the changes in the context of globalization, as well as those driven by negative phenomena, such as the economic crisis.

## TO 9: Promoting social inclusion and combating poverty

According to the targets set by National Reform Plan in the framework of Europe 2020 strategy, Romania targets to reduce the number of persons at risk of poverty and social exclusion by 580.000 persons by 2020. An integrated response is needed in order to achieve this goal as well as to enhance social inclusion, improve housing conditions, and improve access to the labor market and to high-quality social security, health and education services.

In 2011, 40.3% of the Romanian population (8.63 million persons) was at risk of poverty and social exclusion, significantly higher than the EU average of 24.2%<sup>83</sup>. What is even more concerning is the persistence of poverty over time and affecting a large variety of population groups. In terms of gender distribution, the share of women in risk of poverty and social exclusion is slightly higher than that of men in the same situation (42.06%, compared to 39.42%).

Although the expenditure on social assistance has increased from 1.4% of GDP in 2005 to 2.86% in 2011 and specific dedicated strategies have been adopted in this field, the efficiency of the system remains limited, in terms of its capacity to promote and achieve social inclusion and fight poverty.

Poverty remains thus at high levels (1.1 million people living in extreme poverty and 3.68 million persons living in relative poverty in 2010 – give 2011 figures) and is highly dispersed at the level of the entire country, reflecting the extent of the rural economy and population distribution.

The dominant profile of the poor remained stable over time. The poverty risk has been constantly higher for the same categories of population, namely for families with 3 or more children (about 55% of the population affected by poverty), mono-parental families, children (0-17 years old) and young people (18-23 years old), persons with a low level of education, self-employed persons and workers in the informal sector, the unemployed and housewives, as well as Roma people.

Children and young people have the highest poverty risk of all age categories (33% compared to 20% EU average). The economic recession strongly influenced these categories, with almost 320 thousand children (0-17) living in extreme poverty in 2010. The children in rural areas (12.4% in rural areas versus 3.5% in urban areas) and Roma children (27.3% compared to 2% for Romanian children) were the most affected. Poverty inhibits personal development, with negative effects on health, educational results and general welfare.

The impoverishment process is strongly interconnected with the employment ratio, which fell from 50% in 1990 to 40% in 2010. Unemployment remains the main source of poverty for the population of active age. The poverty risk for the unemployed is 6 times higher than for the employees and is on an increasing trend. On the other hand, the self-employed in agriculture have an even higher risk than the unemployed.

For the active age categories, the poverty risk is also strongly correlated with the education level. Low education translates in difficult access and marginal positions on the labor market, as well as involvement in occasional or informal work.

<sup>83</sup> Eurostat (ilc\_peps01 series)

Romania has the EU largest share of population living in rural areas (45% of the total population) and, according to the NIS data for 2010, the risk of extreme poverty is 4 times higher in the rural areas (8.8%), compared to the urban areas (2.2%). The rural areas are also faced with a lower share of salaried employees in the total occupied population (36% compared to 92% in urban areas) and a very low share of higher education graduates (3% of the occupied population, compared to 23% in urban areas).

The poverty among Roma people remains at the highest level, with two thirds of the Roma population living in poverty and one of two Roma living in extreme poverty. There were 619.000 persons (3.2% of the population) self-identified as Roma at the 2011 census. The statistics available for 1998 show a total number of 1.5 million hetero-identified Roma in that year (6.8% of the population), while other research available<sup>84</sup> shows a total number of 1.85 million Roma. According to experts' opinion, the real number of Roma is much higher and the differences between 1998 and 2011 census may come from the difficulties of understanding the terminology used or unwillingness to declare as Roma.

According to the census data from 2002, only less than a quarter (22.9%) of Roma population was part of the active population; approximately 41% of the occupied persons were working in agriculture and 31% were unqualified workers. 70% of Roma persons had no qualifications or were working in activities with no need for professional training. 41.7% of Roma were daily workers and the main income sources are occasional, mainly from the black economy or from social aid.

Roma group is the largest beneficiary of public social support (with 31.1% of Roma benefiting in 2011 of the minimum guaranteed income, compared to 4.9% Romanian and 1.9% Hungarian ethnics), however, the effects of such support remain limited, especially in regard to promoting participating to labor market (60% of the beneficiaries of this type of support declared that they have never worked). Integrated actions – as to promote the sustainable integration on the labor market and social inclusion, as well as to improve access to education, health and social services – are needed in order to respond to the complex needs of the Roma community.

According to the INSE<sup>85</sup> data, in 2011, there were 1.692 million persons with disabilities, which had restrictions on the labour market. Out of the total number, 1.4 million persons had both health problems, as well as difficulties in undertaking normal activities. Almost two thirds of these persons encountered restrictions as regards participation to the professional activities and are in need of specific assistance to be able to undertake such an activity. The employment rate of persons with disabilities was 23.9% in the third trimester of 2011, much lower than the average employment rate. Only 30.1% of the population with disabilities that is employed benefited of special assistance aimed at facilitating their work involvement.

The employment rate for the people with handicap is significantly lower. Only 12.7% of the persons with disabilities aged 18-55 have a job, 57% less than the employment rate of the general population for the same age group.

In terms of regional disparities, the North East and the Southern regions (South-Muntenia, South West Oltenia and South East) register higher exclusion and poverty

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<sup>84</sup> ([http://ec.europa.eu/justice/policies/discrimination/docs/com\\_2011\\_173\\_en.pdf](http://ec.europa.eu/justice/policies/discrimination/docs/com_2011_173_en.pdf))

<sup>85</sup> **Ocuparea persoanelor cu dizabilități** - Modul ad hoc atașat cercetării statistice asupra forței de muncă în gospodării (AMIGO) în trimestrul II 2011 - adresat persoanelor în vârstă de 15-64 ani - Institutul Național de Statistică

risk than the national average. Thus, although these regions count for the 56.3% of the total population, they total 70.5% of the population affected by extreme poverty.

The regions are also strongly affected by the existing demographic trends, with the southern area - in particular - being gradually deserted by the young families with children and leaving only the old people behind. This is of particular concern because, while the poverty risk for the persons aged 65+ has decreased significantly from 1 to 4 persons in 2008 to 1 to 6 persons in 2011, the poverty remains high for the single persons, especially women and older persons.

The demographic ageing, which is more pronounced in the rural areas and in the poorer regions, intensifies the problems. This trend is expected to continue and it is anticipated that some regions will lose up to 50% of their population until 2050. The increase of the share of the population over 65 will place a significant pressure over the labor market, as well as on medical and social services.

The mono-industrial areas (identified in the specific regional analysis – it would be useful to include maps), which were affected by the industrial restructuring confront also with an intensified ageing and depopulation process. The isolated localities situated in the mountainous areas or in the regions along the Danube corridor are subject to the same negative trends, due mainly to their difficult geographical positioning and the limitations in terms of activities and employment. The poverty level is very high in these territories and an integrated approach is needed in order to respond to their complex development needs.

Access to quality social, health or educational services remains highly deficient, due to the poor infrastructure, but also in the context of the unequal access to such services between rural and urban areas. High regional disparities can be observed, while poverty and isolation are often causes of limited or even lack of access to medical or education services. The public expenditure in these fields remains low for the social sector and the lowest in EU 27 for the health sector. The general government expenditure<sup>86</sup> on social protection counted for 14.9% of the GDP in 2010 (18,543 million Euro), increasing from 10.1% in 2002, while the health related expenditure amounted to only 3.6% of GDP in 2010 (4,499 mil Euro), decreasing compared to 2002 (4.1% of GDP). By comparison, on average in EU 27, 19.9% of GDP was allocated for social protection and 7.5% was allocated to health.

### Public Health Services

The Romanian public health system is still incapable to respond to the requirements of a modern society, due to poor infrastructure and serious under-investment, in the context of socio-economic, environment, nutrition problems, as well as an incorrect behavior in relation to health issues. The problems relate both to the quality and accessibility of the health services.

In this context, most health related indicators reveal a poor health status of the population. The country has of the lowest life expectancy at birth among the EU countries (73,5 years in 2009 as compared with 79,4 years on average in EU27), with a higher gap from the European average observed for men. In spite of the progress during the last years, Romania still has the highest infant mortality rates in EU 27 (9.4‰ live birth in 2011, more than double than the EU average), and the second highest maternal mortality ratio in Europe<sup>87</sup>. An emerging problem that could influence negatively the indicators on maternal mortality is the relatively high rate of

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<sup>86</sup> Eurostat, 2010

pregnancies and abortions among young girls under 19, especially for girls coming from the disadvantaged groups. High incidences are still recorded for communicable diseases such as hepatitis B and C<sup>88</sup>. Despite the recent downward trend, Romania has the highest TB notification rate in the EU, accounting for 29% of the total TB caseload reported in EU27, Lichtenstein and Norway in 2010<sup>89</sup>, and significant challenges related to multi-drug-resistant tuberculosis. The overall incidence of HIV remains low and even decreased by 20% since 2004 unlike in most EU countries<sup>90</sup>. However, Romanian women experience the highest cervical cancer incidence and mortality rates across Europe<sup>91</sup>, while cirrhosis-related mortality for both men and women are very high<sup>92</sup>.

More than 11,000 children (up to 3 years old) were diagnosed in 2011 as suffering from protein-caloric malnutrition, and 100 deaths were registered in 2010 because of this condition. The complexity of issues regarding childcare, especially for vulnerable groups, requires specific attention from the health and social systems.

Last but not least, Romania's ranking among the EU countries varies depending on the type of lifestyle-related determinants of health: lowest for the prevalence of adult obesity, one of the highest fruit consumption among people aged 15-24 years, one of the highest alcohol consumption among population older than 15 years of age<sup>93</sup> and a smoking prevalence and tobacco consumption that should not be neglected, especially among youth.

The Roma people, Europe's highest marginalized ethnic group faces serious problems related to health, both in Romania and other EU countries. With a higher prevalence of tuberculosis, hepatitis, skin diseases, their profile is more unfavorable than for non-Roma persons. This is due mainly to the poor housing and hygienic conditions. Roma persons have a higher risk to report a chronic disease, as well as a lower life expectancy (8 to 10 years lower).

More than 11,000 children (up to 3 years old) have been identified in 2011, as suffering from protein-caloric malnutrition, with 100 deaths being registered in 2010 because of this affection.

Differences in regard to the access to public social services remain high and are both geographically, socio-economically and ethnic dependent. It is estimated that half of the poor don't access the medical services, even when there is an urgent need. Moreover, 3 out of 4 poor patients have to pay for medical services and 62% pay for the medicines<sup>94</sup>.

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<sup>87</sup> WHO, [Global Health Observatory](http://gamapserver.who.int/gho/interactive_charts/mdg5_mm/atlas.html)

[http://gamapserver.who.int/gho/interactive\\_charts/mdg5\\_mm/atlas.html](http://gamapserver.who.int/gho/interactive_charts/mdg5_mm/atlas.html)

<sup>88</sup> ECDC, TECHNICAL REPORT Hepatitis B and C in the EU neighbourhood: prevalence, burden of disease and screening policies September 2010

<sup>89</sup> <http://www.intechopen.com/stop-tuberculosis-world-tuberculosis-day.html> ECDC, WHO, SURVEILLANCE REPORT: Tuberculosis surveillance and monitoring in Europe 2012 <http://ecdc.europa.eu/en/publications/Publications/1203-Annual-TB-Report.pdf>

<sup>90</sup> ECDC, SURVEILLANCE REPORT HIV/AIDS surveillance in Europe 2010 [http://ecdc.europa.eu/en/publications/publications/111129\\_sur\\_annual\\_hiv\\_report.pdf](http://ecdc.europa.eu/en/publications/publications/111129_sur_annual_hiv_report.pdf)

<sup>91</sup> IARC, GLOBOCAN 2008 <http://globocan.iarc.fr/factsheets/cancers/cervix.asp>

<sup>92</sup> ECDC, TECHNICAL REPORT Hepatitis B and C in the EU neighbourhood: prevalence, burden of disease and screening policies September 2010 [http://ecdc.europa.eu/en/publications/Publications/TER\\_100914\\_Hep\\_B\\_C%20EU\\_neighbourhood.pdf](http://ecdc.europa.eu/en/publications/Publications/TER_100914_Hep_B_C%20EU_neighbourhood.pdf)

<sup>93</sup> OECD, Health at a Glance Europe 2010

<sup>94</sup> *Romania Functional Review Health Sector Final Report*, Banca Mondială, Aprilie 2011 <http://siteresources.worldbank.org/INTPAH/Resources/Publications/459843-1195594469249/HealthEquityFINAL.pdf>

There are also high regional disparities in relation to the access to the medical services, with South West, South East and North East being the most affected. High discrepancies are also based on ethnicity, with serious problems being registered for Roma people, that encounter serious difficulties in accessing health services, in the context of formal or informal exclusion<sup>95,96</sup>.

The rural population is more vulnerable in terms of health risks. In 2008, less than 15% of the doctors were located in rural areas (5 times less than in urban areas), though the rural population counts for approximately 45% of the total population. In some small villages, the family doctors and medical staff are present in the village just once or twice a week. The migration of the staff in the health sector also adds to the problems. In addition, the health care infrastructure is predominantly located in the urban areas, with 89% of the hospitals, 92% of the medical cabinets and 79.5% of the total number of pharmacies being located in the urban areas, creating high difficulties, in terms of access, for the rural population. Improvement of health infrastructure in rural areas can contribute to the reduction of disparities both at regional level, as well as in terms of urban-rural space.

The only exception is represented by the emergency services, which have improved at the level of all regions, especially after establishing the unique emergency call number 112 and increase of the coverage ratio for the emergency services.

The current care system, with a focus on the tertiary-level services, is highly inefficient, with a significant part of the public resources being wasted on inefficient or useless services and treatment. The insufficient access to primary care, especially in the mountain and isolated areas, but also in rural areas, is causing delays in treatment and further complications, which require supplementary resources generated by the need to access specialized medical services. The suboptimal circuit of the patient in the system and the inefficient use of resources are caused both by the poor level of information and education of the population, as well as the specific barriers and problems of the system, with high costs both for the system and the society. The community health mediators program of the Ministry of Health instituted since 2002 constitutes a positive practice of Romania in addressing the needs of underserved and vulnerable, including rural populations and Roma ethnic communities. This network of health professionals could efficiently and effectively contribute further, along with family doctors and social workers, to fostering the transition from institutional to community-based health care services, especially for high risk domains and/or populations (e.g. maternal and child health, people with disabilities or mental health challenges, elderly, Roma people).

Overall, the technical and managerial capacity within the system remains suboptimal, compared to the more developed EU countries, thus it requires focus on enhancing the skills and competencies of health professionals across various layers or segments of the system.

Moreover, the unfavorable demographic trends, together with the political instability and worsening socio-economic conditions and insufficient financing of the medical system, determined a migration of the doctors and medical assistants to Western European countries and encouraged the practice of informal payments, contributing to the declining quality of medical services and to increasing dissatisfaction of the population. National College of Physician's representatives

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<sup>95</sup> Maria Eva Földes and Alina Covaci, Research on Roma health and access to healthcare: state of the art and future challenges, *Int J Public Health* (2012) 57: 37

<sup>96</sup> Romani CRISS, *Serviciile de sanatate si romii Evaluarea sistemului de mediere sanitare*, © FSG, Madrid 2007

estimate that about 2,800 physicians emigrated from Romania to EU, of which 843 family doctors (about 8%) only in 2011, and another 1605 doctors during the first three quarters of 2012<sup>97</sup>. In the absence of a wise human resources policy in health, the population from certain rural areas lack or risk of lacking access to their primary care physicians, besides to the clinical specialists dropping out secondary or tertiary care facilities.

The Commission's ex-ante conditionality regarding existence of a national or regional health strategy for ensuring access to quality health services and economic sustainability is not yet fulfilled, but efforts are being made in this respect, parallel to the process of drafting and negotiating the Partnership Agreement. Relevant strategic documents currently available are: a national strategy on primary health care for the period 2012-2020 developed with support from the World Bank that which is not yet (?) formalized by the Ministry of Health, and the National Strategy for Sustainable Development for 2013-2020-2030 horizons, which includes the key long-term strategic directions for the health sector in Romania.

Overall, the technical and managerial capacity within the system remains suboptimal, compared to the more developed EU countries, thus it requires focus on enhancing the skills and competencies of health professionals across various layers or segments of the system.

Some promising improvements are expected in the health information system on short/medium term (the Unique Integrated Information System of the National Health Insurance House, E-health prescriptions, and E-health insurance card) but overall the data collection and processing capacity concerning health status of the population remains suboptimal, especially when it comes to details on the health status of the population by income, education and ethnic groups. Participation of local health specialists in European networks collecting certain types of health data is still limited. Therefore, further efforts have to be made in this direction in order to increase local capacity to better monitor the health outcomes of existing national health policies and programs, of the health services provided to the population based on solid evidence.

Moreover, a closer collaboration with the NGO sector is needed, including by creating partnerships, which could contribute to a better and more flexible response to the needs of the population.

## Social services

In regard to the social services, Romania's performance is uneven, with positive results in regard to children protection, but limited efficiency in regard to the care of elderly. Moreover, the integration on the labor market of the persons with less severe disabilities remains suboptimal, showing a strong need to improve policy and measures in this regard.

The capacity of the local authorities to employ or maintain the specialize personnel at the level the social assistance service units is very limited, leading to high urban rural discrepancies<sup>98</sup>. The underfinancing of this type of services and associated investments contribute to this situation. Generally, the social services include the

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<sup>97</sup> <http://www.medicalmanager.ro/articol.php?id=12500>,

<http://www.ziare.com/social/spital/astarastoe-1-605-medici-au-plecat-numai-in-acest-an-din-romania-1189924#comentarii>

<sup>98</sup> Preda (coord., 2011), proiect UNICEF; IRECSO (2011), proiect POSDRU; MMFPS și SERA România (2012), proiect PODCA.

services offered by the specialized directions that generally belong to the cities. In the rural areas, both the primary and specialized services are rare. The training level of the personnel in the field of social assistance is another major problem<sup>99</sup>, with 60% of the staff having no specialized training.

The NGO sector compensates this problem; however some vulnerable groups (such as the drug or alcohol consumers, the homeless or persons infected with HIV) remain uncared for. Identification of early interventions system remains underdeveloped.

Overall, the NGO sector plays an important role in the provision of social services to the vulnerable groups. In 2009, the non-governmental organizations counted for 49% of the accredited suppliers of social services and covered 25% of alternative services for children protection and served 41% of the beneficiaries of house care services, through their own financing sources.

The coverage ratio at national level remains unequal, with the number of private social services providers at county level varying from 3 to 122.

In 2011, the number of institutionalized children, in both public and private centers, was about half the level registered in 2000 (23,240 children in December 2011). The decreasing trend however, was reversed starting with the end of 2011, when – due to increased poverty and public social support – the number of institutionalized children started to increase again.

As regards the institutionalized system for the children with handicap, only 0.05% of these children were institutionalized in 2010, showing a strong lack of trust in the efficiency of this system.

According to the official data<sup>100</sup>, at the end of 2011, there were 83.658 children whose parents worked abroad. Other research<sup>101</sup> however, shows that approximately 170 thousand children (from gymnasium) had at least one parent working abroad. Most of the single children were located in the Western part of the country and in Moldova. Though generally enjoying good living conditions, these children remain vulnerable due mainly to emotional sensitivity that impedes on their personal development, but also given the higher risk of early school leaving and involvement in inappropriate activities.

## Social economy

The economic and social significance of Social Economy enterprises is widely recognized. Social Economy proves it can be a viable instrument that could contribute to ensure inclusive labour markets for unemployed or disadvantaged groups, as well as to promote inclusion of disadvantaged groups on the labour market.

In 2010, the social economy in Romania included a total of over 31.000<sup>102</sup> organizations holding non-current assets amounting to about 10 billion lei (equivalent to 2.5 billion euros), achieving annual incomes of 7.7 billion lei (approximately 2 billion euros) and employed a total of over 100 thousand people, equivalent to 1.7% of wage-earning population and 1.1% of total employed

<sup>99</sup> Preda (coord., 2011), proiect UNICEF.

<sup>100</sup> Data from the Direction of Child Protection, within the Ministry of Labor, Family and Social Protection

<sup>101</sup> Toth et al. (2007). Cercetare pe eșantion reprezentativ național pentru elevii din clasele V-VIII și eșantion suplimentar de elevi ai căror părinți (unul sau ambii) sunt plecați în străinătate

<sup>102</sup> The Atlas of social economy, Romania 2012, Ștefan Constantinescu



population<sup>103</sup>.

Associations and Foundations show a steady upward trend on all economic indicators and on all years analyzed, with a predominant contribution within incomes (74% of total), assets (58%) or employees (61%) of the Romanian social economy in 2010. Compared to 2009, in 2010, the incomes and assets of the AF (Associations and Foundations) have increased by 51% and 48% respectively, while the employed personnel increased by 25%.

The evolution of economic indices show that, in general, social economy organizations have responded well to first difficult economic years, namely 2009 and 2010, both incomes and non-current assets continuing their trend of growth or stabilization. Only the pensioners unions reported decreasing incomes in 2010 compared to 2009, probably due to lower interest rates and lower rates of investments made by them.

Social Economy employed a total of over 100.000 people at the end of 2010 i.e. 1.1% of total employed population and around 1.7% of the wage-earning population.

Yet many legal and practical hurdles impair its effective development: 1) the lack of an EU legal framework at EU and national level, 2) limited knowledge on social entrepreneurship 3) limited access to funding, due to a rigid financial system, bureaucracy and lack of information..<sup>104</sup>

### Educational services

Between 1996 and 2010, the number of schools reduced from 29,815 to 7,024. This reflected both a decline in the number of pupils and merger of schools units, the latter of which greatly affects school accessibility in many areas.

The number of teachers also reduced significantly, together with a decreasing interest for the profession and loss of quality, due to the decrease in the number of pupils, but also to the small salaries and closure of the school units, especially in the rural areas. According to the data from the Ministry of Education, only 25% of the pupils from the rural areas sign up for gymnasium education and their grades are lower compared to those of the pupils in urban areas.

### Access to basic utilities and housing

The utilities infrastructure remains deficient, in spite of the consistent efforts in this regard. Thus, at national level, 72% of the localities have running water (increasing share from 61% in 2005) and only 30% have public sewerage systems.

The housing stock is in poor condition. 85% of the houses and apartments date from the Communist era (part of them, about 15% of total are older, from the period of the Second World War). Only 25% meets current standards on earthquakes. Urban areas were not designed to accommodate the rise in private car ownership and parking spaces are in short supply.

The share of the population living in inadequate conditions decreased from 37% to 29% during the last years. The southern regions, but also the North East Region has

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<sup>103</sup> Idem 1

<sup>104</sup> CE (2011) *Social Business Initiative - Creating a favourable climate for social enterprises, key stakeholders in the social economy and innovation*, Brussels, 25.10.2011, COM(2011) 682 final.

higher percentages than the national average, due to the lower level of economic development. In comparison, the EU average for this indicator stands at 9%.

#### **TO 10: Investing in education, skills and lifelong learning**

In order to meet the national targets assumed in the context of Europe 2020 Strategy, Romania needs to improve significantly in terms consolidating the professional competences of the labor force as well as reducing the early school leaving in order to better respond to the needs of the economy and dealing with the intellectual outflow of the labor force.

In 2011 the educational level of the population was low, with 4.407.000 persons aged 15– 64 years (29% of the same age population) having pre-primary, primary and lower secondary education (levels 0-2). 33% for the people aged 55-59 years and 46% for the people aged 60-64 years are in the same situation.

25% of the population aged 20-64 years (3.377.600 persons) has low educational level (ISCED 0-2) while the greatest part of it (61%) has attained upper secondary and post-secondary non-tertiary education (levels 3 and 4).

The educational structure of the population aged 25-64 years is a similar one, with only 14.9% of the Romanian population having a tertiary education degree (2011), far from the EU average of 26.8%. There are significant differences at regional level, with Bucharest Ilfov region (31.4% in 2011, higher than the EU average), being far above other regions such as South Muntenia and South East, with only 11.2% and 11.6%, respectively. The overall coverage ratio for tertiary education has decreased by almost 13% between 2007/2008 and 2010/2011 university years, to 40.8%. Moreover, only 27.2% of the pupils in rural areas sign up for university education, compared to 56.3% in urban areas. In 2011 only 20.4% of people aged 30-34 years had tertiary education compared to EU level of 34.6%. The lowest rate (16,5) was registered in macro region 4.

In comparison with the EU average, Romania has a considerably higher rate of early school leavers: 17.5% in 2011, more pronounced for the male. The higher rate (20.7) was registered in macro-region 2 while the macro-region 4 registered the lowest (13,3). (Reasons why) The Roma population is the most affected by the early school leaving; especially girls (give % and absolute numbers). There are also high urban-rural differences, with only 25% of the pupils from the rural areas signing up for gymnasium education. Moreover, their grades are lower compared to those of the pupils in urban areas.

The highest rates of early school leaving are registered at the beginning stages of schooling (1<sup>st</sup> and 5<sup>th</sup> grade) and also at the end of the gymnasium. There are differences subject to gender, age, with a higher dropout rate for the boys in the urban areas during primary schools, while in the rural area; the rate is higher for boys dropping out of the gymnasium education.

Being in education or training is the reason of not looking for a job of 32.1% of the inactive population aged 15 -64 years, the same as the EU level. A share of 17.4% of the inactive population aged 20-64 years, above than EU level of 15%, is not seeking employment because of the same reason. The inactive population not seeking employment because of its involvement in education or training decreases with age: 2.6% for the people aged 25 – 64 years compared with 4.5% at EU level. While at EU level 11.5% of the inactive population aged 25-49 years not looking for a job is in education or training the same Romanian population registered only 6.3%.

The big number of those over 15 years with low educational level and the early school leavers leads to high rates of unemployment inactivity regardless their age group or ethnicity. The first challenge for a person having the age over 3 years old and over than the classroom age is to find a place within the educational system. The number of places in the education system is determined primarily by the number of teachers allocated to each unit school. The number of teachers has reduced significantly, especially in the rural areas, due to the decrease in the number of pupils, but also to the small salaries and closure of the school units. There is a need to encourage nonformal and informal learning and develop the credits system and mechanisms for recognizing these kinds of acquisitions in order to increase the access of the low skilled adults to higher educational level.

In 2011-2012 the coverage ratio for schooling population was 76%, higher in the case of women (77.2%), being on a decreasing trend compared to the previous years: 77.6% in 2010-2011, 78.7% in 2009-2010, 79.6% in 2008-2009. The low coverage ratio was registered for the people aged 19 - 23 years and over, with a difference of 7.2 pp. in the favor of women. (INS) The highest rate is recorded for primary education (94%), but with high urban-rural differences, which shows the need to allocate additional resources for supporting education in rural areas.

The share of children aged 7-10 years outside the educational system (that have either abandoned school, or have never gone to school) has increased from 2% in 2005/2006 to 6% in 2011/2012. Research shows that out of 597 Roma children aged 7 to 11, 44.2% do not follow any schooling education. In addition, children with disabilities have high difficulties in following a schooling education, with almost 2,500 children with a severe handicap that have never gone to school (March 2011).

As a result of the high levels of active population migration, with approximately 2.2 million persons living or working abroad, at the end of 2011, approximately 170 thousand children from gymnasium had at least one parent working abroad.

The performance of the educational system is very poor, with high interregional and urban-rural differences. The results at PISA exams in 2009 place Romania on the 49<sup>th</sup> place out of 65 participating countries, with the lowest performances in reading of all EU countries evaluated. 40.4% of the Romanian pupils have poor reading skills (a score under 2 on PISA scale), double compared to the EU level of 20.5%. Only 0.7% of the Romanian pupils obtained a 5 score or over. These shares are relatively similar to those obtained under the PISA evaluation in 2000, which shows that no progress was registered in improving the educational achievements.

In 2012, the results at the baccalaureate exam were the lowest in the last 20 years (43.04% at country level), with regional and intra-regional differences. Graduation rates vary between 14.66% in Ilfov County and 61.8% in Brasov County. There were only 6 counties (out of 40) with rates over 50%.

The low level of acquisitions in reading, math or sciences lead to low quality of the graduated people and dropout because children do not understand higher order elements and feel complex. There is a need to improve the curricula and to adapt teaching methods and materials the specific of the target group. It is important to focus the curricula on the key competencies in order to facilitate the personal fulfillment, active citizenship and labour market integration.

The technical skills are based on the acquisitions in reading, math or sciences. The lowest results obtained over time are now reflected in the low quality of the labor force. There is a need to develop opportunities to improve the skills of reading, math and science for persons over school age.

The structure of the employed population has improved in terms of educational level. The increase of the places in higher education and the admission based on high school results led to an increased number of tertiary education graduates. The poor outcomes obtained over the time by PISA and high school assessment show that most of them lacked the necessary knowledge in order to reach this level. This is reflected in the large number of unemployed people with higher education. Preponderant orientation towards certain qualifications or specializations led to market saturation of the graduates with these skills and a shortage of graduates with qualifications that cover departures from the employment system. Globalization accelerates the departure of the well trained from the local employment system, regardless of their educational level, through their migration from areas with low potential to high potential areas. The need for well-trained staff, the poor quality of the persons having the same educational level as that required by the occupation and the surplus of the persons having a higher educational level caused local businesses to hire people with higher educational levels than the required. This is reflected in the large number of persons practicing occupations that require a lower level of education than they have. Practicing an occupation by a person with a higher educational level than it's required produces distortions in the labor market. On the one hand people are not satisfied with their occupation and are always looking for something better which leads to staff turnover. On the other hand those who have the requested educational level do not find their job which leads to unemployment or inactivity. Participation in CVT is also distorted. Companies do not invest in training these people because they believe that having a higher educational level than the occupation asks they should have the appropriate skills. The people invest in appropriate training to their educational level not the training required by the occupation they practice. There is a need to better know the occupations and their requirements and to adapt the educational offer. A failing educational system produces people with higher educational levels but not all find an appropriate job for their level of education.

The participation in life-long learning is among the lowest in Europe, with only 1.6% of the population participating in life-long learning programs in 2011, only slightly increasing compared to the previous years. There are also high urban-rural differences, with no CVT provider registered in rural areas.

Enterprises' participation in vocational training of employees is also very low, with only 20% of Romanian enterprises providing training for their staff in 2011. Even more concerning are the enterprises' participation to VET diminished by 13 percentage points compared to 2005. This development does not follow the trend at European level, where the share of enterprises offering training to their employees increased by 4 % since 2005, reaching 52% in 2010.

The CVT is regulated by law. Any supplier wishing to issue a certificate recognized by the authorities must be authorized for each program separately. The training program must be based on a standard occupational. There are a small number of occupational standards and most of them are being developed to overcome long ago. For instance, on the National Authority for Qualifications website could be found for the Environment field, an area of great interest, 6 occupational standards: three of them, including the environmental auditor, developed in 2000, 2 developed in 2007 and one in 2008, before the approval of the methodologies for the elaboration of occupational, occupational standards and qualifications which came into force in September 2009.

In case of a qualification program that must be found in the Nomenclature qualifications for the qualification programmes that can be organized outside the educational system, which are periodically updated by joint order of the Minister of Education and Minister of Labour

The reduced programs diversity resulting from the lack of both occupational standards and the linkage between qualifications and occupations lead to an increased offer where the occupational standards exist and a low offer appropriate to the needs of individuals and employers.

Most suppliers correlate the access to a training program with a particular educational level, regardless the qualification level. A person having an educational level ISCED 2 but no qualification level could participate in a Level 2 qualification program. The results are poor quality because, in most cases, the person has trouble with reading, math and science and has no specific competence level 1. These results are found in low labor market integration of those who completed CVT programs.

Under current legislation a person who has graduated primary school can achieve a level 3 qualification following a program that allows the development tree. This approach would allow a significant share of those who have a low educational level to acquire a labor market relevant qualification. In practice, these programs that allow tree developments are very few. There is a need to develop national qualifications framework and its specific instruments and to encourage the provision of CVT programs that allow tree developments. There is a need to complete training programs with programs designed to improve the skills of reading, math and science and counseling activities for integration at work.

Access to education and training is hampered by a number of problems faced by different groups of people: lack of identity papers, homelessness, financial difficulties due to the economic potential of the area, marital status, number of children etc or integration difficulties mostly as a result of different cultures.

To increase the efficiency of support measures is necessary to correlate that measures with the different sources of bottlenecks that participants in education and training meet. There is a need to introduce educational and training vouchers and developed life and career management in order to allow people to fully benefit from the existing opportunities.

## **TO 11: Enhancing institutional capacity and ensuring an efficient public administration**

### **Public administration**

Improving the quality of the public administration remains a priority for Romania. Since its accession to the EU, Romania has undertaken significant efforts to improve the efficiency and effectiveness of public administration and the quality of public services. The effects however, remain limited.

In June 2011, the World Bank has finalized the functional analyses for 12 ministries, agencies and other public institutions<sup>105</sup> and developed a series of action plans and recommendations on issues such as strategic management, organizational structures, budgeting or human resources management.

One persistent problem is the insufficient coordination of public policies at central governmental level, due mainly to insufficient attention paid to public policy as a

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<sup>105</sup> Which can be accessed at [http://www.sgg.ro/index.php?politici\\_publice\\_documente](http://www.sgg.ro/index.php?politici_publice_documente)

decision instrument, as well as to the numerous 'ad-hoc' decisions reflected in the high number of Governmental Emergency Ordinances and the lack of a functional process for elaborating public policies.

By failing to take into account the proportionality principle, the regulations on elaboration of the public policy documents generates an inappropriate relation between the analysis and documentation needed and the complexity of the area to be regulated.

The capacity of Romanian public administration to develop public policy documents and to properly substantiate them remains limited. In spite of the Government initiative in 2005 to set up public policy units within each line ministry, the number of public policies developed by the ministries is below the forecasted level and significantly decreased in the last years. Even if the capacity of the public policy units varies between ministries, the majority of the public policy units are still not integrated in the decision process at ministry level. Two explanations can be identified: the level still insufficient of the necessary skills at the technical staff level of the public policy units, on the one hand and the low interest of the decision level to base the decisions on coherent mid- and long-term policy vision and strategic documents.

It is a strong relation between the capacity to elaborate public policies and the quality of the legislation, especially regarding the needs assessment and ex-ante impact assessment of the regulations. Even if minim standards for ex-ante impact assessment were been elaborated through GD no. 775/2005, GD no. 870/2006 and GD no. 1361/2006 stating a correct technical approach, the implementation of standards is still limited. The assessment of various options is summary, in a few cases the socio-economic impact is based on medium and long term effect analysis; in most cases the cost and the impact on the national budget are not revealed. The legalist system and the low level of the institutional capacity are the causes identified by the World Bank reports for this situation. The lack of the relevant data required by the public policy planning process and by the decision making process, the limited capacity to use, process and interpret the existing one at the level of each entity, the lack of a proper collection data system, the lack of funds for providing studies at National Statistical Institute level, the indistinct relation between NSI and the line ministries concerning the access at data and studies provided by the first one, are some of the problems identified by the World Bank<sup>106</sup> and by the line ministries.

Moreover, policy monitoring systems are highly inefficient, in the context of missing relevant data and statistical information due to the weak coordination between the relevant actors in the system and the lack of an efficient data collection mechanism. The budget development and strategic management are important issues related to the reform of the public administration in Romania. Though important progress has been registered in regard to a strategic planning approach to the budget elaboration, the process remains largely disconnected from the process of elaboration of the public policies and still functions as a 'bottom up' approach, lacking strategic coherence and adequate prioritization of investments.

In the context of the decentralization process, starting with 2001, a series of responsibilities, among which administration of the public and private domain of the administrative - territorial units, administration of the road transport infrastructure from local interest, administration of the local culture bodies, administration of the

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<sup>106</sup> World Bank Functional analysis reports provided in 2010 - 2011, available at [http://www.sgg.ro/index.php?politici\\_publice\\_documente](http://www.sgg.ro/index.php?politici_publice_documente)

health local units, spatial planning and urbanism, water supply, sewerage and wastewater and rainwater treatment, public lighting, waste collection, primary social care services for children protection and for elderly peoples, primary social care services for the victims of domestic violence, local public transport for persons , were allocated to the local public authorities, either on a stand-alone basis or in common with other authorities. Regardless of the autonomy they have in the decision process, the public services remain insufficiently oriented towards the needs of the citizens, in the context of missing quality standards and relative lack of transparency.

The capacity of the local authorities to take over the new competences transferred from central to local level and deliver high quality services is insufficiently developed, especially for the small localities.

Based on provisions of the *GD no. 961/2009 on approval of the Framework – guideline for elaboration of the minimum quality standards and of the minimum cost standard for decentralized public services*, were been worked out standard costs for pre-university education (GD no. 1274/2011), standard cost for social services (GD no. 23/2010). In the context of reducing the state budget expenditures the GD no. 363/2010 on approval of standard costs for investments made from public funds.

In order to increase the public services performance the correlation between standard cost and quality standards, the focus on results taking into consideration the efficiency, efficacy on resources use are needed.

On December 31, 2011, according with National Institute of Statistics' data<sup>107</sup> 320 towns and municipalities and 2861 communes were in Romania. About 55% of the cities have less than 10,000 inhabitants and approximately 52% of the communes have less than 3,000 inhabitants, out of which 12 communes with less than 500 citizens and 81 localities with less than 1,000 inhabitants. The urban-rural disparities remain high, as well as those among regions. Local authorities manifest very low interest in associating, though this could contribute to increasing the quality of the services offered.

The current organizational structure represents a serious challenge in terms of ensuring a balanced and sustainable growth at territorial level. This is of particular concern in the context of limited budgetary resources and limited capacity to attract additional funds. The measures should envisage improving the planning, implementation, monitoring and evaluation skills of the administration, as to strengthen their capacity to deliver high quality public services and promote growth and development.

Moreover, the use of e-Government services and ICT is very limited, both at central and local level, in spite of the efforts undertaken to develop on-line databases and electronic instruments, maintaining the administrative burden for the citizens at high levels.

The performance of the public administration depends directly on the human resources management. Different ministries and administrative bodies share their responsibility to elaborate the human resources policy: Ministry of Regional Development and Public Administration, National Agency for Public Servants, Ministry of Labour, Family, Social Protection and Elderly, Ministry of Public Finance, Ministry of National Education, Ministry of Health, Ministry of Justice, Superior Council of Magistracy – for the judicial system) and different juridical instruments are used for its application. This fragmentation and the absence of a single

<sup>107</sup> National Institute of Statistics, Romania in Figures 2012, <http://www.insse.ro/cms/rw/pages/romania%20in%20cifre.en.do>

institutional framework stating clear responsibility on the human resource management generate the malfunctions of Romanian public administration.

Given the prevalence exclusively to regulations and rules on the selection of personal against the abilities and competences required by each public function, the recruitment and selection of personnel are still problematic; an imbalance between real needs of the administration and the skills of the staff is still registered.

The public servants remuneration remains an open subject. Despite of approval of the Single Salary Law its implementation depends on the evolution of public finances. The remuneration based on administrative position and the seniority system is still applied with a direct impact on the staff motivation and on the administration's performance.

## Judiciary System

The progress made in the process of reforming the judiciary system over the last years are indubitable and were recognized as such, including in the Cooperation and Verification Mechanism. Thus, the legal framework has undergone a substantial change with the enactment of four new codes (the New Civil Code, which entered into force on 1<sup>st</sup> October 2011, the New Code of Civil Procedure, which would take effect on the 1<sup>st</sup> of February 2013, the New Criminal Code, entering into force the 24<sup>th</sup> of July 2013, and the New Criminal Procedure Code, entering into force the 15<sup>th</sup> of July 2013).

This change of the legal framework triggered a significant pressure at the level of human resources involved in the judiciary system, by enhancing the already existing deficiencies, respectively the undersizing or the failure to update the staff schemes, combined with the lack of execution or management staff.

The chronic shortage of staff translated into a high workload both at the level of the judges<sup>108</sup>, as well as at the level of the entire staff scheme<sup>109</sup>. The most worrying data concern the high workload at the level of the High Court of Cassation and Justice: although the cases managed by this court are of a high complexity, the workload is comparable to those at the level of the other courts of law, which means we have an unsustainable situation.

A measure designed to solve the deficiencies at staff level became a cause for one of the system drawbacks; as a result, those magistrates directly recruited in the judiciary have proved a different and insufficient level of training compared to the National Instituted of Magistracy graduates.

A constant weakness of the Romanian judiciary system is the non-unitary judicial practice, generated by an incosistent interpretation and application of the law. Two of the main causes of the incosistency of the justice are<sup>110</sup>:

- a) The fact that the legal unification was not considered a priority by the Superior Council of Magistracy or by the court presidents, which led to a lack of awareness towards the importance of this issue;

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<sup>108</sup> *The judge workload* reflects the number of cases a judge had to settle in the reference period and is calculated by dividing the total number of cases to the number of non-vacant positions (Report on the status of the judicial system for the year 2011, issued by the Superior Council of Magistracy, p. 66).

<sup>109</sup> *The scheme workload* is calculated by dividing the total workload to the total number of positions refected by the organizational charts of courts of law (Report on the status of the judicial system for the year 2011, issued by the Superior Council of Magistracy, p. 66).

<sup>110</sup> Report from the Commission to the European parliament and the Council on Progress in Romania under the Cooperation and Verification Mechanism - 18 July 2012 – COM (2012) 410 fina, p. 8.



- b) The lack of the adequate tools which allow for the access to the jurisprudence of all law courts, which impairs the consistency of the justice (the main judicial data base - ECRIS – offers access only to the court decisions of a certain court of appeal, which does not offer the possibility for the magistrates to compare the court decisions made at national level).

Another cause for the inefficiency of the Romanian judiciary system is the inability to properly investigate the complex financial cases, especially those concerning the public procurement area, due to a lack of funds for a proper training and specialization of the magistrated or eventually for the externalization of such services<sup>111</sup>.

The judiciary system in Romania has some structural deficiencies that affect the effectiveness of the judicial act, such as the fact that limitation periods are not terminated or suspended at the time the case is sent into court, as evidenced especially in cases of high level corruption. This structural weakness is enhanced by the way in which judges settle the applications submitted at trial date, which seem to be mostly in favour of defense.<sup>112</sup>

Last, but not least, the judicial reform is also slowed down by the lack of a sustained and coordinated process for promoting and tracking the judicial accountability. Despite the fact that the legal provision concerning the judicial liability was extended and detailed, so far it has not led to the application of consistent and clear sanctions for disciplinary offences<sup>113</sup>.

Although the Judicial Inspection plays a decisive role in this area, its resources are not used to their full potential. According to the European Commission's recommendations included in the Cooperation and Verification Mechanism, the consultative role of the Judicial Inspection should be enhanced by an involvement in the systematic monitoring of key issues such as the judicial practice, the legal unification and the adoption of best management practices by the presidents of the courts of law.<sup>114</sup>

### The fight against corruption

The second key-area monitored under the Cooperation and verification Mechanism is the fight against corruption.

Significant progress was made in the area of high-level corruption cases, determined by the actions of the National Anticorruption Directorate (NAD). Not the same situation is seen in the courts proceedings. The main causes identified are the following<sup>115</sup>:

- a) Postponements and delays in settling proceedings due to an excessively tolerant approach of judges regarding the arguments of the defense ;
- b) Loss of some corruption cases as a result of reaching prescription periods;
- c) Inconsistency of decisions concerning high-level corruption cases.

An essential component of the institutional framework for fighting against corruption is the National Integrity Agency (ANI); although the activity of ANI knew a rapid evolution, its progress has been held up by a series of challenges: (i) ANI's legal

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<sup>111</sup> Idem, p. 10.

<sup>112</sup> Ibidem.

<sup>113</sup> Idem, p. 11.

<sup>114</sup> Ibidem.

<sup>115</sup> Idem, pp. 13-14.

base was declared unconstitutional in 2010, (ii) the new wealth investigation commissions (established as an extras tage between ANI and courts for the case where ANI suggests the confiscation of unjustified assets), (iii) slow court proceedings, (iv) an inconsistent jurisprudence and (v) an insufficient cooperation between other administrative authorities, the judiciary and ANI.

At programme level, the commitment of decision makers in preventing and sanctioning corruption in the public sector was proved by adopting the National Anticorruption Strategy 2012-2015, which took over the recommendations made in the study of the impact of the two previous strategies<sup>116</sup>. The new national strategy was accompanied also by the approval of the Inventory of anticorruption preventive measures and evaluation indicators, and respectively of the National Action Plan for the Implementation of the National Anticorruption Strategy for the period 2012-2015.

An important source of corruption identified both by the European Commission and by ANI is represented by public procurement, especially at the level of public procurement funded from EU funds. The important effect of the shortcomings in this area is showed by their serious consequences, which finally lead even to the interruptions of payments of EU funds. This is why it is necessary to implement a comprehensive action plan designed to protect public procurements of conflicts of interest.<sup>117</sup>

### The management of EU Funds

The administrative structure defined for the management and implementation of the EU funds is of particular concern, given the potential that such funds have to promote growth and cohesion. Implementation rates for 2007-2013 lag behind, at 11, 47% (ERDF and ESF)<sup>118</sup>, 46% (agriculture and rural development)<sup>119</sup> and 21 % (Fisheries)<sup>120</sup>. In spite of the support aimed at increasing the administrative capacity of the public administration and particularly, of the institutions involved in the management and implementation of EU funds, the system is still confronted with significant problems coming from a lack of prioritization and uneven assignment of tasks, unclear responsibilities or insufficient and inadequate skills in some areas.

Amongst the programmes financed by ERDF and ESF, the ROP and OPACD are most performant when it comes to the EU reimbursements and by comparison to the allocation 2007 -2013, namely 24,70% and 24,63%, while the OP Transport, OP Competitiveness and OP HRD are on the opposite side, with only 6,46%, 6,77%, and 7,73% reimbursements.<sup>121</sup>

A special attention needs to be paid to the coordination function of the management and implementation of EU funds, both at central and regional/ territorial level, in

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<sup>116</sup> Idem, p. 18.

<sup>117</sup> Idem, pp. 20-21.

<sup>118</sup> At December 31, 2012, [http://www.fonduri-ue.ro/res/filepicker\\_users/cd25a597fd-62/rezultate/std\\_abs/Anexa.1-31.decembrie.2012.cu.DL.trimise.la.CE.si.plati.CE.pdf](http://www.fonduri-ue.ro/res/filepicker_users/cd25a597fd-62/rezultate/std_abs/Anexa.1-31.decembrie.2012.cu.DL.trimise.la.CE.si.plati.CE.pdf)

<sup>119</sup> Calculated taking into consideration total amount of payments at January 17, 2013 (<http://www.apdrp.ro/content.aspx?item=1998&lang=RO>) and the public allocation from PNDR

<sup>120</sup> According to the Progress Report on POP implementation at January 18, 2013 (<http://www.madr.ro/pages/page.php?sub=2004&self=20>)

<sup>121</sup> [http://www.fonduri-ue.ro/res/filepicker\\_users/cd25a597fd-62/rezultate/std\\_abs/Anexa.1-31.decembrie.2012.cu.DL.trimise.la.CE.si.plati.CE.pdf](http://www.fonduri-ue.ro/res/filepicker_users/cd25a597fd-62/rezultate/std_abs/Anexa.1-31.decembrie.2012.cu.DL.trimise.la.CE.si.plati.CE.pdf)

order to improve efficiency and effectiveness of the interventions, as well as to eliminate bottlenecks and increase absorption. In the context of the concentration of the EAFRD and EMFF under the same umbrella with Structural Instruments, ensuring an efficient coordination of the funds will be of the outmost importance, as to create efficient systems to correlate the interventions and avoid overlapping, as well as to create synergies and complementarities.

The performance of the current centralized information system (SMIS) – intended as an instrument to improve the management and monitoring process – remained limited, in spite of significant efforts (and financial resources allocated) to improve effectiveness. There is a need to update the current system, both in regard to harmonization of procedures and forms, as well as to meet the new requirements of the EU regulations for the new programming period, in regard to on-line registration of projects and provision of adequate and timely information for all stakeholders.

The capacity of the beneficiaries to implement projects co-financed by EU funds is also insufficiently developed. The focus so far was on providing information on funding opportunities and on ensuring horizontal training on project management and public tender Evaluations<sup>122</sup> made revealed the need for more complex support for the beneficiaries that would combine provision of information, including through help-desk type services, with direct support, to offer direct support in project management and implementation. Such mechanism would need to be implemented at regional or county level, as to be closer to the beneficiaries. Special solutions need to be identified for the major or strategic projects, due to the importance of such projects, both for increasing the absorption and contribute to overall growth.

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<sup>122</sup> Preluat din analiza facuta de ACIS, de completat.

## STRATEGIC VISION

Romania continues to face significant development challenges, in spite of the economic growth registered until 2008. The economic and financial crisis has hit Romania hard and growth has not eliminated the dualism between the Bucharest region and the rest of the Romanian territory, which remains under-developed by EU standards. In 2012, Romania's GDP per capita was 46% of EU average, placing Romania on the second last position in EU 27.

### **Global Objective**

*To reduce the economic and social disparities between Romania and EU Member States, by generating a 15% additional increase of the GDP by 2022 and by increasing the GDP per capita to 65% of EU average.*

Romania commits itself to undertaking all the necessary efforts to address the economic and social needs and exploit the development potential of the country. An integrated approach and joint efforts of all stakeholders involved are needed to achieve the set objectives. The statistics, as well as the experience so far, underline that this task is huge and so is the responsibility in regard to promoting and achieving growth.

Achieving the defined objectives entails a high level of effort from both public and private actors in Romania, as well as achieving a significant improvement of the absorption rate, taking advantage of all the innovations from the 2014-2020 regulations:

- Integration of all EU funding within a national strategy;
- Addressing weak points in domestic policy design, institutional arrangements, and strengthening implementation capacity through reforms assisted by conditionalities and performance mechanisms;
- Definition of clear, explicit objectives for policy effort, which can guide programme building and implementation;
- Development of area-based integrated strategies for which local actors take full responsibility.

### DEFINING THE STRATEGIC VISION

Romania aims to achieve growth and reduce economic and social disparities, by maximizing the impact of EU funds on the economy, through improved efficiency and effectiveness of the management and implementation of these funds. The potential of the economy is huge. Change of approach, together with a consistent and decisive manner of addressing the existing needs will help promoting growth by unleashing potential in some sectors, as well as by stimulating innovation and increasing productivity.

The Partnership Agreement provides the strategic guidelines for development in the coming years, as well as the necessary arrangements that should be ensured to

enhance growth and cohesion. It looks towards defining the strategic lines of action in tight relation with development needs and potential. Moreover, it acts as a coherent platform for defining the tasks of the policy makers and the main players that can boost development and achieve social cohesion.

At the same time, the document looks towards learning from experience and building on the, sometimes tough, lessons learned:

The development priorities identified aim to contribute to the achievement of Europe 2020 targets of intelligent, sustainable and inclusive growth, by strengthening entrepreneurship and promoting employment, as well as by focusing on improving accessibility and sustainable mobility both within the country, and, externally, with the rest of the European Union and with other countries, improving safety and ensuring access to quality basic services for the entire population, especially educational and skills level of the population, especially for vulnerable groups and Roma people. A special attention will be paid to creating the premises for a balanced territorial development, by ensuring an adequate response to the territorial needs through focusing policy efforts in the disadvantaged regions, as well as designing area-based projects, in the framework of the territorial instruments defined by EC.

The strategic planning is coherent **with the targets set in the National Reform Programme** as well as with the programming guidelines for the 2007-2013 period, and draws upon the sectoral and regional policies in place at EU and national level.

It, however, seeks a marked discontinuity with the practices and strategies of the past, taking stock of the tough lessons learned during the previous programming period, first of all, by targeting an integrated approach, putting together all domestic and EU resources towards achieving the defined goals, as well as seeking complementarities and building synergies among domestic and EU funded interventions, together with a clear delineation of competences of the institutions involved.

Moreover, the clear focus on economic growth and aligning the competences and skills of the labor force to the needs of a developing economy will translate as transversal criteria for all interventions, as to ensure coherence of approach and to create synergies.

Reducing the regional and territorial disparities and promoting social inclusion, both through soft and hard measures, will be also be targeted, in the context of deepening poverty and social exclusion, that is both territorially based (isolated territories, mono-industrial towns, rural areas) and socially based, with vulnerable groups being the most affected.

As a key issue resulting from the experience of the previous programming period, the strategy will be centered on strengthening institutional capacity and promoting public reform, in order to orient all institutional efforts towards achieving the set goals. Meeting the conditionalities imposed through the Regulations, together with ensuring transparency of the entire process are key aspects that need to be considered. Adequate monitoring and evaluation capacity will be developed as to

provide the necessary feedback in relation to the relevance and adequacy of strategies, interventions, as well as procedures in the process.

Integration and synergy will be sought between all ESI funds (ERDF, ESF, Cohesion Fund, EARDF, and the Fisheries Fund), domestic resources, and other EU funds, such as Erasmus for All, Horizon 2020, the Program for Social Change and Innovation, the LIFE program, Connecting Europe Facility etc.

The EU funds continue to be the most important resource that can help Romania achieve its growth and cohesion goals: they amounted to #% of all public capital funding between 200# and 20## and it is projected that they will amount to #% between 2014 and 2020.

In order to exploit the opportunities, Romania has to make major steps as to orient all efforts towards **sustainable economic growth**, by directing efforts towards areas and sectors with specific growth potential (as they will be identified by the Strategy for Smart Specialization) and investing in the knowledge-based economy, as well as by promoting collaborative approaches such as clustering of SMEs, development of excellence centers, promotion of growth poles etc. Diversification of agricultural production and of rural economies, as well activities based on cultural and natural heritage (including by development of creative industries) should be also targeted, given the specificity of Romanian economy and its demographic and geographic characteristics.

The development of transport, environment and energy infrastructure is a prerequisite for making the economy grow. Striking the right balance between the different types of investments in infrastructure, such as road network and other transport modalities, promoting energy efficiency, ensuring access of all territories to quality basic services will be essential for growth to actually take place and to increase attractiveness of the country for investors. On the other hand, access to quality educational, social and health infrastructure is essential both for promoting inclusion and socio-economic cohesion, but also for meeting the needs of the economy in relation to a competent labour force.

Sustainable economic growth will be achieved by:

- ✓ Increased productivity
- ✓ Improved competences, adapted to the needs of the labour market, including for vulnerable groups and for women
- ✓ Increase in the activity rates, including for vulnerable groups
- ✓ Innovative application of research and development to market opportunities
- ✓ Infrastructure investment to improve accessibility and attractiveness;
- ✓ Exploiting the development potential of the regions;
- ✓ Promoting sustainable development by...;
- ✓ Promoting social inclusion;
- ✓ Effective and efficient public administration.

The Strategic Vision addresses the socio-economic development needs, tackles the Regional disparities that Romania faces and supports the EU development strategies.

The following five thematic priorities have been identified in relation to the objectives set.

- *Improving human capital through higher employment and better social inclusion and education policies;*
- *Developing modern infrastructure for growth and jobs;*
- *Promoting economic competitiveness and local development;*
- *Optimising the use and protection of natural resources and assets;*
- *Modernization and reinforcement of the national administration and of the judiciary.*

Achieving territorial cohesion by promoting a balanced territorial development will be targeted as a horizontal priority in the framework of the Partnership Agreement. This represents a particular challenge for the Romanian authorities at national and regional level and Romania intends to use the opportunities offered by the EC regulations in relation to programming and implementation flexibility through the use of territorial instruments.

In order to achieve the global objective, Romania will promote investments that respond to all 11 Thematic Objectives as defined by the EC Regulations. The socio economic analyses made have shown the importance of supporting a wider variety of actions, that contribute, in a complementary manner, to achieving the set objectives.

Experience has shown the importance - as well as the difficulty - of coordinating all efforts towards achieving the set goals. Strengthening the capacity of the public administration is essential and acts as a pre-requisite to the success of all interventions planned and achieving real convergence with the EU. At the same time, well-designed tools (such as conditionalities systems and performance mechanisms) can improve the functioning of at least the parts of the public sector dealing with EU funds. A better focus on results and performance, together with improved efficiency and effectiveness in the use of the funds will be targeted at all levels.

Valorization of endogenous potential, both at national and regional level, requires concentration of interventions in the high value added areas that can boost economic growth and promote socio-economic cohesion (areas to be included based on the results of the National Strategy on Smart Specialization).

On the other hand, achieving territorial cohesion requires consistent actions towards reducing the regional and territorial disparities. In order to achieve its goals, Romania intends to make use of the opportunities offered by the Regulations in regard to the Integrated Territorial Investments and the CLLD. The functional approach of the strategy will be essential in capitalizing the existing potential of the urban centers and promoting cohesion. #% of resources will be devoted to this approach, promoting ITIs in areas such as the Danube Delta, Prahova Valley or the Black Sea Coast, as well as in the growth poles.

The strategy reflects the principles of the Regional Development Policy and takes into account the EU Community Strategic Guidelines:

- To stimulate growth and exploit the development potential of the Regions
- To reduce the disparities between Bucharest–Ilfov and the other Regions
- To arrest the chronic under development in the Eastern and Southern Regions
- To reduce social exclusion for vulnerable social and ethnic groups
- To promote an integrated approach to territorial development and focus intervention in specific areas (through ITIs)
- To promote a bottom-up approach to territorial development (through CLLD and LEADER approach),
- To improve the attractiveness of the Regions
- To enhance programme management and implementation expertise at regional level.

The Development Strategies of the Regions represent efficient instruments in defining the development needs of the regions and crafting the most effective interventions. These strategies build on the regional potential and aim to exploit comparative advantages to promote growth, as well as to reduce intra-regional disparities and fight social exclusion by responding also to the needs of the most deprived or mono-industrial areas that have specific needs.

### **An Effective Mix of Priorities**

#### **1. Improving human capital through higher employment and better social inclusion and education policies**

*Achieving the target set by the National Reform Programme in the context of EU 2020 Strategy requires significant efforts to improve national policies, as well as to achieve economic performance in support of growth and development. Employment, education and social cohesion remain important concerns and Romania is committed to take all the necessary measures to address these.*

*The objectives of this funding priority will be achieved by interventions corresponding to the following thematic objectives: TO 8 ,Promoting employment and supporting labour mobility’, TO 9 ,Promoting social inclusion and combating poverty’ and TO 10 ,Investing in education, skills and lifelong learning’.*

*The main actions will solve the institutional problems of an excessive and inefficient government bureaucracy, increase the education levels of the population, as well as improve participation in the labour market. These priorities will be pursued focusing on groups at risk of poverty and social exclusion, which are increasing in size and intensity. Moreover, poverty and social exclusion will be also fought through specific measures. Another set of policies will target social and health policies.*

*Improvement of the functioning of public administration and especially of the relevant stakeholders for HRD strategies within and outside public administration, both at central and local level will be targeted with priority, in order to improve the efficiency and effectiveness of the strategies designed and implemented. Creating a good foundation for growth and enhancing competitiveness, as well as for*



*promoting social cohesion requires significant efforts for reforming the public sector and strengthening the administrative capacity of the main stakeholders, by promoting quality and performance, together with a goal oriented approach and more efficient procedures and clear responsibilities. A coherent legislative framework will be defined, together with the necessary implementing tools (such as integrated databases, monitoring tools, performance system etc.), aimed at creating synergies and complementarities of the interventions planned, as well as eliminating problematic overappings.*

*The situation of the young people on the labour market is deteriorating, in the context of an increasing share of youth not in employment, education and training. Specific measures should will be designed to respond to this challenge, in a coherent mix, including both measures to improve their educational level, in strong relation with the market needs, as well as actions aimed at faciliating employment (such as counselling, dedicated apprenticeship programmes or cooperation networks between educational institutions and employers).*

*Among the first priorities is improvement of the level of education of the young population (as a brickstone of success in life), as well as the level of general and specific skills and competences in the adult population, in the context of an increased relevance of the education and training to the labour market will be targeted with priority. Efforts will be directed towards reducing early school leaving and increasing access to and participation in the educational system, as well as improving the quality of education and training at all levels. Gender, as well as urban or rural location affect these phenomena: boys leave school early more than girls and achieve lower levels of education.*

*Moreover, specific problems impeding access and participation to education will be tackled and measures will be dedicated to improving the quality of education: investments in extending and modernizing the physical educational infrastructure (upgrading school buildings, making them fully accessible to handicapped students, teachers, and other personnel, improving access in isolated territories or in the rural areas, creating and equipping language, math, and science laboratories) as well as "soft" measures aiming at supporting students from a disadvantaged background (e.g., providing transport or other types of support to the families with poor material situation) . This requires a territorially specialised approach, focusing on rural areas (where early school leaving is higher) and adapting the design of intervention on the feature of the targeted people. Complementarities and synergies with national policies should be created and enhanced.*

*In the context of the current demographic trends, with the negative increase of the population, as well as significant migration to other EU Member States, efficient active and preventive labour market measures will be promoted as to increase participation in the labour market. A special focus will be on the less-represented categories on the labour market, such as young people, vulnerable groups, and people currently employed in the shadow economy and in low-productivity or subsistence agriculture.*

*Specific measures will be designed to respond to the situation of youth not in employment, education and training (NEETs): both measures to improve their*

*educational level, in strong relation with the market needs, and actions aimed at facilitating employment (such as counselling, dedicated apprenticeship programmes or cooperation networks between educational institutions and employers). The situation of young people on the labour market is deteriorating and the share of NEETs is increasing.*

*The policy mix will offer customized, specifically designed solutions for the different problems encountered by different groups, based on a thorough analysis of the needs in relation to the access to the labour market, rather than general measures. Aspects related to the barriers encountered by different vulnerable groups, such as Roma, the elderly, or persons with disabilities, should be also tackled, complementary to the direct active measures designed. Gender interventions will redress the situation of women who, notwithstanding higher educational achievements, fare worse in the labour market than men, achieving lower activity rates, being more prone to undeclared work, and earning lower salaries.*

*Poverty and social exclusion. Efforts will also be made to bring the shadow economy to work in the open, by complementing the legislative initiatives with actions aimed at strengthening firms, raising the effectiveness of controls, and improving educational level and employability of the persons currently involved in the shadow economy. The actions should will to respond to the underlying causes of such a phenomenon, including corruption and scarce capacity of the public sector in dealing with the private sector.*

*Social exclusion and poverty act both as a cause and effect of the current problems on the labour market and in the educational system. Efforts need to be directed towards reducing poverty and social exclusion by improving access and participation to education and to the labour market and to quality basic services, as well as health and social services.*

*A special attention will be paid to reducing poverty and social exclusion, by promotion of integrated plans for ensuring a coherent framework for the necessary interventions in these areas. Actions will be also accompanied by awareness raising actions aimed at combating social exclusion and discrimination of any type.*

*Mapping of poverty (including set-up of integrated databases and data collection systems) and design of integrated strategies to respond to the specific identified needs of the vulnerable groups and disadvantaged areas will be supported, in order to to fight poverty and promote social inclusion. Support envisaged includes complementary actions (both soft and infrastructure related investments) in areas such as improving the level of education and employment, improving access to quality basic services, as well as health and social services, and improved housing.*

*Health and social services. Investments in health and social services will be oriented towards improving equal access and quality, as well as to increasing the efficiency of the system. through more and improved infrastructure and system improvements. A special attention will be paid to the vulnerable groups, such as Roma people, children, people with disabilities, the elderly, people living in poor or isolated areas.*

*Significant efforts will be directed towards upgrading the health and social*

*infrastructure, with a special attention to the rural and most deprived areas. Efforts shall be continued to modernize the health system in particular, by implementing the necessary reforms, as well as ensuring the necessary human resources in the field (both in terms of number and of competence range and quality level). An efficient management of all existing and potential resources will be ensured at all levels. The capacity to provide social services will be enhanced, together with the necessary infrastructure. Alternative and more efficient solutions will be identified in order to best and more timely respond to the needs of most vulnerable groups. The experience and knowledge of the non-governmental sector will be valorized, as to maximize impact and efficiency of the interventions.*

*Public private partnerships will be enhanced, together with an enhanced role of the civil society, in order to improve efficiency in implementation of the measures planned. A bottom up approach will be encouraged, as to ensure a closer and better response to the needs identified. Moreover, actions will be implemented through integrated strategies, as to ensure complementarity of interventions.*

*Experience from the LEADER approach will be valorized in order to improve attractiveness of the rural areas and less-developed, disadvantaged or mono-industrial urban areas. Integrated strategies will be developed for these areas, as to respond to their needs, by creating and exploiting synergies and complementarities and orienting all efforts towards the common goal of socio-economic development.*

*The social economy, including set-up and consolidation of social enterprises, will also be promoted, as an efficient tool to combat poverty and social exclusion. Adequate support structures and financing should be ensured, in order for such initiatives to be properly implemented.*

*All interventions will be designed and implemented as to best respond to the needs in regard to the existing urban-rural and territorial disparities.*

## **2. Developing modern infrastructure for growth and jobs**

*The objective of this priority is to provide the economy and society with effective, equitable, and sustainable physical and digital communications. It will be achieved by interventions in the framework of two thematic objectives: TO 7 'Promoting sustainable transport and removing bottlenecks in key network infrastructures' and TO 2 'Enhancing access to, and use and quality of, information and communication technologies'.*

An underdeveloped infrastructure acts as a barrier to growth and social cohesion. Romania's advantageous geographical position and its potential functionality as a regional relay between East-West and North-South can only be exploited in the context of improved accessibility, in terms of both physical and digital networks and broadband infrastructure.

### **Transport**

The development of transport is a pre-requisite for achieving economic growth. Actions will have to strike a balance between development of various transportation

modes in the context of huge development needs and limited resources. The main investment priorities in the transport sector will be defined through the General Transport Master Plan (GTMP), which is currently under elaboration. This will include the development of the National Transport Model and corresponding data bases, elaboration of traffic flows forecast for all transport modes, identification and prioritization of transport policy measures and investment projects in transport, as well as socio-financial analysis at programme level, elaboration of a development strategy of national transport system and elaboration of SEA.

Improving administrative capacity is a priority in order to improve effectiveness of the interventions in the sector. Significant efforts are needed to reform the sector, by restructuring and reinforcing the road and rail agencies so that they become better at programming, building, and maintaining infrastructure and at providing equitable and efficient transportation services. Strengthening the management capacity of relevant actors implies eliminating the main barriers in the system, impeding efficient and effective implementation of the interventions planned, such as public procurement arrangements and procedures, legislative and contracting obstacles, delays in project development and management, low levels of knowledge and skills of the personnel in the relevant agencies, conflicts of interest etc.). Technical and organizational sustainability will be pursued. Towards this purpose, public private partnerships or concessions will be analyzed in relation to the various investments planned.

The GTMP and the National Transport Model will be the ground for future programming activities in transport sector: no transport project will be financed by Structural Funds unless it is included in the Plan. Until the approval of the Master Plan, the Ministry of Transport has identified some projects that can be defined as "no regret projects", which will be supported regardless the results of the Master Plan. Approval of the Plan is expected by 20##. If this deadline is not met, no other transport project will be admitted to Structural Fund support.

The top priority for identifying 'no-regret' projects is filling the gaps in the development in the TEN-T road network: completing the motorways on the core corridor, ensuring the main national connections among the major cities. Eliminating existing bottlenecks, reducing travel times and increasing traffic safety are aspects to be considered in designing the necessary interventions. Within the projects qualified as 'no-regret' projects, the most important projects that will be supported will aim to fill in the TEN-T corridors gaps, namely: the Dumbrava-Deva motorway (50 km) and Sibiu-Pitești motorway (120 km).

'No regrets' investments in the development of the rail network, at the appropriate speeds and quality standards, will target to increase the usage of rail transport, in terms of both passengers and freight traffic. Investments will include support for lines, as well as for rolling stock. Within the projects qualified as 'no-regret' projects, the most important projects that will be supported will aim to fill in the TEN-T corridors gaps, namely: Radna-Simeria (113 km), Predeal-Brașov (26 km) and Brașov-Sighișoara (129 km).

A special attention will be paid to increasing traffic safety, through carrying out the necessary ERTMS investments.

Connectivity and accessibility of the different country's regions, especially of isolated areas will be enhanced. Identification and implementation of the most appropriate solutions (in relation to the balance of road/rail or even water transport connections) will be targeted.

Romania has a high potential in regard to the inland navigation, in particular along the Danube. This potential will be exploited, in cooperation with other concerned countries, as well. The priority, 'no regrets' project in this area is represented by the common corridor Romania-Bulgaria (488 km). Development of related infrastructure, such as berthing and port facilities will be also promoted, with the aim of developing maritime connectivity, as well as coastal tourism, in strong relation with Romania's development potential in these sectors.

Inter-modality of different types of transport will also be supported, through the development of inter-modal platforms. This will benefit also of the planned investments and increased efficiency in the area of road and rail transport.

Support will also be ensured in relation to the EU cross-border infrastructure, given Romania's geographical position at the limits of the EU, including investments in modern equipment and performing systems, necessary to undertake the activity in conditions of improved efficiency and effectiveness. Administrative capacity in this regard will be also reinforced.

### **Enhancing access to and use and quality of information and communication technologies**

A primary goal is ensuring a good digital accessibility, which, besides geographical accessibility is essential for the economy to develop. The IT&C sector contributes directly to the increase of the GDP, by facilitating communication and creating the conditions for economic growth. In order to benefit from the advantages of the information society, in the context of both personal life and in the economic activity, it is essential to have a good access to modern IT&C technologies and services.

The main investment priorities in the sector are defined through the National Strategy on Digital Agenda, which is currently drafted and **will be approved by the Government in...** The plan will contribute to strengthening the administrative capacity at the level of the most important central and regional actors, in terms of developing the planning, monitoring and management capacity, as well as developing a coherent legislative framework for implementation are top priorities in order to ensure effectiveness of all interventions planned. There is a need for coordination between public bodies and for ensuring complementarities of interventions that might weaken implementation.

The lines of actions foreseen include: transformation of public sector functioning supported by e-government and open government practices and concepts; providing

safe and reliable internet access to all (through both physical investments and "soft" interventions aiming at fighting criminality and at reducing barriers to access).

Investment will be directed with priority towards improving *e-Governance*, by ensuring the inter-operability of the IT systems of the public institutions, as well as improving cloud computing and social media. Government-owned data will be made available through open databases, supporting the transformation of public services and the improvements in institutional capacity through Open Government concepts and practices. Such features will be provided at the level of all public institutions, aiming at improving online collaborative and electronic systems. This will improve efficiency at the level of the entire public administration, as well as improve communication with the citizens and economic and social actors. These advantages, however, do not automatically follow the construction of the infrastructure and the increase in equipment endowment. It is necessary to establish new, improved ways of operating for the public sector, cutting red tape, imposing traceable internet transactions for all interactions between citizens and the state, and ensuring that appropriate devices (e.g., availability of computer terminals in pharmacies) are put in place to avoid discriminating against older people and poorer people.

Actions will be launched in order to fight criminality in informatics, as well as in order to valorize the existing potential related to highly skilled professionals in the sector, by developing a relevant digital achievement for Romania.

Development of basic skills competences for citizens, stimulation of digital education resources, and integration of modern technologies in the education process will also be supported in the context of consistent and integrated *e-Education* investments. The most effective implementation approaches will be identified, and a special attention will be paid to the rural or isolated areas as well as avoiding perpetuating gender digital divides in younger generations. Social integration and inclusion will be targeted, by improving access of vulnerable groups (such as Roma) to IT based resources, as well as by developing special instruments dedicated to the needs of the most vulnerable groups.

Modern ITC technologies will also be developed in support of cultural development, with the help of *e-Culture* instruments, in order to valorize Romania's significant potential in the field. Digital cultural heritage will be supported, as an instrument to enhance knowledge and competences in this area by supporting the dissemination of cultural heritage in Romania and abroad, as well as for promoting and developing cultural tourism.

*E-Health* type instruments will also be supported, complementary to the interventions in the field of health infrastructure and in support of the restructuring and reform of the health and social system. Large-scale use of such instruments, set-up and consolidation of integrated databases at national and regional level (including both public and private health units), development and use of modern instruments such as the Electronic Health Card etc. will be supported. Set-up and integration of comprehensive databases, with effective data-collection systems will help respond to the needs of the most vulnerable groups, by ensuring a correct and complete identification of their needs.

*Research and development, as well as innovation* will be promoted through the initiation of specific programmes in these fields, together with dedicated mechanisms and instruments for the set-up and consolidation of innovation clusters and competitiveness poles, both at national and regional level. The instruments developed will be tailored according to the sectoral or regional specific needs and taking account of the development potential, as identified by the National Strategy on Smart Specialization, which is currently under elaboration.

*E-commerce and development of ICT based instruments* for companies will also be supported in order to increase the competitiveness of the Romanian companies on both national and international market, in the context of modernized processes and operations as well as increased productivity.

The programmes will fund investments in modernizing and extending the *broadband infrastructure*, with a special focus on white areas. In the context of the globalized and more and more interconnected economy, the insufficient endowment in terms of IT&C impacts directly on the capacity of the isolated communities and disadvantaged groups to access socio-economic development. Ensuring the necessary connections and improving access to broadband infrastructure will improve access to better education and to the labour market, through an improved access to information and improved connectivity.

The interventions supported will impact growth and cohesion and will contribute to increasing attractiveness of Romania and its regions as a place of living and investing. Integrated approaches will be targeted for improving effectiveness of the interventions, when needs stem from different sectors.

Actions can be complemented by interventions aimed at improving the IT skills and competences of the population, as to be able to access the opportunities offered by improved IT&C, as well as to improve the overall skills level of the population. Complementary interventions in regard to the IT&C infrastructure, inter-operable systems, e-type instruments and soft measures will contribute to the reduction of social exclusion, through improved access to information and opportunities in both education and on the labour market.

### ***3. Promoting economic competitiveness and local development***

Improving Romania's competitiveness is key to promoting and achieving growth. Actions will focus on improving the business environment through reform in the operation of and requirements from the public sector in various realms, but mainly in the research policy, as well as on the actions facilitating innovation and those targeting to improve research. Actions will also target to improve access to finance for SMEs.

The main competitive weaknesses relate to the low competitiveness and productivity of the Romanian companies, in the context of poor innovation and limited financing to the RDI sector, poor access to financing and dispersion of efforts, mainly to the low-tech and low value-added sectors.

The connection of the R&D sector and the education and training sector with the needs of the economy and those of the labour market remain poor. Moreover, in spite of progress registered in the last years, the business environment remains unfriendly, excessively bureaucratic, with complicated and time-consuming procedures and difficult, sometimes unclear, legislation.

Rural areas confront themselves with specific problems, in the context of underdeveloped basic infrastructure, poor level of entrepreneurship and poor access to finance, poor educational level of the population, migration and demographic ageing of population. Inconsistent approaches in terms of legislation, frequent legislative changes or absences of legislation in relation to some of the activities add to the problems. In spite of their known potential, agriculture and fisheries are limited by the persistent problems in the rural areas and at the level of the economy and continue to be confronted with excessive fragmentation and small-scale activities, with low productivity.

In order to achieve the objectives of this funding priority, interventions are planned in the framework of the following thematic objectives: TO 1 'Strengthening research, Technological development and innovation' and TO 3 'Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector (for the EAFRD) and the fisheries sector (for the EFMM)'.

### **Research, Development and Innovation**

The long-term competitiveness of the economy and its capacity to grow and create jobs, through higher value-added and sustainable investments, is conditioned by the application of an efficient Research & Innovation (R&I) policy and the development and implementation of dedicated, specialized interventions in this area.

The "National Strategy RDI 2014-2020", which is currently under development, shall define the most efficient policy mix focusing on a limited number of priorities. The strategy is built on the analysis of the R&I-based growth potential and on modern foresight methods and it includes also the analysis of potential partners in other regions and avoids unnecessary duplication and fragmentation of efforts. The strategy also has a strong regional focus and will define the main priorities for R&D at regional level, taking into account the specificity and the growth potential of the regions.

Support for technological transfer and protection of intellectual property, together with actions aimed at improving the business and innovation environment will be implemented with priority. Within this context, at juridical and regulatory level, a priority is the revision of the patent law in order to remove the unnecessary red tape, as well as clarify the relationship between employer and employee regarding the rights of patent etc.

Moreover, measures will be implemented to attract young, promising researchers from abroad and retain young researchers to remain in Romania. Such measures will be implemented in strong complementarity with promoting an increased relevance of R&D to the economy and the labour market, by strengthening the involvement of the academia in the R&D efforts of the Romanian private sector.



Increasing the practical applicability of the research results generated by the public sector and use of RDI results for orienting the economy towards higher technology and higher value-added sectors will also be supported. Actions will aim at boosting demand driven R&I capacity (both public and private) by granting incentives to companies that employ staff for RDI activities, as well as by encouraging partnerships in research programmes for vital sectors of the economy and support public research institutes in the area with potential of transferability and application in the economy will increase the R&I capacity and infrastructure of the Romanian economy.

As regards the agricultural sector, efforts will be focused on regional research and technological centers/ clusters, as important tool in transferring research into the local and regional business and communities. Their development around the universities (taken their research and human development functions) can contribute to both increasing the absorption capacity of the private sectors/ SMEs, but also to address grand societal challenges in the coming years.

Developing and implementing adequate legislation aimed at promoting measures to encourage the development of Masters Degrees / Doctorate programs in partnership with private companies, taking into account labor market demand and its dynamics will also be supported, in order to improve cooperation of education and research institutions with the economic actors.

The integration of the Romanian institutions within the international networks will be also promoted, by promoting the participation in the transnational programmes and Horizon 2020 (linking emerging centres of excellence and innovative regions in less developed Member States to leading counterparts elsewhere in Europe; building links with innovative clusters and recognising excellence in less developed regions; supporting access to international networks for researchers and innovators who are less involved in the ERA or from less developed regions; contributing as appropriate to the European Innovation Partnerships; preparing national institutions and/or clusters of excellence for participation in the Knowledge and Innovation Communities (KICs) of the European Institute of Innovation and Technology (EIT); and hosting high-quality international researcher mobility programmes with co-funding from the "Marie Skłodowska-Curie Actions").

## **Enhancing the competitiveness of SMEs**

### Business environment

Enhancing the competitiveness of the Romanian companies requires the existence of a friendly business environment that can foster development in all sectors, especially for SMEs. Actions in this regard will target to improve access to specialized services and up-to-date equipment and infrastructure, access to quality consultancy and advisory services, together with improved access to finance. Support will be granted for the entire life cycle of enterprises from setting-up, for all types of services needed, addressing the different difficulties that hamper their development.

The economic crisis placed a huge pressure on the economy at global level, with companies all over the world facing financial and operational difficulties. Providing a

coherent and stable legal framework, including measures to stimulate and foster investments, is essential. The policy will aim at increasing resilience vis-à-vis external shocks through reforms and conditionalities. Current legislative gaps and incoherencies in relation to some sub-sectors, especially in the field of agriculture or fisheries will also be addressed, together with simplification and harmonization of procedures at all levels needed.

Measures to reduce production costs in agriculture (continue to implement measure to reduce diesel fuel excise, providing low-cost energy for irrigation) will also be implemented. A unified approach at territorial level regarding environmental requirements and standards will be targeted. In order to foster entrepreneurship in rural areas, measures foreseen will give priority to funding start-ups **for the business sector interventions**.

#### Access to finance

Access to finance will be improved by designing and implementing a range of products adapted to the specificity of Romanian SMEs, including a combination of credit and grant to facilitate full project implementation, as well as risk sharing innovative financial instruments, such as micro-finance (especially for start-ups), micro-credit revolving schemes, guarantee and counter-guarantee facilities, equity investment in innovative businesses, etc.

A special attention will be paid to ensuring a good penetration of banking and non-banking financial services in rural areas, as well as ensuring quality financial advisory and entrepreneurial services for small farmers and entrepreneurs from rural areas.

#### Consolidation of the existing SME sector in Romania (including microenterprises)

With almost 18% of the population acting independently in business life, Romania is scoring satisfactorily in terms of entrepreneurship. However, given that almost 90% of the Romanian companies still fall into the microenterprises category, efforts will be oriented towards capitalizing on the existing base and potential and help companies grow, in the context of improved business environment and better access to finance.

Complementarities with the interventions in the RDI sector will be created and built upon, as to stimulate investments in the higher added value and high tech sectors. Innovation and knowledge based instruments and tools will be promoted. Synergies will be sought with the interventions in the field of human resources development, by integrating training and LLL to the support, as to improve the competences and skills of personnel in the strong relation with the needs of the business sector. Moreover, investment in modern, non-polluting technologies will be supported, together with increase of energy efficiency and savings in all sectors, in the context of the need to promote sustainable development, by protecting the environment and increasing resilience to climate change.

Investments should be concentrated in sectors where Romania and its regions have a comparative advantage and that can act as real growth engines, as they will be defined in the framework of the National Strategy for Smart Specialization that is

currently under elaboration, and they should look towards exploiting the existing regional or sector level potential.

Given the important role played by foreign direct investments towards promoting economic growth, increasing the level of FDI and ensuring a balanced territorial distribution of investments is a priority. Romania's competitive advantage in regard to the medium skilled and relatively cheap labour force will be exploited. The measures aiming at improving infrastructure and business accessibility, together with those targeting legislative and fiscal stability and coherence will contribute to promotion of FDI. Additional active promotion measures will be implemented, taking account of the existing regional and sectoral development potential.

#### Development of clusters and competitiveness poles

Given that clustering is a tool for increasing competitiveness under certain conditions (e.g., agglomeration advantages from proximity of firms in the same production line, low transaction costs, and low barriers to entry), support for clustering and competitiveness poles will be treated with priority, in order to foster the development of viable enterprises, that have potential for growth and consolidating on the existing business base and potential.

In this context, support will be targeted towards development of clusters, excellence centers or promoting investments in the context of growth poles, as to create synergies and complementarities of efforts and interventions. Within this effort, a key group of action will improve access to shared facilities and high quality services (including in regard to improved access to finance and quality consultancy) and infrastructure for all actors and it will shape training and LLL according to the needs of the cluster.

#### Agriculture and fisheries

Given the geographical position of Romania, its landforms and specific climate, agriculture and fisheries have a high potential to develop. Given the large share of population living in rural areas, modernization of agriculture and fisheries can play an important role both in promoting and achieving socio-economic cohesion, as well as in ensuring a balanced development of the territory.

Actions will target the modernization of the agricultural and food industry sectors, in terms of capital and by ensuring the necessary financing and quality consultancy and financial services. Interventions will aim to capitalize on Romania's significant potential in these areas, through increased specialization. Synergies will have to be sought in relation to research and innovation, together with consistent efforts to enlarge and consolidate business base in these fields.

Modernization will include reducing the environmental impact of agriculture, by improving practices.

Specific support for start-ups and consolidation of the existing base (by granting support for growth) is envisaged as to foster development of these sectors, together with improving the access of agricultural producers and rural businesses to the markets, in the context of improved distribution channels. Actions will also target to increase the level of training and education of the rural population and to increase

entrepreneurship, by specially tailored programmes to respond to the specific needs of the communities and regions. Synergies will be created between the different types of actions.

Association and grouping of producers will be also promoted, as to improve productivity and efficiency. The role of producers' organizations and professional associations in developing specific legislation, collecting and monitoring data, as well as proposing and implementing improvements will be enhanced.

A key priority to foster development in these sectors is to provide a coherent legal and procedural framework, to eliminate the current barriers to development, due to excessive bureaucracy, heavy and non-specific legislation, high level of taxation and tax evasion etc. Actions will target the improvement of both legislative and business environment, in regard to increased access to finance, simplification of regulations, improved consultancy services etc.

### **Local development**

Efforts will target the development of rural **and small-towns** infrastructure, in order to increase attractiveness for investors. Complementary actions in other areas, such as education and training, infrastructure development, environmental actions etc. will also be supported. Synergies will be created and exploited, by promoting and supporting integrated strategies aiming at achieving local development and social cohesion.

Bottom-up approaches will be encouraged in the framework of LEADER or CLLD type initiatives, in order to best respond to the identified needs of the regions. Investments will be also supported in line with the identified potential of the regions or territories concerned.

## ***4. Optimising the use and protection of natural resources***

A key challenge and, at the same time, opportunity for Romania is to improve the use of its natural resources, in order to foster the sustainable development of the country, by protecting the environment and adapting to the negative effects of climate change.

In order to achieve the objectives of this funding priority, interventions are planned in the framework of the following thematic objectives: TO 4 'Supporting the shift towards a low-carbon economy in all sectors', as well as TO 5 'Promoting climate change adaptation, risk prevention and management' and TO 6 'Protecting the environment and promoting resource efficiency'.

### **Energy efficiency and enhanced use of renewable energy sources**

The overall goal is to reduce emissions of greenhouse gases and other pollutants. This will be achieved through a large improvement in energy efficiency and in a shift in energy production towards renewable energy sources.

According to the targets set in the National Reform Programme in the context of Europe 2020 Strategy, Romania aims to achieve a 19% reduction in the primary energy use comparing to the projected levels by improving energy efficiency, to reduce the GHG emissions by 19% compared to 1990 levels, as well as to achieve a 24% share of the renewable energy sources in the total consumption.

The Romanian Energy Strategy 2007–2020, transposing the Directive 2006/52/EC on energy end-use efficiency and energy services, is currently under revision by the Ministry of Economy and includes components dedicated to energy efficiency in industry, transport and residential and public buildings, as well a dedicated section for renewable energy.

Energy efficiency will be pursued in the industrial sector, by promoting less energy-intensive production and use of modern, non-polluting technologies, especially by large energy consumers. Specific conditions for granting aid and support to industrial firms will be designed as to encourage energy savings. In order to improve efficiency of such support, an assessment of investments and savings potential, together with programme structuring (including related to implementation arrangements, co-financing or project management) are currently under analysis. Appropriate actions will be adopted in relation to the adaptation of the legislative framework as to complement and support measures in this field.

Specific actions will be implemented in order to reduce the energy intensity in the transport sector, where the consumption has remained practically unchanged since 1999. Investments will be supported in the framework of a coherent strategy, including renewal of rolling stock and improving the traffic management and logistics for railways. Similar measures will be taken for local public transport. Fiscal measures aimed at promoting energy efficiency (such as variable taxes, according to the fuel consumption) together with pricing and tolling systems, will also be implemented, to encourage collective transport and improve logistics for all modalities, in such a way as to provide the appropriate incentive set to private operators in road transport, sea and river transport, and air transport for passenger and freight.

The reduction of the energy consumption in the housing sector, given the extent of the problems in this area, will be given a high priority. Improving energy efficiency in residential buildings, by thermal rehabilitation, as well as through increased use of renewable energy resources, will be supported through aid and credit schemes and improved regulations and controls. To this aim, the *Financing Strategy for investments in residential sector, including the identification of specific financial mechanisms to support energy efficiency and renewable energies for residential buildings* is currently under elaboration. The most appropriate financial instruments and the criteria for target groups will to be defined in this context, in order to ensure the effectiveness of these types of measures.

Improving the efficiency of district heating transmission and distribution systems will also be supported, given their importance, both from an economic point of view, and in terms of social impact. The gas transport and distribution networks are in advanced stage of depreciation, and are highly consuming energy. Support will be granted in this regard to improve efficiency and achieve energy savings.

Energy efficiency in agriculture will also be supported, by promoting use of biofuels for mechanical agricultural work and set-up of energy management systems at all levels.

The legislative framework will be harmonized with the *acquis communautaire*, in regard to enforcing a series of measures to promote investment in the building sector, mainly in relation to energy performance certificates, energy audit, boiler or air conditioning efficiency inspections etc., as well as to eliminate the regulatory provisions that currently act as barriers to investment and achieving competitiveness. The development of the market for energy services, particularly ESCOs, alternative financing mechanisms and PPP arrangements, will be supported in order to promote energy efficiency and foster development.

Production and use of renewable energy sources will also be promoted in order to exploit the huge potential Romania has in this area. Investments will be supported to exploit full potential, especially in regard to the less valorized resources, such as wind, biomass and solar energy. Use of RES will be intensified in order to ensure energy supply for the isolated communities, but also to support the economic activities, as to reduce the economy dependency from imports of primary energy.

Measures will include environment protection through modernization of energy producing plants will, given the high risks posed by this sector and its increased level of pollution.

In the energy production industry, in addition to renewable sources, high-efficiency co-generation of heat and power will also be supported. Institutional capacity development is essential in order to ensure effectiveness of the actions planned. Actions will be supported in this respect... (detail more).

### **Reduction of GHG emissions**

Dedicated strategies at sector level will be developed and implemented in order to minimize the total GHG emissions and reduce the impact on the environment. Improving the use of RES will be supported, as well as the large-scale use of modern, energy efficient techniques and technologies.

Moreover, support will aim to improve waste hierarchy, as to minimize the negative effects of poor waste management and poor sewerage facilities. Complementarities will be created with interventions in the field of environment, especially in the field of waste recycling, and the dedicated actions to enhance business base in industry and agriculture. Training of qualified personnel in order to enhance application of efficient management systems will also be supported.

Given the important role that forests have in absorbing higher quantities of CO<sub>2</sub>, afforestation will be intensified in order to increase absorption and retention of

green house gas emissions, as well as to reduce the risks of landslides and improve soil management. Implementation of efficient forestry management systems and modernization of forestry practices will be also supported.

### **Urban transport and mobility**

The development of the public transport will be promoted, in the context of carefully designed urban development plans, aiming to exploit the full potential of the Romanian cities and promote sustainable development.

Strengthening the administrative capacity of the responsible authorities in the field is a key for development of transport network and sustainable development. The high level of corruption, not very clear public procurement legislation, poor interferences among line ministries, public authorities and implementing agencies, weak administrative and implementation capacity of the responsible bodies contribute to the status-quo.

Urban issues will be supported in the framework of integrated strategies, aiming at ensuring coherence of interventions, as well as creating and exploiting complementarities with other interventions, such as those in the field of urban regeneration, improving energy efficiency etc.

Actions will be supported at the level of growth poles, in relation to development and implementation of urban mobility plans. Plans will pay specific attention to maintenance of existing rolling materials and to substitute obsolete vehicles with energy-efficient ones. Road maintenance and modal shifts (when appropriate) will form part of the plans. Support will be granted in the framework of coherent strategies, which will aim to improve planning, management and implementation at the level of the public sector.

### **Urban regeneration**

A series of actions aimed at urban regeneration will be implemented, as to improve living conditions and increase attractiveness of the Romanian cities, including actions aimed at rehabilitation of industrial polluted sites (including decontamination and reintroducing the sites into the economic circuit), investments targeting the rehabilitation of historical centers, as well as rehabilitation of the UNESCO patrimony.

Actions to improve energy efficiency in cities, especially in the public lightning networks, will also be implemented.

Actions will be implemented in the framework of coherent integrated strategies, as to created and exploit complementarities of interventions and to improve efficiency.

### **Risk prevention and management**

Romania has been confronted with extreme weather conditions in the last years, consisting of floods both on the Danube and the majority of internal rivers, as well as with extreme draught. Other risks such those related to heat waves, forest fires, landslides, earthquakes or new Industrial risks, also affect the Romanian population and the economy.

Strategic directions include implementation of actions to increase disaster preparedness and to prevent disasters. To this aim, a series of regulations and action plans on the management of emergencies, as well as evaluations of flood risk areas and risk management plans have been elaborated and approved, or are currently under elaboration. Moreover, the National Strategy for Flood Risk Management on medium and long term was approved in 2010.

A methodology for unitary assessment of the risks, aimed at harmonizing the results of the individual risk assessment, together with tailored guidelines for risk prevention and management project are currently under preparation and will be at the basis of the future interventions for risk prevention and protection against disasters.

Future support will aim to improve risk assessment and mapping, through the development of the necessary tools (systems and early warning detection, mapping and risk assessment) and increased investments in disaster management systems in order to improve the resistance to disasters and the risk prevention and management capacity.

The cooperation between local authorities and the relevant ministries will also be enhanced, especially in relation to the adaptation and prevention activities, as well as risk management, in order to better fight against the effects of cross contamination, especially regarding flood protection, protection of forests against fire and pest and protect the coastline.

### **Adaptation to climate change**

The priority in this area is reducing the impact of climate change on population's health, on biodiversity and on economic activities. The measures aimed improving adaptation to climate change will be implemented in the framework of the future National Strategy for Climate Changes 2013-2020, which will include measures, standards and specific areas for projects related to adaptation and will be approved by **December 31 20##**.

Actions will improve the responsiveness of the economy and society to disaster and emergency situations. Dedicated actions will be implemented to prevent soil degradation, erosion and landslides, as to ensure an efficient adaptation to climate change. Moreover, the investments in the field of irrigation will be done in strong synergy with the protection measures against floods.

Reducing the impact of climate change on biodiversity will be also supported, through improved management and risk prevention measures in naturalistic areas and in areas where human activity is putting excessive stress on biodiversity.



Measures aiming at adaptation to climate change will complement actions aiming at improving quality and resistance of infrastructure, improving building standards, improving access of the population to quality basic services etc.

In order to increase the effectiveness of the measures defined, actions will target to improve the inter-institutional cooperation, as well as to develop and consolidate the necessary skills at the level of relevant institutions for developing and implementing the most appropriate solutions. This will, however, require the construction of specific incentive systems for each institution. Dedicated research and innovation can support: there may be a need to devote resources to research and innovation in this field and in the related ones (such as construction materials and procedures).

## **Protecting the environment and promoting resource efficiency**

### Water and wastewater sector

The investments will be continued in the water and wastewater sectors, in line with the provisions of the master plans elaborated. Moreover, the efforts towards regionalization will be continued, with the aim of improving effectiveness and efficiency of interventions. The actions planned will contribute to enhanced socio-economic cohesion and to the reduction of regional and urban-rural disparities, by improving access to quality basic services.

In this context, actions in the *water sector* will target the refurbishment of drinking water treatment plants, together with measures for increasing safety and risk reduction in water supply systems. Use of the most advanced technologies and materials in the rehabilitation/ extension of water supply systems will be also promoted.

As regards the *wastewater treatment*, actions will target to ensure the connection of the agglomerations with over 10,000 PE to municipal wastewater treatment plants equipped with tertiary treatment, which ensures also the nutrients removal (such as nitrogen and phosphorus compounds). To this aim, the number of urban wastewater treatment plants endowed with advanced (tertiary) treatment will be increased, in order to comply until 2015 with the European directive provisions. For the agglomerations with a PE under 10000, actions will target to ensure connection to wastewater facilities ensuring minimum secondary treatment (biological treatment).

The *connection to sewerage systems*, according to the requirements of the Directive 91/271/EEC will also be improved for agglomerations over 2000 PE.

*Regionalization* efforts will be enhanced, given the importance of having technically and economically strong operators able to implement large investment projects, in the field of water and sewage services operation.

### Surface and underground waters

Additional actions will target to improve the *quality of surface and underground waters*, by implementing the necessary measures in regard to the wastewaters

evacuated in the surface waters, as well as by promoting reduction of the pollution of the aquifer, and that resulting from soils fertilizing and fighting against pests.

### Marine environment

Actions will be implemented in order to reduce or eliminate the negative impact of reduction and loss of biodiversity and contamination with dangerous substances on the marine environment. Since the pressure on marine environment is enormous, and only partially depends on activities which are under the control of Romanian authorities, particular care must be used in setting realistic (yet ambitious) targets and to cooperate internationally. Measures will be implemented in complementarity with actions aimed at restoration of the coastal area and improvement of the environment.

### Waste sector

Efforts will be continued and extended in regard to the investments in developing the integrated waste management systems, in order to meet the recycling targets for 2020.

Implementation of separate collection of the municipal waste will be supported and enhanced, in the context of integrated waste management systems. Complementary actions for promoting use of recycling materials in industry will be also supported.

Use of different treatment methods using specific waste streams will also be encouraged. In this context, investments aimed at reducing resource consumption and promoting the practical implementation of waste hierarchy (prevention, preparing for reuse, recycling, energy recovery and disposal etc.) will be promoted.

A number of actions will also be implemented in order to ensure compliance with the new requirements, including consolidation of integrated waste management systems, support of transition to low carbon investments and systems, promoting of energy efficiency, reduction in the total resource consumption by increasing the waste recycling ratio as well as promotion of a more efficient use of resources. Synergies will be sought and created with other financing opportunities, both for the public and private sector.

Significant investments will be implemented in relation to other types of waste, such as industrial or healthcare waste. Actions in this regard will target the improvement of industrial waste collection and waste, with a special attention to waste dumps and mine tailing ponds, due to the potential risk they represent.

This issue is particularly important in energy production and will be addressed in coordination with the other measures for energy.

### Air Quality

Actions will improve air quality and reduce the level of pollution with different substances, with a special focus on urban agglomerations, where the pollution is

higher. Synergies will be created and enhanced with other measures in energy efficiency, local public transport, environmental protection. In particular, investments in enhancing business base will support use of modern and non-polluting technologies etc., in order to promote a sustainable development.

#### Quality of soils

Actions aiming at improving the quality of soils will be promoted as to reduce negative impact of industrial and agricultural activities. Actions for contaminated sites will be implemented both on a stand-alone basis, as well as in the framework of coherent integrated strategies for urban regeneration and will target re-introduction of such sites in the economic circuit.

#### Biodiversity

A particular attention will be paid to promoting and exploiting Romania's huge potential in this field. **Detail actions aimed at promoting biodiversity**

In order to valorize the country's significant potential in biodiversity, actions will be implemented with priority to promote the Danube Delta Biosphere Reservation and exploit the significant tourism potential in relation to it.

Support will also target valorization of potential in relation to the pharmaceutical industry, tourism, agriculture and forestry, fisheries, in the context of an adequate and efficient management of existing resources and potential. To the same aim, relevant regulations and procedures will be adapted as to incorporate the principles of sustainable development in the regional and sectoral policies.

### ***5. Modernisation and reinforcement of the administration and judiciary***

Improving the quality of the public administration and that of the judiciary remains a priority for Romania. These are key elements to ensure citizens' rights through an effective and equal delivery of basic services, focusing on poor people and vulnerable groups as well as to ensure that the business environment improves, thus unleashing development potentialities. Moreover, actions will aim to maximize use and effectiveness of opportunities such as EU Funds.

A strong change is needed: Romania is among the countries with the lowest levels of absorption of Structural Funds, thus foregoing the opportunity to support investments in key sectors. In order to change this, it is necessary to engineer a drastic change in the way the public sector works.

The principles for the reform actions are:

- Focus on expected results, as to reverse the way policies are conceived and planned; feasible, concrete, measurable goals will be identified in the process, as to provide a guide for planners and for implementers, strengthen the public sector in resisting pressures, and allow for close monitoring, evaluation and public scrutiny of actions and results;

- Clear definition of activities in programming documents, in close connection with the expected results;
- Definition of a realistic time-frame and a monitoring system, allowing to detect early problems and solve them;
- Ensure sufficient openness of the system: monitoring and information systems will be established in all sectors and for all interventions;
- Evaluation. Results and processes will have to be evaluated, in order for all actors (the EU, planners, funders, implementing bodies, potential and actual beneficiaries, citizens, and firms) to learn from their actions.
- Conditionality. A strong incentive system, as well as a strong realism in conceiving policies will be targeted. Romania will undertake all efforts to make full use of the innovations from the new regulation, especially of the opportunity offered by conditionality.

### **Public administration**

The interventions planned aim to improve the efficiency and effectiveness of public administration and the quality of public services. To this aim, a strategy on strengthening the efficiency of public administration 2013-2017 is currently under elaboration. The actions envisaged target the consolidation of the administrative capacity, as well as ensuring a better regulation and improving the quality and access to public services.

Support will strengthen the coordination and improve the quality of public policy, focusing on implementation capacity and the ability of promptly providing services to firms and citizens, **at both central and local level**. Efforts will be directed towards developing the capacity of the public administration to develop evidence-based public policies and implement them, by providing incentive systems, by increasing monitoring and evaluation, by increasing public scrutiny of government actions through open data, by improving the skills of the relevant staff in key sectors and in key areas relevant for all work (such as gender issues, evaluation, targeting the poor, procurement and anti-corruption) in the entire public administration.

Data collection, together with set-up and development of efficient monitoring systems will also be supported. A key issue in this strategy is that government data be opened: this will both improve the functioning of the public sector (via the increased public scrutiny of its actions which data is freely available) and provide opportunities for the private sector (via offering new services using information previously unused).

Moreover, the capacity of the local public administration to provide high quality public services, in line with the responsibilities resulting from the decentralization process, will be enhanced. Efforts will target reducing the currently high regional and urban-rural disparities, in the context of a differentiated capacity of local authorities to provide quality public services. Interventions will target to promote the association among local authorities, to ensure better services and save on costs by taking advantage of scale economies.

Support will be granted for improving the planning, implementation, monitoring and evaluation skills of the administration, as to strengthen their capacity to deliver high quality public services, focus on disadvantaged groups, and promote growth and development. The quality of the human resources management at the level of the entire public administration will also be improved. Actions in this regard will be implemented in the context of integrated strategies, aiming at improving the skills and competences of the personnel involved, with the set-up of consistent **evaluation and performance systems.**

Enforcement of quality standards, together with a higher degree of transparency and orientation towards citizens' needs, will be promoted. In order to increase the public services performance, the correlation between standard cost and quality standards will be enhanced and there will be a focus on results, with the aim of improving the efficiency and effectiveness in the use of resources.

### **Judiciary system**

**[..] to be detailed**

### **Management of EU funds**

Support will also be targeted towards improving the administrative capacity to implement EU funds, given the importance played by such funds to promote economic growth and cohesion.

A plan was elaborated in this regard, including short term measures related to creation of a new civil servants category and tools for measuring staff and structures performance, measures for the next period 2014-2020 focusing on the institutional and procedural aspects, as well as measures envisaged for a longer term prospective addressing structural shortcomings related to public policy formulation and prioritization of investments. Further to its approval, actions will be implemented within its framework.

A special attention will to be paid to improving the coordination function of the management and implementation of EU funds, both at central and regional/territorial level, in order to improve efficiency and effectiveness of the interventions, as well as to eliminate bottlenecks and increase absorption. In the context of the concentration of the EAFRD and EMFF under the same umbrella with Structural Instruments, ensuring an efficient coordination of the funds will be of the outmost importance, as to create efficient systems to correlate the interventions and avoid overlapping, as well as to create synergies and complementarities.

Additionally, a new monitoring system for the interventions financed by EU funds will be implemented, aimed at ensuring a consistent and effective follow-up of the implementation process and strengthening the coordination process.

Actions will also target strengthening the capacity of the beneficiaries to develop and implement projects co-financed by EU funds, through the development of specifically tailored mechanisms at regional or local level.

