

EVALUATION QUESTION 1

What are the temporary measures and waivers referred to in Annex VII of the Accession Treaty and which are the investment needs deriving from the new requirements set by the Acquis which can be supported now or in the future through Structural Instruments?

The Treaty concerning the accession of the Republic of Bulgaria and Romania to the European Union of 25 April 2005 sets out the transitional provisions for Romania. They were laid down in Annex VII of the Treaty.

Annex VII specified Transitional measures in the following domains:

1. Freedom of movement for persons
2. Freedom to provide services
3. Free movement of capital
4. Competition policy (Fiscal aid; Steel restructuring)
5. Agriculture (Agricultural legislation; veterinary and phytosanitary legislation)
6. Transport policy
7. Taxation
8. Energy
9. Environment (Air quality; Waste management; Water quality; Industrial pollution and risk management).

Specific transition periods were agreed to enable Romania to comply with certain parts of the *Acquis Communautaire* – the body of legislation that binds the European Union. Subsequently, a volume of Directives and Regulations – *acquis* – has been enacted.

Transition measures regarding the Freedom of movement for persons and cigarette excise duty are protectionist measures imposed by other Member States and are not considered within this evaluation. Also, the Agriculture sector is not within the remit of this evaluation and, therefore, also not considered.

An overview of the transition measures, the legislative act and specific requirements are presented in **Table 1 - Overview of transition measures**. Each of the measures has a timeframe for compliance, the longest being until 2018 for waste water treatment.

Table 1 - Overview of transition measures:

Domain	Legislation	Content	Deadline	Status
Freedom to Provide Services	Directive 97/9/EC	investor-compensation	Incremental to 2010	Aligned
Free Movement of Capital	Treaty establishing a Constitution for Europe.	Land ownership	2011 / 2013	Aligned
Competition Policy	Treaty establishing a Constitution for Europe, Part III, Title III, Chapter I, Section 5, Rules on competition	Fiscal Aid	2010	Aligned
	Treaty establishing a Constitution for Europe, Part III, Title III, Chapter I, Section 5, Rules on competition	Free Trade Areas	2011	Aligned
	Treaty establishing a Constitution for Europe, Part III, Title III, Chapter I, Section 5, Rules on competition	Steel Restructuring	2008	Aligned
Transport Policy	Council Regulation (EEC) No 3118/93	Road haulage	2010	Aligned
	Directive 96/53	Road upgrading	2013	In progress
	Directive 1999/62	Vehicle tax	Incremental to 2009	Aligned
Taxation	Directive 77/388	Value added tax on international passenger transport	Indeterminate	Aligned
	Directive 2003/49	Taxation applicable to interest and royalty payment	2010	Aligned
	Directive 2003/96	Taxation of energy products (unleaded petrol)	2010 / 2011	Aligned
	Directive 2003/96	Taxation of energy products (electricity)	2010	Aligned
Energy	Directive 68/414	Petroleum product stocks	Incremental to 2011	

Domain	Legislation	Content	Deadline	Status
Environment Air Quality	Directive 94/63	Volatile Organic Compounds	Incremental to 2009	(Economic Operators)
Environment Waste Management	Regulation (CEE) nr. 259/93	Waste shipment monitoring	2011 (option to 2015)	Aligned
	Directive 94/62	Waste management (recovery)	Incremental to 2012	Aligned
	Directive 1999/31	Waste management (landfill)	Incremental to 2016	In progress
	Directive 2002/96	WEEE (electronic waste)	2008	In Progress
Environment Water Quality	Directive 83/513 Directive 84/491 Directive 86/280	Industrial discharges	2009	(Economic Operators)
	Directive 91/271	Waste water treatment	2018	In Progress
	Directive 98/83	Drinking water quality	Incremental to 2015	In Progress
Environment Industrial Pollution and Risk Management	Directive 96/61	Integrated pollution prevention and control	Incremental to 2015	In progress
	Directive 2000/76	Medical waste incineration	Incremental to 2008	Aligned
	Directive 2001/80	Industrial emissions	Incremental to 2013	In progress

As it can be inferred from the table above, and with more resolution in Annex 1, a number of the transition measures are designed to buffer Romania's economy / business sector and citizens against an immediate shock in joining the common market. **It can also be seen that here is a high degree of alignment.** The other transitions measures fall into a more long-term and strategic category concerning energy security, environmental protection and the transport infrastructure. Although some benefits of compliance should be apparent immediately, greater impact should be manifest in the longer term, as they provide a platform from which sustainable socio-economic growth can emerge.

Notwithstanding the challenges in meeting the demands for the required infrastructure development - as discussed later in this Report - and the fact that the deadlines have yet to

expire, **at the time of this evaluation overall positive progress towards meeting the Treaty obligations has been achieved.** However, a considerable volume of new *acquis* has been introduced since Accession and this includes legislation that supersedes that upon which the transition measures are based. Invariably this *acquis* is more demanding than its predecessor. These concern the single Directive (68/414) listed under the Energy heading and more than half of the directives and regulation listed under Environment. The legislation is in the following table:

Table 2 - Newly Introduced Legislation Amending or Corresponding to Transition Measure Legislation

Domain	Transition measure legislation	Deadline	New acquis	Deadline	Content
Energy	Directive 68/414	Incremental to 2011			Petroleum product stocks
			Directive 2009/11/EC	31.12.2012	
Environment Air Quality	Directive 94/63	Incremental to 2009			Volatile Organic Compounds (Petrol)
Environment Waste Management	Regulation (CEE) nr. 259/93	2011 (option to 2015)			Waste shipment monitoring
	Directive 94/62	Incremental to 2012	Directive 2013/2	30.09.2013	Waste management (recovery)
	Directive 1999/31	Incremental to 2016	Directive 2011/97	15.03.2013	Waste management (landfill)
	Directive 2002/96	2008	Directive 2012/19	14.02.2014	WEEE (electronic waste)
Environment Water Quality	Directive 83/513 Directive 84/491 Directive 86/280	2009	Directive 2008/105	13.01.2009*	Industrial discharges
	Directive 91/271	2018			Waste water treatment
	Directive 98/83	2010			Drinking water quality
Environment Industrial Pollution and Risk Management	Directive 96/61	Incremental to 2015	Directive 2008/1/EC Directive 2010/75	07.02.2013 06.01.2013	Integrated pollution prevention and control
	Directive 2000/76	Incremental to 2008			Medical waste incineration
	Directive 2001/80	Incremental to 2013			Industrial emissions

These new Directives serve to increase the already substantial investment needs that compliance with the obligations set out in the Treaty Annex VII transition measures. However, Romania's obligations under the Accession Treaty should remain as stated to the specific conditions and technicalities laid down. The new *acquis* becomes another obligation (as it does for all Member States) but does not 'up the ante' of the Treaty agreement.

As mentioned above, **a substantial volume of *acquis* has been introduced since Romania acceded to the EU. Much of this is of little or no particular relevance to Romania in terms of compliance. There are even fewer instances where compliance could be supported by Structural Fund investment.** It could be argued that any action to be taken by the public administration or any requirements to oversee adherence to the legislation could fall within the remit of administrative capacity development. However, these cannot be considered to constitute *investment needs deriving from the new requirements set by the acquis*. **The evaluation could identify no instances where Structural Fund investment in these 'soft' areas had been *needed* in the sense that otherwise Romania would fall foul of its Member State obligations or incur infringement procedures.** The utilisation of funds in these areas was more opportunistic than necessary. (This is not to disparage the utilisation of the funds but the purpose was not to achieve compliance with the *acquis* but for other and worthy reasons: e.g. socio-economic development and convergence.)

At the outset of this evaluation a **list of all *acquis*** (submitted with the Inception Report) was prepared and annotated as to the possibility of compliance being supportable by Structural Funds. **Although the list did not establish priorities it was evident that the Energy, Environment and Transport sectors have the greatest investment needs.** A comprehensive list of all projects supporting *acquis* compliance in these sectors is given in Annex 1.

An analysis of specific issues concerning the transition measures and investment needs for each of the three sectors –Energy, Environment, Transport- follows below.

ENERGY

Annex VII of the Accession Treaty has only one transitional measure for the Energy sector, Directive 68/414/EEC conferring obligations of Member States to maintain minimum stocks of crude oil and/or petroleum products. A transition period for compliance until 31 December 2011 is provided. Subsequently, Directive 2009/119/EC has been enacted and imposes an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products (the 2009 ‘Oil Stocks Directive’).

There are transitional measures that apply indirectly to the Energy sector, but they fall under the environment chapter (Annex VII, 9, p.182-207) and focus on: air quality, waste management, water quality, industrial pollution and risk management. In most cases, these measures target various enterprises/power plants active in the energy sector and their environmental impact.

As of July 1, 2013, the EU legislation comprised 413 acts on energy, distributed as follows:

Energy statistics (5); General principles and programs (100); Coal (81); Electricity (24); Nuclear (187); Oil and Gas (14); Other sources of energy (10).

For the purposes of this evaluation the acquis in force is considered under the following sub-topics: natural gas; electricity; coal and oil; energy efficiency (with the following subtopics: buildings, products, services and final consumption, vehicles); nuclear; renewable.

The current **acquis of primary importance to Romania’s energy sector** is as follows:

- **Directive 2009 /72/EC** (internal market in electricity);
- **Directive 2009/73/EC** (internal market in natural gas);
- **Regulation 713/2009** (ACER);
- **Regulation 714/2009** (cross-border exchanges in electricity);
- **Regulation 715/2009** (access to natural gas transmission networks);
- **Regulation 994/ 2010** (measures to safeguard security of gas supply);
- **Regulation 347/2013** (trans-European energy infrastructure, TEN-E);
- **Directive 2009/119/EC** (minimum stocks of crude oil and petroleum products);
- **Directive 2009/126/EC** (Stage II petrol vapour recovery during refuelling of motor vehicles at service stations);
- **Directive 2009/30/EC** (on the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions);

- **Directive 2009/31/EC** (geological storage of carbon dioxide - CCS);
- **Directive 2011/63/EU** (quality of petrol and diesel fuels);
- **Directive 2013/30/EU** (on safety of offshore oil and gas operations);
- **Directive 2009/28/EC** (promotion of the use of energy from renewable sources);
- **Directive 2010/31/EU** (energy performance of buildings);
- **Directive 2012/27/EU** (energy efficiency);
- **Directive 2009/125/EC** (eco-design requirements for energy using products);
- **Directive 2010/30/EU** (on labelling energy using products);
- **Directive 2009/33/EC** (clean and energy-efficient road transport vehicles);
- **Directive 2009/71/Euratom** (on Nuclear Safety);
- **Directive 2011/70/Euratom** (safe management of spent fuel and radioactive waste).

The following table details the Directives having financial implications for Romania and requiring investment, their objectives / targets and status of transposition and where national targets have been set.

Table 3: Directives having financial implications for Romania and requiring investment

Acquis	Target / Objectives	Romanian Legislation
Electricity and Natural Gas		
<p>Directive 2009/72/EC of 13 July 2009 concerning common rules for the internal market in electricity.</p>	<p>Grid reinforcements to cope with increased demand and supply, to cope with cross-border electricity transmission capacity, and take-up intermittent generation from renewable energy. In particular:</p> <p>Art 3.10: Member States shall implement measures ... which shall include <i>energy efficiency / demand-side management measures</i> and <i>means to combat climate change</i>, and security of supply. Such measures may include... <i>maintenance and construction of the necessary network infrastructure, including inter-connection capacity.</i></p> <p>Art 3. 11: “introducing intelligent metering systems or smart grids.”</p> <p>Art. 12: TSO responsibility to ensure long-term secure, reliable & efficient electricity system and availability of all necessary ancillary services.</p> <p>Art 22.7: investment obligations under the ten-year network development plan (TYNDP)</p> <p>Annex I: Member States shall ensure the implementation of intelligent metering systems; prepare a timetable with a target of up to 10 years for the implementation of intelligent metering systems; min. 80% of consumers shall be equipped with intelligent metering systems by 2020.</p>	<p>Law 123/2012 (Official Gazette no. 485/16 July 2012); Law 160/2012 (Official Gazette no. 685/3 Oct. 2012); + The Ten Year Network Development Plan, TYNDP (non-binding), agreed by the Romanian TSO (Transelectrica) with the ENTSO-E.</p>
<p>Directive 2009/73/EC of 13 July 2009 concerning common rules for the internal market in natural gas.</p>	<p>No quantifiable targets, but objectives that require financial investments, such as:</p> <p>Art 3.7: “<i>maintenance and construction of necessary network infrastructure, including interconnection capacity</i>”</p> <p>Art. 6.2.b: “<i>identification and, where necessary, development or upgrading of the electricity and natural gas interconnections;</i>”</p> <p>Art. 8: Design technical rules that have to ensure interoperability of systems</p> <p>Art 13. 2: “<i>Each transmission system operator shall build sufficient cross-border capacity to integrate European transmission infrastructure accommodating all economically reasonable and technically feasible demands for capacity and taking into account security of gas supply.</i>”</p> <p>Art.22.7: regarding the implementation of the TYNDP</p> <p>- Art. 23.2</p> <p>- Annex I (2): “<i>Member States shall ensure the implementation of intelligent metering systems (...)</i>”</p> <p><i>Member States or any competent authority they designate, shall ensure the interoperability of those metering systems to be implemented within their territories</i>”</p>	<p>Law 123/2012 (Official Gazette no. 485/16 July 2012);</p> <p>Law 160/2012 (Official Gazette no. 685/3 Oct. 2012);</p> <p>+ The TYNDP (non-binding), agreed by the Romanian TSO (Transgaz) with the ENTSO-G.</p>
Regulation (EC) No	Art. 6.5: investments required for enabling “ permanent bi-directional capacity on all cross	Regulations have direct

Acquis	Target / Objectives	Romanian Legislation
994/2010 of 20 October 2010 concerning measures to safeguard security of gas supply.	<i>border interconnections between Member States as early as possible and at the latest by December 3, 2013</i>	application.
Regulation (EU) No. 347/2013 on guidelines for trans-European energy infrastructure (New TEN-E Regulation)	Details the measures to be taken in order to fast track the 12 energy infrastructure priority areas by 2020 and the eligibility rules for Project of Common Interest. Of the 12 areas identified, relevant for Romania are: <ul style="list-style-type: none"> - <i>Electricity Corridors</i> (North-South Interconnections in CEE and SEE to complete internal market and integrate generation from renewable; - <i>Gas Corridors</i> (Southern Gas Corridor); - <i>Smart grids deployment</i>; - <i>Electricity Highways</i>; - <i>Cross-border CO2 networks and CCS</i>. 	Entered into force on 15 May 2013 Applies from June 1, 2013
Coal and Oil		
Council Directive 2009/119/EC of Sept. 14, 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products. (2009 Oil Stocks Directive)	Emergency oil stocks have to cover 90 days of net imports.	NOT TRANSPOSED (Deadline - 31 December 2012). Current Status: In Jan. 2013, the Commission sent a formal notice to Romania. In June 2013, the Commission sent a <i>reasoned opinion</i> calling on Romania to take action to ensure full compliance with the Directive. On Aug. 26, 2013 the Ministry of Economy published the Draft Law which was adopted by the Senate on Nov. 11, sent to the Chamber of Deputies where it is currently debated in the specialized commissions.
Directive 2009/126/EC of 21	Art 3. 1: Member States (MSs) shall ensure that <i>any new service station shall be equipped with a Stage II petrol vapour recovery system</i>	Deadline: Jan.1, 2012 HG 958/2012

Acquis	Target / Objectives	Romanian Legislation
October 2009 on Stage II petrol vapour recovery during refueling of motor vehicles at service stations	<p>Art 3. 2: MSs shall ensure that <i>any existing service station which undergoes a major refurbishment shall be equipped with a Stage II petrol vapour recovery system</i></p> <p>Art 3. 3: MSs shall ensure that <i>any existing service station with a throughput in excess of 3 000 m³ /year shall be equipped with a Stage II petrol vapour recovery system <u>by 31 December 2018.</u></i></p> <p>Art 5. 2: Where an automatic monitoring system has been installed, Member States shall ensure that the petrol vapour capture efficiency is tested at least once every three years</p>	
<p>Directive 2009/30/EC of 23 April 2009 re. the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC (Text with EEA relevance)</p>	<p>Art 4. 2: From 1 January 2011, the <i>maximum permissible sulphur content of gas oils shall be 10 mg/kg.</i></p> <p>Directive targets the reduction of GHG intensity of fuel and energy supplied within each MS:</p> <p>Art 7a. 2.: MSs <u>shall require suppliers to reduce as gradually as possible life cycle GHG emissions per unit of energy from fuel and energy supplied by up to 10 % by 31 December 2020 [...]</u></p> <p>(a) 6 % by 31 December 2020. [...] intermediate targets: 2 % by 31 December 2014 4 % by 31 December 2017;</p> <p>(b) an indicative additional target of 2 % by 31 December 2020,</p> <p>(c) an indicative additional target of 2 % by 31 December 2020, subject to Article 9(1)(i), to be achieved through the use of credits purchased through the Clean Development Mechanism of the Kyoto Protocol</p> <p>Art 7b.3: <i>With effect from 1 January 2017, GHG emission saving from the use of biofuels [...] shall be at least 50 %; for biofuels produced in installations in which production has started on/after 1 January 2017, the GHG emissions saving shall be at least 60 % from 1 Jan. 2018; for biofuels produced by installations that were in operation on 23 January 2008, the first subparagraph shall apply from 1 April 2013.</i></p>	<p>HG 1197/2010 (Official Gazette no. 854 / 21 Dec. 2010);</p> <p>HG 928/2012 (Official Gazette no. 679/ 1 Oct. 2012).</p>
<p>Commission Directive 2011/63/EU of June 1 2011 on the quality of petrol and diesel fuels</p>		<p>HG 928/2012 (Official Gazette no. 679/ 1 Oct. 2012);</p> <p>HG no. 935/2011 (on biofuels)</p>
<p>Directive 2013/30/EU of 12 June 2013 on safety of offshore oil and gas operations (Text with</p>	<p>No quantitative targets, but imposition of additional measures to be taken by operators / owners which shall require investments, such as:</p> <p>Art. 12.(1): Reporting obligations for operators on major hazards for a production installation</p> <p>Art. 17.(1): “Member States shall ensure that operators and owners establish schemes for independent verification“</p>	<p>NOT TRANSPOSED</p> <p><u>Transposition Deadline by 19 July 2015.</u></p> <p><u>Implementation by 19 July 2016</u></p>

Acquis	Target / Objectives	Romanian Legislation
EEA relevance).	Art. 19.(1): obligation for operators and owners to prepare a “corporate major accident prevention policy” Art.28 (2): <i>“Member States shall ensure that the operator and the owner maintain equipment and expertise relevant to the internal emergency response plan in order for that equipment and expertise to be available at all times”</i>	for new installations. <u>Implementation by 19 July 2018</u> for existing installations.
Renewables		
Directive 2009/28/EC of 5 June 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.	<u>EU target - renewable energy in gross final energy consumption:</u> 20% by 2020 <u>EU target – implied share of electricity from RES:</u> 34% by 2020 <u>EU target - renewable share in transport:</u> 10% by 2020 (implies use of biofuels) Art 17.2: GHG emission saving from the use of biofuels and bioliquids ... shall be at least 35%. With effect from 1 January 2017 , the GHG emission saving from the use of biofuels and ...shall be at least 50 % . From 1 January 2018 that GHG emission saving shall be at least 60 % for biofuels and bioliquids produced in installations in which production started on or after 1 January 2017.	<u>National target - renewable energy in gross final energy consumption:</u> 24% by 2020 <u>National target - electricity from RES:</u> 33% by 2010 35% by 2015 38% by 2020 <u>National target–renewable in transport</u> 5.75% by 2010 10% by 2020 HG. no. 1281/2007; Law no. 220/2008; HG. no. 750/2008; OG. no. 22/2008; HG. no. 409/2009; Law no. 139/2010; OG. no. 29/2010; HG. no. 1232/2011; HG no. 935/2011 (on biofuels); OUG. no. 88/2011; Law no. 134/2012; HG. no. 248/2012;

Acquis	Target / Objectives	Romanian Legislation
		OUG. no. 57/2013; OUG. no. 79/2013 National Energy strategy 2007-2020 National Plan for Promoting Renewable Energy (2010)
Directive 2009/31/EC of 23 April 2009 on the geological storage of carbon dioxide.	The Directive addresses targets that are outlined in the Com. Communication ' <i>Limiting global climate change to two degrees Celsius – The way ahead for 2020 and beyond</i> ', 10 Jan.2007) as: - a global reduction of GHG emissions of 50 % by 2050; -a 30 % GHG emissions reduction in the developed world by 2020; -a 60-80 % GHG emissions reduction in the developed world by 2050. Directive details provisions for EU Carbon Capture and Storage (CCS) projects. Specific financial obligations are related to the entire Chapter 4: (Operation, closure and post-closure obligations) + Annexes.	Law 114/2013; OUG no. 64/2011; GETICA - a CCS Demo Project: Romania's only <i>Carbon Capture and Storage (CCS)</i> project. Current status: FEED.
Energy Efficiency		
Energy Performance of Buildings		
The recast Directive 2010/31/EU on the energy performance of buildings, adopted in May 2010. ("EPBD")	Art. 9.1: Member States (MSs) shall ensure that: (a) by 31 December 2020, all new buildings are nearly zero- energy buildings; and (b) after 31 December 2018, new buildings occupied and owned by public authorities are nearly zero-energy buildings. Drafting National Plan that have to include: - numerical indicator of primary energy use expressed in kWh/m ² per year. - intermediate targets for improving the energy performance of new buildings by 2015.	Law 372/2005 (Official Gazette no. 1144 / 19 Dec. 2005) - modified on April 18, 2012; OUG 18/2009; OUG 63/2012; Law no. 159/2013. National Plan to increase the energy performance of buildings. - 20% of costs - covered by Buildings' Owners' Association (the beneficiaries) - 80% of costs covered by the Program (50% from the state budget and 30% from the local budget)

Acquis	Target / Objectives	Romanian Legislation
<p>Directive 2006/32/EC of 5 April 2006 on energy end-use efficiency and energy Services</p>	<p><u>Indicative energy savings target for the MSs:</u> 9% reduction in final energy consumption (2008-2016) compared to average of last 5 years for which there is available data (2001-2005)</p> <p>Obligations on national public authorities as regards energy savings and energy efficient procurement, and measures to promote energy efficiency and energy services.</p> <p>Status: Repealed by the 2012 Energy Efficiency Directive (2012/27/EU)</p>	<p><u>National target:</u> Intermediary target: 4.5% in 2010</p> <p>Final target: 9% in 2016 Romania's <i>National Strategy on Energy Efficiency</i> (H.G. 163/2004) targets a 40% reduction of energy intensity during 2004-2015. A 10 Mtoe (19%) reduction in the primary energy consumption by 2020</p> <p>HG no. 1281 / 2007; HG no.718 /2008; OG no. 22 /2008; OUG no. 18/2009.</p> <p><i>National Energy Efficiency Action Plan I (2007);</i></p> <p><i>National Energy Efficiency Action Plan II (2011);</i></p> <p><i>National Plan to reduce energy costs for population by increasing energy efficiency and using renewable energy(2007).</i></p>
<p>Directive 2012/27/EU of 25 October 2012, on energy efficiency, amending Directives</p>	<p>Art. 5 (1): ...each MS shall ensure that, as <i>from 1 January 2014, 3% of the total floor area of heated and/or cooled buildings owned and occupied by its central government is renovated each year at least to meet the minimum energy performance requirements</i> that it has set in its application of Article 4 of Directive 2010/31/EU. For this purpose, <i>by 31 December 2013, MS shall establish and make publicly available and inventory of heated</i></p>	<p>NOT TRANSPOSED (Deadline: June 5, 2014)</p>

Acquis	Target / Objectives	Romanian Legislation
<p>2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC</p>	<p>and/or cooled central government buildings with a total useful floor area of more than 500 m2 and, as of July 2014, over 250 m2 ...</p> <p>Directive allows alternative approaches: other cost effective measures (deep renovations and measures for behavioural change of occupants), to achieve by 2020 an amount of energy savings in eligible buildings that is at least equivalent to that required.</p> <p>Art. 9 (3): In multi-apartment and multi-purpose buildings with a central heating/cooling source or supplied from a district heating network or from a central source serving multiple buildings, individual consumption meters shall also be installed by 31 December 2016.</p>	
Energy Efficiency of products		
<p>Directive 2009/125/EC of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-using products.</p>	<p>Art 11: Requirements for components and sub-assemblies (“placing components and sub-assemblies on the market and/or putting them into service”)</p> <p>Art 13: MSs “shall ensure (...) by strengthening support networks and structures, that they encourage SMEs and very small firms to adopt an environmentally sound approach”.</p> <p>Art. 14: manufacturers shall ensure (...) that consumers of products are provided with requisite information on the role that they can play in the sustainable use of the product; and the ecological profile of the product and the benefits of ecodesign.</p> <p>Annex 5: re. obligation to document all measures adopted by the manufacturer to improve the overall environmental performance has to contain:</p> <p>3.1.c. checks and tests to be carried out after manufacture to verify product performance against environmental performance indicators;</p> <p>3.2.a: mandatory procedures for establishing the ecological profile of the product;</p> <p>3.2.b mandatory environmental product performance objectives and indicators, which consider technological options;</p> <p>3.2c mandatory program for achieving these objectives.</p>	<p>HG no. 55/2011 (Official Gazette no. 121/17 febr. 2011)</p>
<p>Directive 2010/30/EU of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products.</p>	<p>Some provisions that have financial implications are:</p> <p>Art.3.1.c: MSs shall ensure that the introduction of the system of labels and fiches concerning energy consumption or conservation is accompanied by educational and promotional information campaigns aimed at promoting energy efficiency and more responsible use of energy by end-users;</p> <p>Art.5: Suppliers obligation (to provide free of charge labels to dealers; to provide labels based on technical documentation; to include design calculations carried out and test reports, etc).</p>	<p>HG no.217/2012 (Official Gazette no.204 / 28 March 2012)</p>

Acquis	Target / Objectives	Romanian Legislation
Energy services		
Directive 2012/27/EU		
Energy Efficiency of Vehicles		
Directive 2009/33/EC of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles.	<p>Mandatory inclusion of lifetime costs for energy consumption, CO2 emissions, and pollutant emissions as award criteria in the procurement of vehicles for public transport services. Directive details methodology and gives data to be used for calculations in Annex.</p> <p>The document mentions the EU strategy to reach 120 g/km objective for CO2 emissions from new passenger cars by 2012, citing a 2007 Communication - <i>'Results of the review of the Community Strategy to reduce CO 2 emissions from passenger cars and light-commercial vehicles'</i>.</p>	OUG no.40/2011 (Official Gazette no. 307/ 4 May 2011)
Nuclear		
Council Directive 2006/117/ Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel.	Regulatory in nature.	<p>Transposition DL: 25/12/2008</p> <p>CNCAN Order no. 443/2008.</p>
Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations (the 'Nuclear Safety Directive')	<p>The targets are mostly regulatory in nature, such as, but they could have a financial implication as well:</p> <p>Art. 9 (1): MSs shall submit a report to the Commission on the implementation of this Directive for the first time by 22 July 2014, and every three years thereafter, taking advantage of the review and reporting cycles under the Convention on Nuclear Safety.</p> <p>(3) Member States shall at least every 10 years arrange for periodic self-assessments of their national framework and competent regulatory authorities...</p>	<p>Transposition DL: 22/07/2011</p> <p>Law 111/1996 (republished, Official gazette no. 552/2006); HG 1627/2003, HG 26/2011, HG 1536/2008, HG 623/2009, HG 750/2004, OG 7/2003, OUG 25/2007, HG 69/2007, Law 329/2009, HG 1080/2007 and other.</p> <p>The Secondary legislation is issued by 2 organizations: ANDR and CNCAN</p> <p>Examples of CNCAN Orders:</p>

Acquis	Target / Objectives	Romanian Legislation
		<p>Order no. 56/2004, 62/2004, 156/2005, 221/2005, 400/2005 and others.</p> <p>National Development Strategy in the Nuclear Field and its Roadmap (2002)</p>
<p>Council Directive 2011/70/ EURATOM of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste.</p>	<p>Directive institutes binding rules for nuclear safety and waste management, such as:</p> <p>Art.4 (3) e: “: the <i>costs for the management of spent fuel and radioactive waste shall be borne by those who generated those materials</i>”</p> <p>Art.4(3): “Member States shall ensure that the national framework <i>require licence holders to establish and implement integrated management systems</i>”</p> <p>Art.4.(4): “Member States shall ensure that the national framework require licence holders to <i>provide for and maintain adequate financial and human resources</i>”</p>	<p>NOT TRANSPOSED</p> <p>Transposition DL: 23/08/2013</p> <p>Existing legislation: OG.11/2003, Law 111/1996.</p> <p>Current Status The Draft law (that would update the current applicable legislation – OG 11/2003 and Law 111/1996) was sent by the Senate to the Chamber of Deputies (deciding body) on October 28, 2013.</p>

As detailed in the table above, Romania’s energy main investment needs are focused in the following areas:

- natural gas (interconnectors and modernization works for transport and distribution infrastructure);
- electricity (network consolidation and smart metering);
- energy efficiency;
- energy performance of buildings;
- energy efficient and clean transportation;
- reducing CO2 emissions and other harmful gases;
- installing stage II vapour recovery equipment in service stations;
- eco-design for energy using products;
- safety of offshore oil and gas operations;
- safety of nuclear operations;
- renewables.

The following table outlines the Structural Instruments that can support compliance with the energy acquis.

Table 4: Structural Instruments that support the transposition of the new energy acquis

Program me	Priority Axis	Key Area of Intervention (KAI)
SOP IEC ²	1: An innovative and eco-efficient productive system	KAI 1 (1.1): Productive investments and preparation for competition on the SME market with respect for environmental conditions
	4: Increasing energy efficiency and security of supply, in the context of combating climate change	KAI 1 (4.1): Efficient and sustainable energy (improving energy efficiency and environmental sustainability of the energy system - operations: - 4.1.1 (energy efficiency) - 4.1.2 (natural gas and electricity transportation, distribution grids) - 4.1.3 (large combustion plants) KAI 2 (4.2): Valorisation of renewable energy resources for producing green energy KAI 3 (4.3): Diversification of interconnection networks in view of strengthening security of energy supply
ROP ³	1: Support to sustainable development of urban growth poles	KAI 2 (1.2): Support investments in energy efficiency of residential buildings
SOP HRD ⁴	1: Education and professional training to support economic growth and knowledge based society development	KAI 1-5
OP ACD ⁵	1: Structural and process improvements of the public policies management cycle	KAI 1 (1.1): Improving the decision making process KAI 2 (1.2): Increase the responsibility of public administration KAI 3 (1.3): Improving organizational efficiency
	2: Improving the quality and efficiency of public service supplied with a focus on de- centralization	KAI 2 (2.2): Improving the quality and efficiency of services supplied

² SOP IEC stands for Sector Operational Program “Increase of Economic Competitiveness”

³ ROP stands for Regional Operational Program

⁴ SOP HRD stands for Sector Operational Program “of Human Resources Development”

⁵ OP ACD stands for Operational Program Administrative Capacity Development”

ENVIRONMENT

The legislation subject to transition measures in Annex VII of the Accession Treaty is summarised in Table 1 and detailed in Annex 1.

Subsequently, and particularly for the environment acquis, legislation has been introduced since Accession which supersedes or augments the legislation cited in Annex VII of the Accession Treaty. This is indicated in Table 2.

The current active relevant legislation corresponding to the Annex VII requirements is detailed in the table below:

Table 5: Current active environment relevant legislation corresponding to the Annex VII requirements

Acquis	Targets	Status
Water Quality		
<p>Directive 2008/105/EC of the European Parliament and of the Council of 16.12.2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC, amending Directive 2000/60/EC</p>	<p>Set the quality standards as required by Article 16(8) of the Water Framework Directive.</p>	<p>Transposed GD. 351/2005 as amended by GD. 783/2006; GD.1038/2010</p>
Waste Management		
<p>Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives</p>	<p>By 2020, the preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50 % by weight</p> <p>By 2020, the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the list of waste shall be increased to a minimum of 70 % by weight.</p> <p>Adoption of waste management plans and waste prevention programmes.</p>	<p>Transposed Law no. 211/2011; GD. 856/2002; GD. 1470/2004, GD. 358/2007; GD. 128/2002 as amended and supplemented by GD. 268/2005 GD. 427/2010; GEO. 152/, as amended by Law no. 84/2006, as amended by GEO. 40/2010 approved by Law no. 205/2010; GD. 445/2009, as amended by GD. 17/2012; GD. 210/2007; Law no. 132/2010; Draft Law amending and supplementing Law no. 211/2011 on waste.</p>

Acquis	Targets	Status
Commission Directive 2013/2/EU of 7 February 2013 amending Annex I to Directive 94/62/EC on packaging and packaging waste - transposition deadline 30.09.2013	Seeks to clarify the definition of 'packaging'	Transposition deadline 30.09.2013
Council Directive 2011/97/EU of 5 December 2011 amending Directive 1999/31/EC as regards specific criteria for the storage of metallic mercury considered as waste - transposition deadline 15.03.2013	To lay down the conditions for the safe storage of metallic mercury for up to 5 years.	
Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE), amended by Directives 2003/108/CE, 2008/34/CE and 2008/112/CE – fully transposed (to be repealed starting 15.02.2014)	<p>Achieving a medium of separate collection of at least 4 kg per inhabitant per year of waste electrical and electronic equipment (WEEE) from private households and levels of recovery, reuse and recycling of materials and substances in accordance with Directive 2002/96/EC on WEEE.</p> <p>By way of derogation from Articles 5(5) and 7(2) of Directive 2002/96/EC, Romania shall attain the rate of separate collection of at least four kilograms on average per inhabitant per year of WEEE from private households, the rate of recovery and the rate of component, material and substance reuse and recycling by 31 December 2008.</p>	<p>GD. 1037/2010; GEO 196/2005, approved by Law no. 105/2006, as amended by Law no. 292/2007; GEO 37/2008; GEO. 15/2010; Law no. 167/2010; GEO. 115/2010; Law no. 71/2011;</p> <p>OM MMGA /MEC No. 1225 /721 /2005, as amended by OM MMGA/ MEC No. 1269 /820 /2006; OM MMDD /MEC No. 910 /1704 /2007; OM MMGA/ MEF No. 1223/715/2005, as amended by OM MMDD /MEF No. 706 /1667 /2007; MO. 556/2006; MO. 901/2005; MO. 1099/2007 (Not published in the OJ) amending and supplementing MO. 66/2006 (Not published in the OJ);</p> <p>MO. 2264/2011;</p> <p>Draft OM to repeal MO. 1.223/715/2005 the procedure for registration of producers, recording</p>

Acquis	Targets	Status
		<p>mode and reporting data on electrical and electronic equipment and waste electrical and electronic equipment;</p> <p>Draft OM to repeal MO. 1225/2005 on the authorization of collective organizations.</p>
<p>Directive 2012/19/EU of 4 July 2012 on waste electrical and electronic equipment (WEEE) (recast)</p>	<p>Collection target of 45% of electronic equipment sold, which will apply from 2016 and from 2019, a target collection of 65% of equipment sold, or 85% of electronic waste products.</p> <p>According to art. 7 (3), Romania is an exception to this provision, so the lack of necessary infrastructure and low level of EEE consumption, decide to:</p> <p>(A) achieve, from 2016, a collection rate of less than 45% but less than 40% of the average weight of EEE placed on the market in the three preceding years, and</p> <p>(B) postpone realization collection rate referred to in paragraph (1), second subparagraph to a date determined later on, but no later than August 2021.</p>	<p>Transposition deadline 14.02.2014</p> <p>Draft GD for transposition of Directive 2012/19/EU.</p>
Industrial Pollution Control and Risk Management		
<p>Directive 2008/1/ of 15 January 2008 concerning integrated pollution prevention and control, amended by Directive 2009/31/EC.</p> <p>To be superseded from 01.07.2014 by Directive 2010/75/EU</p>	<p>Industrial pollution and risk management: application of permit conditions for existing installations in accordance with art. 5 (1) of Directive 96/61/EC concerning integrated pollution prevention and control.</p> <p>The IPPC Directive will be repealed with effect from 7 January 2014 by Directive 2010/75/EU on industrial emissions</p>	<p>Transposed</p> <p>GEO. 152/2005, as amended by Law no. 84/2006, as amended by GEO 40/2010 approved by Law no. 205/2010;</p> <p>MO. 818/2003 , as amended by MO. 1158/2005 and MO. 3970/2012</p> <p>MO 36/2004;</p> <p>MO 169/2004;</p> <p>MO 566/2003;</p> <p>MO 37/2003.</p>

Acquis	Targets	Status
<p>Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control).</p>	<p>Recast of seven existing Directives, those concerning integrated pollution prevention and control (2008/1/EC), large combustion plants (2001/80/EC), waste incineration (2000/76/EC), solvent emissions (1999/13/EC) and three concerning the titanium dioxide industry</p>	<p>Transposition deadline 06.01.2013 Draft Law Industrial Emissions</p>

Although they do not alter the Accession Treaty agreement, the acquis which has superseded legislation and targets laid out in the Treaty comprises the most challenging and investment intensive area of the environmental acquis. Currently, there are over 800 acts in the Environmental sector at EU level. Many of them were in force at the moment of Romania's Accession to the EU.

The content of the **key environmental legislation and its stage of transposition** follows below:

Horizontal legislation:

Directive 2011/92/EU - the effects of certain public projects on the environment - *fully transposed*;
Directive 2004/35/EC - the responsibility for the environment in relation to the prevention and remedying of environmental damage, as amended by Directives 2006/21/EC and 2009/31/EC - *fully transposed*;
Directive 2007/2/EC establishing an Infrastructure for Spatial Information in Europe (INSPIRE) - *fully transposed*;
Directive 2008/99/EC - environmental protection through criminal law - *fully transposed*;
Directive 2002/49/EC relating to the assessment and management of environmental noise

Air quality:

Directive 2008/50/EC on ambient air quality and cleaner air for Europe - *fully transposed*;
Directive 2009/126/EC on Stage II petrol vapour recovery during refuelling of motor vehicles at service stations - *transposition deadline 01.01.2012*;
Directive 98/70/EC on quality of petrol and diesel fuels and amending Directive 93/12/EEC as amended by Directives 2000/71/EC, 2003/17/EC, 2009/30/EC, 2011/63/EU and Regulation (EC) No. 1882/2003 - *fully transposed*;
Directive 1999/32/EC the sulphur content of certain liquid fuels and amending Directive 93/12/EEC, as amended by Regulation (EC) no. 1882/2003 and Directives 2005/33/EC, 2009/30/EC - *fully transposed*;
Directive 1999/32/EC was further amended by Directive 2012/33/EU - *transposition deadline 18.06.2014*;
Directive 97/68/EC to approximate the laws of Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery, amended by Directives 2001/63/EC, 2002/88/EC, 2004/26/EC, 2006/105/EC, 2010/26/EU - *fully transposed*;
Directive 2012/46/EU amending Directive 97/68/EC on the approximation of the laws of Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery - *transposition deadline 21.12.2013*.

Industrial pollution control:

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances and amending and subsequently repealing Directive 96/82/EC - *transposition deadline 31/05/2015*;
Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants, as amended by Directive 2006/105/EC and Regulation (EC) no. 219/2009 - *fully transposed*;
Directive 2004/42/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC, as amended by Directive 2008/112/EC and Directive 2010/79/UE - *fully transposed*;

Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) with correction in OJ L 158, 19.06.2012 - The Industrial Emissions Directive (IED) is a recast of seven existing Directives, those concerning integrated pollution prevention and control (2008/1/EC), large combustion plants (2001/80/EC), waste incineration (2000/76/EC), solvent emissions (1999/13/EC) and three concerning the titanium dioxide industry - *transposition deadline 06/01/2013*;

The IED will repeal the following Directives currently in force as of 7 January 2014. Directive 2008/1/EC concerning integrated pollution prevention and control (IPPC), as amended by Directive 2009/31/EC - *fully transposed*;

Directive 2001/80/EC on the limitation of emissions of certain pollutants from large combustion plants dimensions, as amended by Directives 2006/105/EC and 2009/31/EC - *fully transposed*;

Directive 1999/13/EC to reduce emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations (VOC), as amended by Directive 2004/42/EC of Regulation (EC) no. 1882/2003 and Directive 2008/112/EC - *fully transposed*, repealed from 07.01.2014 by Directive 2010/75/EU;

Waste management:

Directive 2008/98/EC on waste and repealing certain Directives - *fully transposed*;

Directive 2011/97/EU amending Directive 1999/31/EC (Directive 1999/31/EC Landfill, as amended by Regulation (EC) no. 1882/2003 - fully transposed) regarding specific criteria for the storage of metallic mercury considered as waste - *transposition deadline 15.03.2013*;

Directive 2006/21/EC on the management of waste from extractive industries and amending Directive 2004/35/EC - *partially transposed*;

Directive 2013/2/EU amending Annex I to Directive 94/62/EC on packaging and packaging waste - *transposition deadline 30.09.2013*;

Directive 2002/96/EC on waste electrical and electronic equipment (WEEE), as amended by Directives 2003/108/EC, 2008/34/EC and 2008/112/EC (*fully transposed*) repealed as of 15/02/2014 by Directive 2012/19/EU. Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) - *transposition deadline 2014*;

Directive 2002/95/EC on the restriction of use of certain hazardous substances in electrical and electronic equipment, as amended by Directive 2008/35/EC and Decisions 2005/618/EC, 2005/717/EC, 2005/747/EC, 2006/310/EC, 2006/690/CE, 2006/691/EC, 2006/692/EC and 2008/385/EC (*fully transposed*) repealed by Directive 2011/65/EU.

Directive 2011/65/EU on the restriction of use of certain hazardous substances in electrical and electronic equipment- *transposition deadline 02/01/2013*;

Directive 2000/53/EC on end of life vehicles, amended by Decisions 2002/525/EC, 2005/63/EC, 2005/438/EC, 2005/673/EC, 2008/689/EC, Directive 2008/33/EC, Directive 2008/112/EC and Directive 2011/37/EU - *fully transposed*;

Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC as amended by Directives 2008/12/EC and 2008/103/EC - *fully transposed*;

Water quality:

Directive 2000/60/EC establishing a framework for Community action in the field of water, as amended by Directives 2008/32/EC, 2008/105/EC and 2009/31/EC and Decision 2455/2001/EC - *fully transposed*;

Directive 2006/11/EC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community - *fully transposed*;

Directive 2006/44/EC on the quality of fresh waters needing protection or improvement in order to support fish life - *fully transposed*;

Directive 2006/113/EC on the quality of shellfish waters - *fully transposed*;

Directive 2006/7/EC on the management of bathing water quality and repealing Directive 76/160/EEC- *fully transposed*;

Directive 2006/118/EC on the protection of groundwater against pollution and deterioration - *fully transposed*;

Directive 2007/60/EC on the assessment and management of flood risks - *fully transposed*;

Directive 2008/56/EC establishing a framework for Community action in the field of marine environmental policy - *fully transposed*;

Directive 2008/105/EC on environmental quality standards in the field of water policy, amending and repealing Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC amending Directive 2000/60/EC - *fully transposed*;

Directive 2009/90/EC establishing, pursuant to Directive 2000/60/EC, technical specifications for chemical analysis and monitoring of water status - *fully transposed*.

Nature protection:

Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, as amended by Directives 97/62/EC, 2006/105/EC and Regulation (EC) no. 1882/2003 - *fully transposed*;

Directive 2009/147/EC on the conservation of wild birds - *fully transposed*;

Hazardous substances:

Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances, and further amended - *partially transposed* (repealed from 1 June 2015 by Regulation (EC) No 1272/2008);

Directive 1999/45/EC on the approximation of laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations, as amended by Directives 2001/60/EC, 2004/66/EC, 2006/8/EC, 2006/96/EC and Regulations (EC) nr.1882/2003, 1907/2006, 1137/2008 and 1272/2008 - *fully transposed*; (repealed from 1 June 2015 by Regulation (EC) No 1272/2008);

Directive 98/8/EC concerning the placing of biocidal products, as amended by several regulations and directives- *fully transposed* (end of validity: 31/08/2013; repealed by Regulation (EU) No 528/2012).

Directive 2012/38/EU amending Directive 98/8/EC to include cis-trichloro-9-ene as an active substance in Annex I to Directive - *transposition deadline 30.09.2013*.

Directive 2012/41/ EU amending Directive 98/8/EC to extend the inclusion in Annex I to the active substance nonanoic acid to the type of product 2 - *transposition deadline 30.09.2013*.

Directive 2012/42/ EU amending Directive 98/8/EC to include hydrocyanic acid as an active substance in Annex I to Directive - *transposition deadline 30.09.2013*.

Directive 2013/3/ EU amending Directive 98/8/EC to extend the inclusion of thiamethoxam as an active substance in Annex I to Directive product type 18 - *transposition deadline 31/01/2014*.

Directive 2013/4/EU amending Directive 98/8/EC to include Didecyldimethylammonium chloride as an active substance in Annex I to Directive - *transposition deadline 31/01/2014*.

Directive 2013/5/EU amending Directive 98/8/EC to include pyriproxyfen as active substance in Annex I to Directive - *transposition deadline 31/01/2014*.

Directive 2013/6/EU amending Directive 98/8/EC to include diflubenzuron as an active substance in Annex I to Directive - *transposition deadline 31/01/2014*.

Directive 2013/7/EU amending Directive 98/8/EC to include chloride Alkyl (C12-16) dimethylbenzyl ammonium as active substance in Annex I to Directive - *transposition deadline 31/01/2014*;

Directive 2010/63/EU the protection of animals used for scientific purposes - repeals Directive 86/609/EEC from 1 January 2013, except art. 13 is repealed with effect from May 10, 2013 - *deadline for transposition 10/11/2012*.

Genetically modified organisms:

Directive 2001/18/EC on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC, as amended by Decision 2002/623, the Regulations (EC) no. 1829/2003 and 1830/2003 and Directive 2008/27/EC - *fully transposed*;

Directive 2009/41/EC on the contained use of genetically modified organisms (Recast) - *fully transposed*.

Climate change:

Directive 2003/87/EC establishing a system for trading greenhouse gas emissions trading within the Community and amending Council Directive 96/61/EC, as amended by Directive 2004/101/EC and Regulation no. 219/2009 - *fully transposed*;

Directive 2008/101/EC - *fully transposed*;

Directive 2009/29/EC - *transposition deadline 31.12.2012*;

Directive 2009/31/EC on the geological storage of carbon dioxide - *fully transposed*.

Not all the above Directives and Regulations require investment. Some only require administrative measures. Others impose requirements on economic operators, for example volatile organic compounds, end of life vehicles, hazardous substances.

The investment needs deriving from the new requirements set by the acquis which can be supported now or in the future through Structural Instruments are concentrated in the following areas:

Air quality (Directive 2008/50/EC on ambient air quality) - There are several urban agglomerations where the levels of suspended particles are exceeding the daily and annual limits and where air quality management programmes were elaborated and investments are required for implementing the reduction measures.

Water quality: In order to meet the requirements of the Water Framework Directive (WFD) in respect of the “good status” of natural water bodies and the “good ecological potential” for heavily modified and artificial water bodies, river basin management plans were elaborated which set the objectives and measures needed to comply with the WFD requirements and other Directive pertaining to water quality. Other than the investments in wastewater collection and treatment systems, the plans also identify other measures that need to be implemented; e.g. restoring the lateral and longitudinal connectivity of water bodies;

Waste management: The new requirements of the Waste Framework Directive (Directive 2008/98), stipulate that by 2015 separate collection systems for paper, metal, plastic and glass will be established. By 2020, recycling and re-use of household and similar streams of waste paper, metal, plastic and glass will be increased to a minimum of 50 % by weight. These requirements indicate the construction of new facilities and improvement of current facilities. Meeting recovery

targets for waste from electrical and electronic equipment (WEEE) has been problematic for Romania and further efforts are required to embed the necessary infrastructure.

Industrial emissions:

While much of the responsibility for compliance falls upon economic operators, installations publicly owned are the responsibility of the competent authorities.

Flood risk management: Plans are required to assess and mitigate flood but it is the implementation of those plans that are of more consequence to Romania. This requires significant investment.

Nature protection: European legislation on nature protection (Habitats Directive and Birds Directive) was in force at the time of accession and subsequently amended. Romania’s obligation is to prepare management plans under the Natura 2000 framework for the conservation of Sites of community Interest (SCI) Special Protection Areas (SPA).

Table 6 Structural Instruments which support acquis compliance – Environment

Operational Programme	Priority axes	Key Action of Intervention
SOP ENV	Priority Axis 1: For the water quality sector: Directive 91/271/EEC on the treatment of the urban wastewater, modified and amended by the Directive of the Commission 98/15/EC, Directive number 98/83/EC on the quality of water intended for human consumption; Water Framework Directive 2000/60/EC	KAI 1 Wastewater treatment provision and drinking water provision
	Priority Axis 2: For the waste management sector: Directive 1999/31/EC on the landfill of waste Directive 94/62/EC on packaging and packaging waste, whose provisions were replaced by Directive 2002/96/EC, during the elaboration and approval of the SOP Environment;	KAI 1 Waste management, landfill construction KAI 2 Rehabilitation of historically contaminated sites (not acquis compliance driven)
	Priority Axis 3: For the industrial pollution air quality sub-sector, Directive 96/61/EC (Integrated Pollution Prevention and Control) and Directive 2001/80/CE on the limitation of emissions of certain pollutants into the air from large combustion plants (LCP);	KAI Rehabilitation of district heating plants
	Priority Axis 4: For the nature conservation sector, Directive 92/43 EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and Directive 79/409/CEE on the conservation of wild birds (Birds Directive), (amended by Directive 2009/147/EC).	KAI Conservation and management of SCI, SPA
	Priority Axis 5: While the Directive 2007/60/EC (Floods	KAI Flood damage

Operational Programme	Priority axes	Key Action of Intervention
	Directive) focuses on assessment and management the objective of the Priority Axis is to strengthen the infrastructure to protect people and property against flooding and coastal erosion.	prevention KA2 Coastal erosion prevention (not acquis compliance driven)
SOP Increasing Economic Competitiveness	Financing Large Combustion Plants producing electricity to reduce pollutant emissions, thus supporting objectives in respect of energy independence / electric supply for the economy.	Rehabilitation of Large Combustion Plants

TRANSPORT

Annex VII of Romania's Accession Treaty contains the transitional measures that apply to the **transport sector**. Two transition periods (stages) were stipulated as follows:

The first stage was successfully concluded in 2010, by establishing the minimum tax rates (as laid down in Annex I of Directive 1999/62/EC regarding heavy goods vehicle charges of for the use of certain infrastructures). The Government Decision 1374/2010, adopted by the Romanian Government, addressed this provision.

The second period of transition, due to end in December 2013, is concerned with Directive 96/53/EC of 25 July 1996 stipulating the maximum authorised dimensions for vehicles on national and international roads and the maximum authorized weights for international traffic circulating within the Community.

The action plan for complying with Directive 96/53/EC consists mainly of **upgrading the national network of secondary roads** (which are gradually opened for certain road vehicles with maximum authorised dimensions for national and international traffic and the maximum authorized weights in international traffic).

In order to meet the acquis obligations, funds are being utilised from the SOP Transport (Priority Axis 2, KAI 2.1), the European Territorial Cooperation programmes Romania-Bulgaria, CBC (Priority Axis 1), and from other funding sources.

Table 7 : Overview of main EU legislation in the transport sector

	Total number	No of legislation, by modes						from which, compliance supported by CSI
		Road	Rail	Inland waterway	Maritime	Air	Bi-, tri-, multimodal	
Directives & Regulations	163	34	21	25	21	38	24	27

While some legislation amends previous regulations or directives, others are large Directives delivered as a "package" (e.g. Commission Directive 2013/9/EU of 11 March 2013 amending Annex III to Directive 2008/57/EC **on the interoperability of the rail system** within the Community, or Directive 2012/34/EU of 21 November 2012 **establishing a single European railway area**).

Table 8: Directives having financial implications for Romania and requiring investment

Acquis	Targets	Romanian Legislation
1. Directive 96/53/EC of 25 July 1996 laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic	A MS may not reject or prohibit the use on its territory (in international traffic, of vehicles registered or put into circulation in any other Member State) for reasons relating to their weights and dimensions, provided that such vehicles comply with the limit values specified in Annex I.	No specific legislation required. Technical specifications for works comply with national legislation.
2. Directive 2012/34/EU of 21 November 2012 establishing a single European railway area	MS shall develop their national railway infrastructure by taking into account, where necessary, the general needs of the Union; MS may also provide the infrastructure manager with financing consistent with its functions as referred to in point (2) of Article 3, the size of the infrastructure and financial requirements, in particular in order to cover new investments. MS may decide to finance those investments through means other than direct State funding.	
3. Directive 2008/57/EC on the interoperability of the rail system within the Community; Commission Directive 2011/18/EU of 1 March 2011 amending Annexes II, V and VI to Directive 2008/57/EC on the interoperability of the rail system within the Community	Achieve interoperability within the Community rail system in a manner compatible with the provisions of Directive 2004/49/EC. These conditions concern the design, construction, placing in service, upgrading, renewal, operation and maintenance of the parts of this system as well as the professional qualifications and health and safety conditions of the staff who contribute to its operation and maintenance.	
4. Directive 2008/110/EC of 16 December 2008 amending Directive 2004/49/EC on safety on the Community's railways (Railway Safety Directive)	MS shall ensure that measures to develop and improve railway safety take account of the need for a system-based approach	
5. Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the Single European Sky	This Regulation lays down requirements on the systems contributing to the provision of surveillance data, their constituents and associated procedures in order to ensure the harmonisation of performance, the interoperability and the efficiency of these systems within the European air traffic management network (EATMN) and for the purpose of civil military coordination.	
6. Commission Regulation (EU)	RIS should be developed and implemented in	

Acquis	Targets	Romanian Legislation
No 164/2010 concerning the technical guidelines for the planning, implementation and operational use of river information services (RIS) referred to in Article 5 of Directive 2005/44/EC on harmonised river information services (RIS) on inland waterways in the Community;	a harmonised, interoperable and open way. The technical specifications should take due account of the work carried out by relevant international organisations. Continuity shall be ensured with other modal traffic management services, in particular maritime vessel traffic management and information services.	
7.Regulation EC 1137/2008 and Commission Directive 2007/71/EC of 13 December 2007 amending Annex II of Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues	Directive focuses on ship operations in European Union ports. It addresses in detail the legal, financial and practical responsibilities of the different operators involved in delivery of ship-generated waste and cargo residues.	

There are three main components within the transport sector, irrespective of modes: infrastructure; vehicles and technologies/procedures using specific Information and Communication Technologies (ICT). Whereas, the last two components are subject to specific regulations, for infrastructure development/upgrading there are special needs related to the territorial connections and spatial accessibility.

Table 9: Structural instruments that support the transposition of the transport acquis

Operational Programme	Priority axes	Key Action of Intervention
SOP - Transport	PA 1: Modernization and development of TEN-T priority axes aiming at sustainable transport system integrated with EU transport networks	1.1. Modernization and development of road infrastructure along Priority Axis TEN-T 7
		1.2. Modernization and development of rail infrastructure along Priority Axis TEN-T 22
		1.3. Modernization and development of inland water way infrastructure along Priority Axis TEN-T 18
	PA 2: Modernization and development of the national transport infrastructure outside the TEN-T priority axes aiming at sustainable national transport system	2.1. Modernization and development of national roads
		2.2. Modernization and development of national railways and a passengers' services
		2.3. Modernization and development of Danube and maritime ports
		2.4. Modernization and development of air transport infrastructure

	Priority Axis 3: Modernization of transport sector aiming at higher degree of environmental protection, human health and passenger safety	3.1. Promoting the intermodal transport
		3.2. Improving transport safety for all transport modes
		3.3. Mitigating the transport negative impacts on environment
	Priority Axis 4: Technical Assistance*	4.1. Support for management, implementation, monitoring and control of SOP-T
		4.2. Support for publicity and dissemination for SOP-T
Regional Operational Programme	Priority Axis 2: Improvement of regional and local transport infrastructure	2.1 Rehabilitation and modernization of the county roads and urban streets network - including construction/rehabilitation of ring roads
European territorial cooperation programmes Romania-Bulgaria CBC Programme 2007-2013	Priority Axis 1: Accessibility - Improved mobility and access to transport, information and communication infrastructure in the cross-border area	1.1 Improvements to land and river cross-border transport facilities

There is strong correlation between the acquis and Priority Axes. Given that developing the transport infrastructure is a long-term undertaking it should be assumed that the existing priorities would remain in place for the foreseeable future.

Conclusions

- While many for the provisions under Annex VII of the Accession Treaty were administrative issues and significant investment was not required to ensure compliance with the acquis, significant investment was required in respect of the Environment and Transport sectors.
- Since Accession, new obligations requiring significant investment have arisen in the Energy sector – largely driven by the environmental acquis and the spectre of climate change.
- Much of the legislation in force at the time of the Accession Treaty and which required investment to ensure compliance has been superseded by new provisions, invariably more stringent and requiring additional investment.
- These three areas – Energy, Environment and Transport - will continue to dominate investment needs in terms of acquis compliance in the immediate future and beyond.
- While investments have been made through national funds, including bank loans and there is a private sector contribution, Structural and Cohesion Funds will remain the primary source of funding supporting acquis compliance within these sectors.

EVALUATION QUESTION 2

Which of the needs identified at Q1 are addressed with the aid of financing from Structural Instruments or other sources (such as Public Funds – National Budget, Local Budget, EIB, EBRD)? What are the sums allocated (Priority Axis/ Key areas of intervention) through Structural Instruments that are aimed at financing these needs?

Aside the three sectors requiring heavy investment - Energy, Environment and Transport - it is not possible to identify any significant funding that directly supports acquis compliance. Investments may be made or loans taken out to support initiatives which are consistent with the acquis but this would be. Business needs to adhere to acquis, which is manifest in national legislation, to either avoid penalties or remain trading and this may require investment or additional costs. But again, the purpose is not to ensure acquis compliance. All actions in all walks of life subject to the rule of law must technically comply with any relevant acquis as this is embodied in national legislation.

Similarly, government at all levels may secure funding for initiatives which are acquis compliant but would have no influence on either ensuring compliance or promoting compliance had the initiative been undertaken or not.

The task, therefore, is to identify which interventions have been undertaken which have a direct influence on meeting acquis obligations.

Other than the heavy investment sectors, discussed below (energy, environment, transport), the following sectors need to be considered in terms of meeting acquis obligations:

- Freedom of movement for workers and social policy
- Right of establishment and freedom to provide services
- Taxation
- Economic and monetary policy and free movement of capital
- Industrial policy and internal market
- Regional policy and coordination of structural instruments
- Science, information, education and culture
- Law relating to undertakings
- Area of freedom, security and justice
- industrial policy and internal market

In all of these areas the Treaty obligations have been met and compliance with the acquis achieved. This has been accomplished without the need for additional investment and within the respective institutions' own resources. New acquis has and is being dealt with similarly. Only in the horizontal area of statistics has external funding been available and this falls within Industrial policy and internal market.

The 'industrial policy and internal market' section covers more than one chapter of the initial negotiation chapters of the Community acquis, ranging from statistics to enterprise and industrial policy to trans-European networks.

As a common feature of the different pieces of legislation, none are subject to derogations of transitory measures under the Treaty of Accession. Also, none of the Directives and Regulations listed under this heading are linked directly to a target or objective, which Romania has set for the current financial framework.

Generally, there are a large number of directives and regulations which refer to the introduction, update or harmonization of procedures at the level of the Member States. These cover, for example, the collection of various statistical data, interoperability of networks, approval or verification of different products.

As such, **the actual transposition of the EU legislation is done by adapting the national legislation and updating work procedures, internal regulations, forms and processes by the responsible institutions.** This may be accompanied by supporting measures, such as training or acquisition of new equipment (generally IT infrastructure but not limited to this), which can be financed through projects under SOP ACD or other specific measures under other operational programmes, such as SOP Transport.

During the course of the analysis, no project could be directly linked to one or more pieces of the acquis and the quasi-unanimous statement by stakeholders was that the EU legislation was put in place without external help. The exception being for statistics where the National Institute for Statistics (NIS) has received some grants from Eurostat. In 2013, a number of 31 projects were implemented (see Annex 2).

As a Member State, Romania has to comply with specific requests from Eurostat. For undertaking the General Agriculture Census, Eurostat provided funds (in 2010) amounting to M€ 4 .

Indirectly, the EU acquis may generate investment needs for companies or other stakeholders, in order to comply with the new rules, regulations or standards. Such is the case, for example, for the safety requirements in passenger cars, using certain products for human consumption etc. These investments in replacing or modernising equipment or technological processes may be funded through SOP IEC. Since there is no reference (or limitation) in the guidelines for applicants, which can link the project to the acquis, it was not possible to determine whether there were such projects funded under the SOP IEC. However, it can be said that **all SOP IEC-type of projects have had a positive contribution to meeting horizontal objectives like energy efficiency and compliance with EU standards.**

Investment support for the Energy, Environment and Transport is discussed below.

ENERGY

A comprehensive List of Energy, Environment and Transport acquis, the objectives, achievements, individual projects, funding sources and allocations are given in Annex 1.

Unlike Environment and Transport, which have their own primary dedicated programmes (SOP Environment and SOP Transport), there is no specific SOP for Energy. Of all the sector operational programmes that were identified to contribute to compliance with the new energy acquis, the core axis for investments in energy was Axis 4 of SOP IEC. Energy related projects under SOP HRD and OP DCA, although important too, are deemed to be indirect 'soft projects' and therefore, not central to the analysis.

Investments made in the energy sector during 2007-2013 primarily supported renewable projects (Dir. 2009/28/EC) and modernisation of electricity and natural gas networks. Most of the projects assisted by structural funds were financed through SOP IEC (Axis 4) and, indirectly, through SOP Environment. Thermal rehabilitation of residential buildings was introduced in 2011 under ROP Axis 1 as a pilot program. **The big projects that explicitly contribute to compliance with the energy acquis have received financing from: European Investment Bank (large scale electricity and wind projects), European Bank for Reconstruction and Development (power and renewables), State Budget, Romanian Fund for Energy Efficiency, but also dedicated commercial lines such as the Energy Efficiency Financing Facility.** The national contribution was used for co-financing in projects supported by structural funds, but also dedicated national

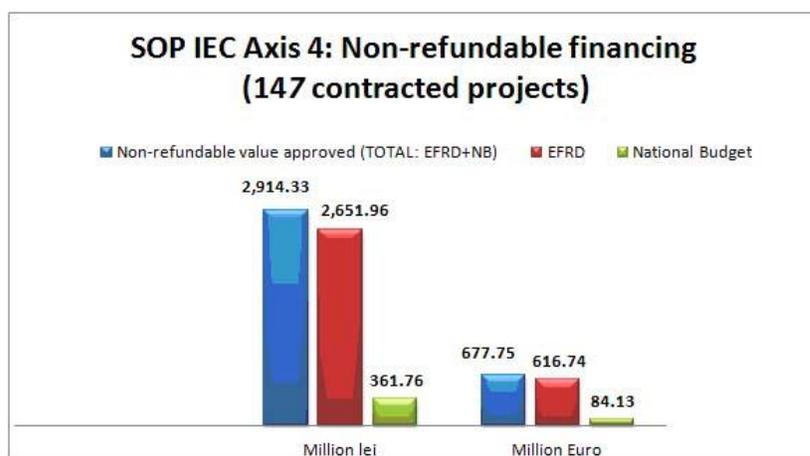
programs such as thermal rehabilitation of buildings and the smaller programs managed by the Environment Fund („Green house”, „Rabla”, „Promoting RES”).

As of October 2013, 155 contracts have been signed (8 subsequently cancelled), under **SOP IEC** Axis 4. This supports three areas: 44 projects for energy efficiency, 39 for energy transport and distribution and 84 for renewables. Of the 167 beneficiaries, 115 were private and 32 public. As of the end of October 2013, 147 projects have been financed.

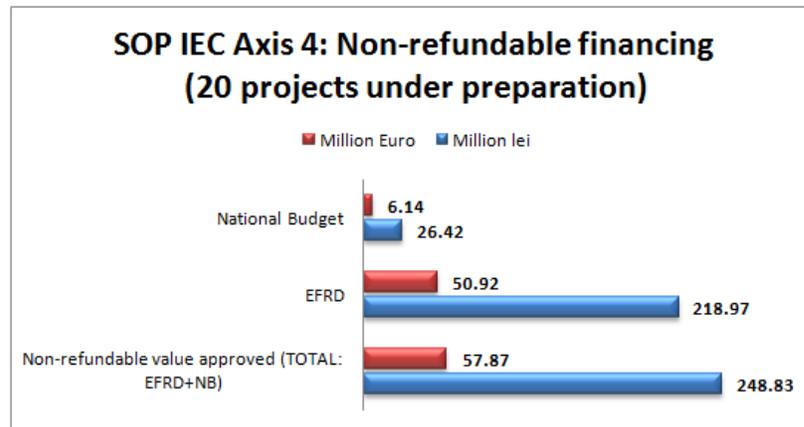
Table 10: Projects contracted under Axis 4 SOP IEC - Energy

Field	Total no. Projects	Status	
		Contracted	Under implementation
Energy efficiency	44	28	16
Transport & distribution	39	39	0
Renewables (RES)	84	80	4
TOTAL	167	147	20

Source: Energy Intermediate Body (October 2013)



Source: Energy Intermediate Body (October 2013)



Source: Energy Intermediate Body (October 2013)

From the initial allocation to PA 4 (M€ 579 from the EFRD) amounts were re-allocated to other priority axis within the programme. To avoid the risk of losing the funds a total of M€ 158.5 - M€ 49 in 2012⁶ and M€ 109.5 in 2013 - was transferred to other Axes where there was over-subscription. E.g Axis 1 'An innovative and eco-efficient productive system' a total of 3,902 applications have been received with a total value of Bn€ 1.2 for an available budget of M€ 359 ., This altered the contracting rate percentage and due to the reduction of the Axis 4 allocation, in October 2013 it appeared over-contracted (125%) in comparison to the previous May (84%).

According to the Framework Implementation Program of SOP IEC for 2007-2013, the goals of Axis 4 were:

- 1) **To reduce primary energy intensity by 40%** compared to 2001;
- 2) **To increase by 4% RES** (electricity from renewable energy sources) from 29% (2004) to 33% of gross national consumption by 2010. The reason provided was that in 2004, 24% of RES was produced entirely from big hydro power generation units and it was considered that the 33% had to be reached through *“power generated from other renewable energy sources in order to avoid dependency on big hydro”*.

⁶ According to Decision No. 14 of the Monitoring Committee of SOP IEC of November 24, 2011, M€ 49 were taken from Axis 4 (from KAI 4.1.4 – M€ 27, from KAI 4.3 – M€ 15, and from KAI 4.1.1. – M€ 7) that were allocated to the project Extreme Light Infrastructure (ELI).

- 3) **To reduce emissions produced by energy installations according to the National programme, to reduce SO₂, NO_X, dust emissions in large combustion plants (LCPs).**
- 4) **To diversify the interconnecting networks.** Out of an estimated 9% interconnection capacity at all Union for the Coordination of the Transmission of Electricity (UCTE) borders, it was considered that 4% can be covered by co-financing through structural funds during 2006-2015.

Energy efficiency targeted the following measures:

1. **Production capacity:** building new thermal/power production units based on RES that would compensate for the retirement of outdated units. Under SOP IEC, another objective was to equip the major modernised energy units of the National Energy System with flue desulphuration. Under SOP Environment, equipment with desulphuration units targeted the district heating large combustion plants (LCP).
2. **Improving the quality of the transport and distribution network:** modernisation, extending the lifetime of the electricity, natural gas, and oil networks, addressing the current transportation losses. This was to be complemented by the National electrification programme 2007-2009 and the operators' own resources.
3. **Improving energy efficiency at point of use - both residential and industrial.** These measures were complementary with the thermal rehabilitation of buildings financed under ROP and with the national programme to thermally rehabilitate residential buildings financed jointly from the national budget, local budget and beneficiaries. (OUG nr. 174/2002 concerning special measures to thermally rehabilitate apartment blocks, the Program "District Heating 2006- 2009, quality and efficiency").

For industry, the energy intensive sectors targeted were: steel making, construction, glass, chemical, food, cement, paper and cellulose, generally sectors where energy costs exceed 20% of total production costs.

No projects were identified supporting the National Energy Regulatory Agency (ANRE), the National Agency for Mineral Resources (ANRM) or the Energy Department within the Ministry of Economy.

Table 11: Key Acquis correlated with SI support - Energy

Acquis	Objectives/ Targets	SI Support	Total Funding M€	IFI Funding M€	National Budget M€
Directive 2009/72/EC of 13 July 2009 concerning common rules for the internal market in electricity.	Grid reinforcements to cope with increased D and S, to cope with cross-border electricity transmission capacity, and take-up intermittent generation from renewable energy. In particular: Art 3.10: Member States shall implement measures ... which shall include energy efficiency /demand-side management measures and means to combat climate change, and security of supply. Such measures may include maintenance and construction of the necessary network infrastructure, including inter-connection capacity.” Art 3. 11: “introducing intelligent metering systems or smart grids.” Art. 12: TSO responsibility to ensure long-term secure, reliable & efficient electricity system and availability of all necessary ancillary services. Art 22.7: investment obligations under the ten-year network development plan (TYNDP) Annex I: Member States shall ensure the implementation of intelligent metering systems; prepare a timetable with a target of up to 10 years for the implementation of intelligent metering systems; min. 80% of consumers shall be equipped with intelligent metering systems by 2020.	SOP IEC - 4.1.2	66.30	58.34	7.97
Directive 2009/73/EC of 13 July 2009 concerning common rules for the internal market in natural gas.	No quantifiable targets, but objectives that require financial investments, such as: Art 3.7: “maintenance and construction of necessary network infrastructure, including interconnection capacity”- Art. 6.2.b: “identification and, where necessary, development or upgrading of the electricity and natural gas interconnections;”- Art. 8: Design technical rules that have to ensure interoperability of systems Art 13. 2: “Each transmission system operator shall build sufficient cross-border capacity to integrate European transmission infrastructure accommodating all economically	SOP IEC - 4.1.2	30.99	27.27	3.72

Acquis	Objectives/ Targets	SI Support	Total Funding M€	IFI Funding M€	National Budget M€
	reasonable and technically feasible demands for capacity and taking into account security of gas supply.”Art.22.7: regarding the implementation of the TYNDP- Art. 23.2-Annex I (2): “Member States shall ensure the implementation of intelligent metering systems (...)Member States or any competent authority they designate, shall ensure the interoperability of those metering systems to be implemented within their territories”				
Directive 2009/28/EC of 5 June 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.	EU target - renewable energy in gross final energy consumption: 20% by 2020EU target - implied share of electricity from RES: 34% by 2020 EU target - renewable share in transport: 10% by 2020 (implies use of biofuels) Art 17.2: GHG emission saving from the use of biofuels and bioliquids ... shall be at least 35%. With effect from 1 January 2017, the GHG emission saving from the use of biofuels and ...shall be at least 50 %. From 1 January 2018 that GHG emission saving shall be at least 60 % for biofuels and bioliquids produced in installations in which production started on or after 1 January 2017	SOP IEC, Axis 4.2 (Renewables)	503.33	443.33	60.40
Directive 2012/27/EU of 25 October 2012, on energy efficiency supersedes 2006/32/EC	For TARGETS - Energy end-use efficiency and energy services.	SOP IEC 4.1.1	50.15	44.13	6.02
Directive 2006/32/EC of 5 April 2006 on energy end-use efficiency and energy Services	9% reduction in final energy consumption (2008-2016) compared to average of last 5 years for which there is available data (2001-2005) Obligations on national public authorities as regards energy savings and energy efficient procurement, and measures to promote energy efficiency and energy services . Status: Repealed by the 2012 Energy Efficiency Directive (2012/27/EU)	SOP IEC 4.1.3	23.69	20.85	2.84

Table 12: Overview of non-structural instruments supporting the transposition of the new energy acquis

Independent Agency	Romanian Fund for Energy Efficiency (FREE): established in 2003 to promote energy efficiency has financed a total of 28 contracts worth M€ 10.79, of which 11 contracts between 2007-2012 with a total value of M€ 5.91
State Budget	National Multi-annual Plan to Increase Energy Performance of Buildings: finances thermal insulation of apartment blocks built between 1950 and 1990. 50% from the state budget allocations, within the funds annually approved from the budget of the Ministry of Regional Development and Public Administration; 30% from the funds annually approved from local budgets; 20% from the repair funds of the owners' associations.
	National Program for increasing energy efficiency and utilizing renewable energy sources in the public sector over the 2009-2010 period approved by the GD 1661/2008: ensures co-financing for projects benefiting local public administration authorities and relating to: Rehabilitation and modernization of the district heating systems; Thermal rehabilitation of certain public buildings; Modernization of interior and exterior public lighting.
	Program for the renewal of the national auto fleet ('Rabla' program): individuals receive approx. € 900 /vehicle as <i>scrapping premium</i> for bringing vehicles older than 10 years to dedicated centres. The scrapping premium is given as exclusive vouchers to buy a new car. The program is financed from the Environment Fund.
Environment Fund	National Program to Promote Less Polluting & More Energy Efficient Transport Vehicles (commenced in 2011)
	National "Green House" Program (Casa Verde)
	National Program to Promote Production of Electricity from Renewable Energy
EU non SI	Connecting Europe Facility – an EU initiative that finances cross-border projects that can benefit more Member States. Total budget is Bn€ 5.85 for 248 eligible Projects of Common Interest (PCIs) - Romania participates in 7 PCIs.
	NER 300 program – a financing program that works with revenues raised from the sale of ETS allowances and directs it to R&D expenditure (mainly renewable energy installations and CCS projects).
	Intelligent Energy Europe (IEE) 2007-2013 , global budget M€ 730
	Energy efficiency financing facility (EEFF): structured as credit line based on grants established from the EC and EBRD funds that is carried out through six Romanian banks and is designed for the private companies.
EIB	Loans amounting to M€ 1,085.53 for electricity, renewables and Energy efficiency in residential buildings.
EBRD	Loans amounting to M€ 1,168.58 for electricity, renewables and energy efficiency in residential buildings.
EEA GRANTS (2009-2014)	Energy Efficiency M€ 8
	Renewable energy M€ 8
NORWAY GRANTS (2009-2014)	Green Industry Innovation: M€ 24 (Programme launched on February 2013. Call closed in August 2013)
	Capacity Building and Institutional Cooperation between dedicated Romanian and Norwegian public institutions, local and regional authorities: M€ 6 (Programme approved on June 21, 2013 - related to <i>nuclear safety</i>)
Romania SME Sustainable Energy Finance Facility	Programme supported by EU and EBRD in order to help SMEs and housing associations invest in energy efficiency and renewable energy solutions. Typical investments supported by RoSEFF, in <i>energy efficiency</i> : replacement motors, controls, lighting, machines, industrial production lines and their components, building insulation, thermopan windows, heat pumps,

(RoSEFF)	boilers, burners, furnaces, ovens, kilns, cogeneration systems, etc. <i>In renewable energy:</i> Biomass, biogas and biofuel-fired boilers and cogeneration systems; solar hot water systems; small hydroelectric.
SMEs Financing Facility “Energy Efficiency Window – Green Initiative”, BCR bank,	Supported by EIB loans for energy efficiency projects and investments in renewable energy only if combined with energy efficiency projects. Eligible projects: Solar energy (thermal and electrical) Biomass (sustainable, preferably from agricultural wastes for the co-generation or production only of thermal energy) Geothermal energy.
Swiss – Romanian bi-lateral cooperation	A contribution of M€ 3.77 towards the thermal rehabilitation of public buildings in the social and health sectors.

National funds were also used for:

State Aid support to promote high energy efficiency cogeneration: between April 2011 and December 2012, 36 companies received a total of M€ 340 (as bonus).

Programme District Heating, Heat and Comfort (2012) – M€ 6.98 from the State Budget and M€ 6.48 local contribution were spent to rehabilitate district heating systems.⁷

Both the **EBRD and EIB provided loans for electricity generation, renewables and energy efficiency**. Loans from the EBRD financed 15 projects, for electricity production (5), for renewable (9) and for energy efficiency (1) - the total value amounting to M€ 1,168.58.

The EIB financed 10 projects: electricity (4), renewable (2) and energy efficiency (4) in residential buildings with a total value of M€ 1,085.53. In addition, to EIB loans for the thermal rehabilitation of residential buildings Bucharest sector 4 also funds the 2012 – 2015 multi-annual programme; the total investment is M€ 132.

The **bilateral Romanian-Swiss cooperation** supported a ‘*Pilot project for thermal rehabilitation of buildings with a social assistance and/or health protection purpose that are being managed by local public authorities*’. This project had 3 stages and a total of 20 buildings were thermally rehabilitated.

Details of the projects and their financing are given in Annex 1. A summary of the non-SI investments are given below in Table 13.

⁷ Ministry of Foreign Affairs, *Short Progress Report on the Implementation of the National Reform Program 2011-2013*, March 15, 2013, Annex 1, pg. 15.

Table 13: Key Acquis correlated with non – Structural Instruments support – Energy

Acquis	Objectives/ Targets	IFI Support	Total Funding M€	IFI Funding M€	National Budget M€
Directive 2009/72/EC concerning common rules for the internal market in electricity.	Grid reinforcements to cope with cross-border electricity transmission capacity, and take-up intermittent generation from renewable energy	EIB	404.00		
		EBRD	515.30		
Directive 2009/28/EC on the promotion of the use of energy from renewable sources	Establishes a common framework for the promotion of energy from renewable sources	Environment Fund for heating systems utilizing renewable sources – initial allocations	0.00	0.00	32.54
		Environment Fund for producing energy from renewable sources – initial allocations	0.00	0.00	184.97
		EBRD - renewable projects		577.7	
		EIB - 2 renewable projects		400	
		EEA GRANTS 2009-2014	8		
Directive 2009/31/EC on the geological storage of carbon dioxide.		Norwegian Financial Mechanism; EU ETS incomes from auctions; National Public Sources; EU 7th Framework Project (FP7); Green Investment Scheme EIB loan; Equity	40		
Directive 2010/31/EU (recast) energy performance of buildings, (“EPBD”)	Member States shall ensure that: a) by 31 December 2020, all new buildings are nearly zero- energy buildings; and (b) after 31 December 2018, new buildings occupied and owned by public authorities are nearly zero-energy buildings. Intermediate targets for improving the energy performance of new buildings by 2015	EIB loans for thermal insulation of buildings in Bucharest sectors 2, 4, 1 and 6	281.88		
		National “Green House” Program (Casa Verde) – allocations	465.46	348.24	117.23
		EBRD	12		
Directive 2009/125/EC establishing a framework for the setting of	MS shall ensure that the introduction of the system of labels and fiches concerning energy consumption or conservation is accompanied	Energy Efficiency Financing Facility (EEFF)	63.5		
		EEA GRANTS 2009-2014	24		

Acquis	Objectives/ Targets	IFI Support	Total Funding M€	IFI Funding M€	National Budget M€
ecodesign requirements for energy-using products	by educational and promotional information campaigns aimed at promoting energy efficiency				
Directive 2006/32/EC on energy end-use efficiency and energy services	9% reduction in final energy consumption (2008-2016) compared to average of last 5 years for which there is available data (2001-2005) Obligations on national public authorities as regards energy savings and energy efficient procurement, and measures to promote energy efficiency and energy services	ROMANIAN FUND FOR ENERGY EFFICIENCY	M\$ 8.2		
		EBRD	505.3		
		EEFF	63.5		
		EEA GRANTS (2009-2014)	8		
Directive 2009/33/EC of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles	Mandatory inclusion of lifetime costs for energy consumption, CO2 emissions, and pollutant emissions as award criteria in the procurement of vehicles for public transport services.	Environment Fund (allocations)	2.51		2.51
		EIB	950		
Directive 2004/8/EC of on the promotion of cogeneration based on a useful heat demand in the internal energy market		EIB	33		
Council Directive 2006/117/Euratom of on the supervision and control of shipments of radioactive waste and spent fuel	The targets are mostly regulatory in nature, but they could have a financial implication as well. 1) MS shall submit a report to the EC on the implementation of this Directive every three years starting from 2004; 2) MS shall at least every 10 years arrange for periodic self-assessments of their national framework and competent regulatory authorities	NORWAY GRANTS 2009-2014	6		
		Swiss / Romanian Contribution		3.77	1.36

ENVIRONMENT

The most important financing source in Environmental sector dealing with acquis compliance is represented by SOP ENV.

The sums allocated through SOP ENV for each Priority Axis/KAIs are presented in the following table.

Table 14: The sums allocated through Structural Instruments SOP Environment M€

Year	ERDF	CF	Total
2007	50.58	221.79	272.37
2008	117.99	319.32	437.30
2009	149.02	429.49	578.51
2010	168.69	514.66	683.35
2011	206.33	554.82	761.15
2012	252.44	596.37	848.81
2013	291.60	639.37	930.98
Total	1,236.65	3,275.82	4,512.47

PA	EU funds	National Contribution	Total	Co-financing rate
PA1 (CF)	2,776.53	372.89	3,149.42	88,16%
PA2 (ERDF)	934.22	184.63	1,118.85	83,50%
PA3 (CF)	229.27	159.37	388.64	58,99%
PA4 (ERDF)	171.99	19.11	191.10	90%
PA5 (CF)	270.02	45.82	315.84	85,49%
PA6 (ERDF)	130.44	14.49	144.93	90%
Total	4,512.47	796.32	5,308.79	85%

Priority Axis 1 (Water and wastewater) has the largest allocation – 61%, followed by the waste management sector (PA 2/KAI 2.1), with 18.6% of the funds. **The water and waste domains are by far the most challenging and require the most investment to ensure the Accession Treaty obligations are met and the relevant acquis compliance achieved.** Therefore, the allocations are not disproportionate. While the allocation for waste was assumed sufficient for all of the 42 integrated waste management plans the allocation for water/ wastewater allocation was estimated at only one third of the required investment.

Table 15: Key Acquis correlated with Structural Instruments (SI) support - Environment

Acquis	Objectives/ Targets	SI Support	Total Funding M€	IFI Funding M€	National Budget M€	Other/ ineligible funding M€
WASTE MANAGEMENT						
Directive 2002/96/EC on waste electrical and electronic equipment (WEEE), amended by Directives 2003/108/CE, 2008/34/CE and 2008/112/CE - (abrogated starting with 15.02.2014) Directive 2012/19/EU on waste electrical and electronic equipment) (recast) -	To protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste from electrical and electronic equipment (WEEE)					
Directive 94/62/EC on packaging and packaging waste	Harmonize national measures concerning the management of packaging and packaging waste to prevent any impact on the environment	SOP ENV PA 2 - KAI 2.1	1,401.60	510.12	80.21	N/A
Directive 1999/31/EC on the landfill of waste	Provide for measures, procedures and guidance to prevent or reduce negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from landfilling of waste, during the whole life-cycle of the landfill.					
	TOTAL		1,401.60	510.12	80.21	N/A

Acquis	Objectives/ Targets	SI Support	Total Funding M€	IFI Funding M€	National Budget M€	Other/ ineligible funding M€
Flood Risk Management						
Directive 2007/60/EC on the assessment and management of flood risks	Establish a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community.	SOP ENV PA 5, KAI 5.1 _	318.36	217.82	39.94	60.61
Water		Total	318.36	217.82	39.94	60.61
Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment	Collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. The objective of the Directive is to protect the environment from the adverse effects of the above mentioned waste water discharges.	SOP ENV PA 1_	4,116.75	3,050.12	470.67	N/A
Directive 98/83/EC on the quality of water intended for human consumption	Protect human health from the adverse effects of any contamination of water intended for human consumption					
		TOTAL	4,116.75	3,050.12	470.67	N/A
Pollution Control						
Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants, amended by Directives 2006/105/EC and 2009/31/EC - Will be repealed from 01.01.2016	The Directive applies to combustion plants with a rated thermal input less than 50 MW, irrespective of the type of fuel used (solid, liquid or gaseous).	SOP ENV PA 3	369.61	182.81	164.53	5.39

Acquis	Objectives/ Targets	SI Support	Total Funding M€	IFI Funding M€	National Budget M€	Other/ ineligible funding M€
Nature Protection						
Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, amended by Directives 97/62/EC, 2006/105/EC and Regulation (EC) 1882/2003 - <i>transposed total</i>	Contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora	SOP ENV PA 4	171.24	124.71	26.18	1.87
Directive 2009/147/EC on the conservation of wild birds						
		TOTAL	171.24	124.71	26.18	1.87

The evaluation has also identified other sources for funding the Environmental sector:

Life +, which supports nature and biodiversity projects and environmental policy and governance projects.

Global Environment Facility (GEF), for air quality, climate change, nature protection projects;

Financial Mechanism of the European Economic Area (EEA), which supports waste management projects.

Integrated Nutrient Pollution Control (INPC), financed by World Bank (WB), which supports water quality projects;

Environmental Fund (EF), for project in waste management, rehabilitation of contaminated sites, air quality, water quality, nature protection, flood and landslide management;

Table 16: Key Acquis correlated with non-SI support - Environment

Acquis	Objectives/ Targets	IFI Support	Total Funding M€	IFI Funding M€	National Budget M€	Other/ ineligible funding M€
Water						
Directive 91/271/EC concerning urban wastewater treatment Directive 98/83/EC on the quality of water intended for human consumption Directive 2000/60/EC establishing a framework for Community action in the field of water policy, amended by Directives 2008/32/EC, 2008/105/EC 2009/31/EC and Decision 2455/2001/CE	Collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. The objective of the Directive is to protect the environment from the adverse effects of the above-mentioned waste water discharges.	Environment Fund (EF)	0.00	0.00	333.51	0.00
		EEA Grants	3.56	1.97	1.59	
		Integrated Nutrient Pollution Control (INPC) World Bank	10.67			
Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources	The objective is of reducing water pollution caused or induced by nitrates from agricultural sources and prevent further such pollution	INPC World Bank	6.92			
Directive 2000/60/EC establishing a framework for Community action in the field of water policy, amended by Directives 2008/32/EC, 2008/105/EC and 2009/31/EC and Decision 2455/2001/CE		LIFE+	0.70	0.30	0.4	

Acquis	Objectives/ Targets	IFI Support	Total Funding M€	IFI Funding M€	National Budget M€	Other/ ineligible funding M€
Directive 2000/60/EC establishing a framework for Community action in the field of water policy, amended by Directives 2008/32/EC, 2008/105/EC and 2009/31/EC and Decision 2455/2001		EEA Grants	0.33	0.26	0.07	
Waste Management						
Regulation (EEC) No 259/93 on the supervision and control of shipments of waste within, into and out of the European Community	Establishes procedures and control regimes for the shipment of waste, depending on the origin, destination and route of the shipment, the type of waste shipped and the type of treatment to be applied to the waste at its destination	LIFE+	1,20	0.56	0.64	0.00
Directive 2008/98/EC on waste and repealing certain Directives	By 2020, preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material shall be increased to a minimum of 70 % by weight.	LIFE+	3.35	1.49	1.86	
		EEA Grants	2.40	2.00	0.4	
Generic Waste Management incl WEEE, End of Life Vehicles		AFM Waste management, including	27.05		27.05	

Acquis	Objectives/ Targets	IFI Support	Total Funding M€	IFI Funding M€	National Budget M€	Other/ ineligible funding M€
		hazardous waste				
Industrial Pollution						
Directive 2000/76/EC on the incineration of waste - to be repealed on 7 January 2014	Prevent or to limit negative effects on the environment, in particular pollution by emissions into air, soil, surface water and groundwater, and the resulting risks to human health, from the incineration and co-incineration of waste. This shall be met by means of stringent operational conditions and technical requirements, through setting emission limit values for waste incineration and co-incineration plants	LIFE+	0.62	0.30	0.32	0.00
Nature Protection						
Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, amended by Directives 97/62/EC, 2006/105/EC and Regulation (EC) 1882/2003	To contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora					
Directive 2009/147/EC on the conservation of wild birds	Conservation of all species of naturally occurring birds in the wild state. It covers	LIFE +	20.99	13.11	7.87	0.00

Acquis	Objectives/ Targets	IFI Support	Total Funding M€	IFI Funding M€	National Budget M€	Other/ ineligible funding M€
	the protection, management and control of these species and lays down rules for their exploitation.					
Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, amended by Directives 97/62/EC, 2006/105/EC and Regulation (EC) 1882/2003	Contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora	Global Environment Facility – Small Grants Programme	2.13	0.98	0.72	0.00
		EEA Grants	1.55	1.29	0.26	
		EF			1.62	
Flood Risk						
Directive 2007/60/EC on the assessment and management of flood risks	Establish the framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods	EF (Environment Fund)	0.00	0.00	125.75	0.00
		EEA Grants	1,422.83	973.46	178.48	
Horizontal Initiatives		GEF SGP	1.69	0.80	0.51	0.39
		LIFE	1.10	0.50	0.60	

TRANSPORT

The overwhelming financing source for Transport, which includes meeting the Annex VII obligations and the contribution towards the Trans European Network for Transport (TEN-T), comes from the Sectoral Operational Programme Transport (SOP-T).

Table 17 SOP-T-allocation per Priority Axis (amounts in M€):

Year	ERDF	CF	Total
2007	28.81	223.15	251.96
2008	122.25	319.10	441.35
2009	77.72	398.81	476.53
2010	214.08	515.55	729.63
2011	230.87	554.65	785.53
2012	245.49	596.21	841.70
2013	122.53	638.92	761.44
Total	1,041.74	3,246.40	4,288.13

PA	EU funds	National Contribution	Total	Co-financing rate
PA1 (CF)	3,246.40	572.89	3,819.29	85%
PA2 (ERDF)	904.91	159.69	1,064.60	85%
PA3 (ERDF)	107.74	19.01	126.75	85%
PA4 (ERDF)	29.08	5.13	34.22	85%
Total	4,288.13	756.73	5,044.86	85%

The total funds from Structural Instruments for achieving acquis compliance in the Transport sector are given in the following table:

Table 18: Key Acquis correlated with Structural Instruments support - Transport

EU Acquis	Objectives / Targets	SI Support	Budget M€			Other
			Total	SI	National Budget	
Directive 96/53/EC laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic	A Member State may not reject or prohibit the use in its territory, in international traffic, of vehicles registered or put into circulation in any other Member State for reasons relating to their weights and dimensions	SOP-T PA 2 KAI 2.1	677.97	372.08	138.00	129.20
Directive 2012/34/EU establishing a single European railway area	(1) Member States shall develop their national railway infrastructure by taking into account, where necessary, the general needs of the Union; (2). Member States may also provide the infrastructure manager with financing consistent with its functions as referred to in point (2) of Article 3, the size of the infrastructure and financial requirements, in particular in order to cover new investments	SOP-T PA 1 KAI 1.2	2,240.40	1,495.89	263.98	480.53
Directive 2008/57/EC on the interoperability of the rail system within the Community ; Directive 2011/18/EU on the interoperability of the rail system within the Community	Establish the conditions to be met to achieve interoperability within the Community rail system in a manner compatible with the provisions of Directive 2004/49/EC. These conditions concern the design, construction, placing in service, upgrading, renewal, operation and maintenance of the parts of this system as well as the professional qualifications and health and safety conditions of the staff who contribute to its operation and maintenance.	SOP-T PA 3 KAI 3.3 SOP-T PA 2 KAI 2.2	189.41	122.57	24.69	42.15
Directive 2008/110/EC on safety on the Community's railways (Railway Safety	Member States shall ensure that measures to develop and improve railway safety take account of the need for a system-based approach	SOP-T PA3 KAI 3.2	158.13	95.80	20.00	42.33

EU Acquis	Objectives / Targets	SI Support	Budget M€			Other
			Total	SI	National Budget	
Directive)						
Commission Implementing Regulation (EU) No 1207/2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky	Lays down requirements on the systems contributing to the provision of surveillance data, their constituents and associated procedures in order to ensure the harmonisation of performance, the interoperability and the efficiency of these systems within the European air traffic management network (EATMN) and for the purpose of civil-military coordination.	SOP-T PA 2 KAI 2.4	75.65	41.51	6.75	27.38
Commission Regulation (EU) No 164/2010 concerning the technical guidelines for the planning, implementation and operational use of river information services (RIS)	RIS should be developed and implemented in a harmonised, interoperable and open way. The technical specifications should take due account of the work carried out by relevant international organisations.	SOP-T PA3 KAI 3.2	22.73	13.75	4.52	4.46
Regulation EC 1137/2008 and Commission Directive 2007/71/EC of 13 December 2007 amending Annex II of Directive 2000/59/ on port reception facilities for ship-generated waste and cargo residues	The Directive focuses on ship operations in European Union ports. It addresses in detail the legal, financial and practical responsibilities of the different operators involved in delivery of ship-generated waste and cargo residues. Member States must ensure that port reception facilities meet the needs of the ships	SOP-T PA 3 KAI 3.3.	33.16	19.95	6.87	6.34
Total			3,397.46	2,161.56	464.82	732.40

Other funds (non - Structural Instruments) supporting the Transport Sector are summarised in the tables below:

Table 19: Romanian state budget

Type of investments	Total Funds M€	%, by mode	Funds in 2009 (M€	Funds in 2010 M€	Funds in 2011 M€
1	2		4	5	6
Road Transport					
Completed projects, 2009-2010	3,304.11		395.52	291.25	
Allocated funds with deadline in 2011	2,169.06				166.11
Projects started after 2009, with deadline after 2011	5,664.28				
Projects started after 2011	479.23				
	11,616.68	89,4%	395.52	291.25	166.11
Rail Transport					
Completed projects, 2009-2010	129.79		2.51	3.93	
Allocated funds with deadline in 2011	570.44				78.69
Projects started after 2009, with deadline after 2011	5.95				
Projects started after 2011	13.58				
	719.76	5,5%	2.51	3.93	78.69
Inland waterway transport					
Completed projects, 2009-2010	33.04		2.44	1.18	
Allocated funds with deadline in 2011	21.25				3.10
Projects started after 2009, with deadline after 2011	14.60				
Projects started after 2011	10.67				
	79.56	0,6%	2.44	1.18	3.10
Air transport					
Completed projects, 2009-2010	154.43		3.23	2.97	
Allocated funds with deadline in 2011	142.56				1.08
Projects started after 2009, with deadline after 2011	142.43				
Projects started after 2011	141.80				
	581.23	4,5%	3.23	2.97	1.08
	12,997.23		403.70	299.33	248.99

(source: Transport Ministry, <http://www.mt.ro/nou/index.php>)

Table 20: EU pre- and post-accession funds

Type of investments	Total Funds M€	%, by mode	Funds in 2009 M€	Funds in 2010 M€	Funds in 2011 M€
1	2		4	5	6
Road transport					
Completed projects, 2009-2010	453.27		55.49	87.54	
Allocated funds with deadline in 2011	276.96				89.67
Projects started after 2009, with deadline after 2011					
Projects started after 2011					
	730.23	33,8%	55.49	87.54	89.67
Rail transport					
Completed projects, 2009-2010	715.44		130.06	176.23	
Allocated funds with deadline in 2011	715.44				145.27
Projects started after 2009, with deadline after 2011					
Projects started after 2011					
	1,430.87	66,2%	130.06	176.23	145.27
	2,161.10		185.55	263.77	234.94

Table 21: Loans (EBRD, EIB, CEB)Bank)

Type of investments	Total Funds M€:	%, by mode	Funds in 2009 M€	Funds in 2010 M€	Funds in 2011 M€
1	2		4	5	6
Road transport					
Completed projects, 2009-2010	738.23		599.68	1,529.63	0.00
Allocated funds with deadline in 2011	480.35				167.12
Projects started after 2009, with deadline after 2011	1,662.12				
Projects started after 2011	850.82				
	2,994.03	95,5 %	599.68	1,529.63	167.12
Rail transport					
Completed projects, 2009-2010	57.13		27.03	17.19	
Allocated funds with deadline in 2011	35.40				6.60
Projects started after 2009, with deadline after 2011					
Projects started after 2011	1.42				
	93.94	3,0%	27.03	17.19	6.60
Inland waterway transport					
Completed projects, 2009-2010			27.03	17.19	6.60
Allocated funds with deadline in 2011	47.45				
Projects started after 2009, with deadline after 2011					
Projects started after 2011	47.45	1,5%			9.48
	31,353.80				

As it can be seen in the tables above, the state budget financing and loans from IFIs were primarily allocated to the road infrastructure (approx. 90% from the total funds). However, rail transport received about 2/3 of the total EU pre- and post accession funds, but the absolute amount was comparatively small.

Conclusions

Under the 2007 – 2014 programming round for the Structural and Cohesion Funds considerable finance was allocated to the environment and transport sectors under the respective operational programmes which directly addressed the investment needs arising from the Accession Treaty obligations. However, the amounts were not sufficient to entirely meet the investment needs.

Some of the investments required for the energy sector were addressed through Sectoral Operational Programme – Increasing Economic Competitiveness (SOP IEC). Funds were also reallocated under SOP IEC from other areas to further support the energy sector.

However, there is no systematic approach to allocating funds in respect of acquis compliance. It follows that there is no systematic monitoring in place to assess interventions' contributions towards ensuring acquis compliance. There is inherent correlation between the areas requiring investment to ensure acquis compliance and that which is required for the 'greater good'. Certainly no programmes have been initiated which are contrary to acquis compliance. Programmes and projects are initiated according to the strategic planning and priorities inherent within the operational programmes. It could almost be considered as 'coincidental' that some of this correlates with acquis requirements, while the acquis is the legal framework binding the Member States to the European Union the Structural and Cohesion Funds are not specifically designed to ensure acquis compliance but also the development and cohesion needs of the Member States – acquis compliance for the overwhelmingly large part being administrative and technical matters related to transposition.

Funding from national resources (including bank loans), contributions made by other EU funded schemes and other IFIs have been identified. As with SCFs these are invariably project specific results orientated and are not designed with the purpose of ensuing acquis compliance. Again it could be regarded as 'coincidental' that there is a contribution towards compliance.

Summary of funding allocations deemed to directly or indirectly support acquis compliance:

Energy

SCF + co-financing contribution M€ 671.26

Other contribution M€ 2,407.35

Environment

SCF + co-financing allocation M€ 7400

Other contribution M€ 498.43

Transport

SCF + co-financing contribution M€ 3375.55

National Funds M€ 13831.56

Legacy funding from pre-accession funds M€ 2170.41

EVALUATION QUESTION 3

What is the current progress and the forecast for DMI sites / relevant projects identified in Q2? What are the prospects for Romania to achieve the goals identified in Q2 for projects financed by the Structural Instruments and public funds? If not achieving these targets could be consequences from this assumption?

During the course of this evaluation it has become apparent that there is no systematic and unitary monitoring of progress made where investments are required for acquis compliance. However, the Ministry of Foreign Affairs maintain a progress record of the status of meeting the obligations laid out in the transition measures specified in Annex VII of the Accession Treaty. Also, the line ministries are acutely aware of the acquis provisions that fall under their auspices, what the arising needs are and what actions need to be taken. Although this observation falls outside the remit of this evaluation, it would seem prudent to suggest that consideration be given to conferring responsibility on a central body for monitoring investment performance and need against acquis obligations.

For the sectors, EU legislation does not establish quantifiable targets *per se* but rather procedures to be implemented; e.g. *the alignment of the current rules of the Union with inter-national rules on training and certification of seafarers (Directive 2012/35/EU of the European Parliament and of the Council of 21 November 2012 amending Directive 2008/106/EC on the minimum level of training of seafarers)*, or measures to be introduced - *protecting workers from the risks associated with electromagnetic fields (Directive 2012/11/EU of the European Parliament and of the Council of 19 April 2012 amending Directive 2004/40/EC on minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields).*

The transposition of the majority of Directives was/is to be done through an administrative process, aimed at adapting the internal procedures of the responsible institutions, or following the implementation of operational tasks. For example, Council Directive 2010/18/EU of 8 March 2010 implementing the revised Framework Agreement on parental leave, establishing *ways of further improving the reconciliation of work, private and family life and the possibility of introducing new types of family-related leave, such as paternity leave, adoption leave and leave to care for family members* was

implemented in Romania through legislation regulating parental leave and childcare allowance (with subsequent amendments).

In most of the examined cases, the EU Directives clearly state the actions or the set of actions to be followed, e.g. *prevent the use of devices intended to defraud the system and thereby to undermine the effectiveness of the social legislation relating to road transport* (Commission Directive 2009/4/EC of 23 January 2009) or *modernization of the rules governing admission to the occupation of road transport operator in order to ensure that those rules are applied more uniformly and effectively in the Member States* Regulation (EC) No 1071/2009 of the European Parliament and of the Council of 21 October 2009).

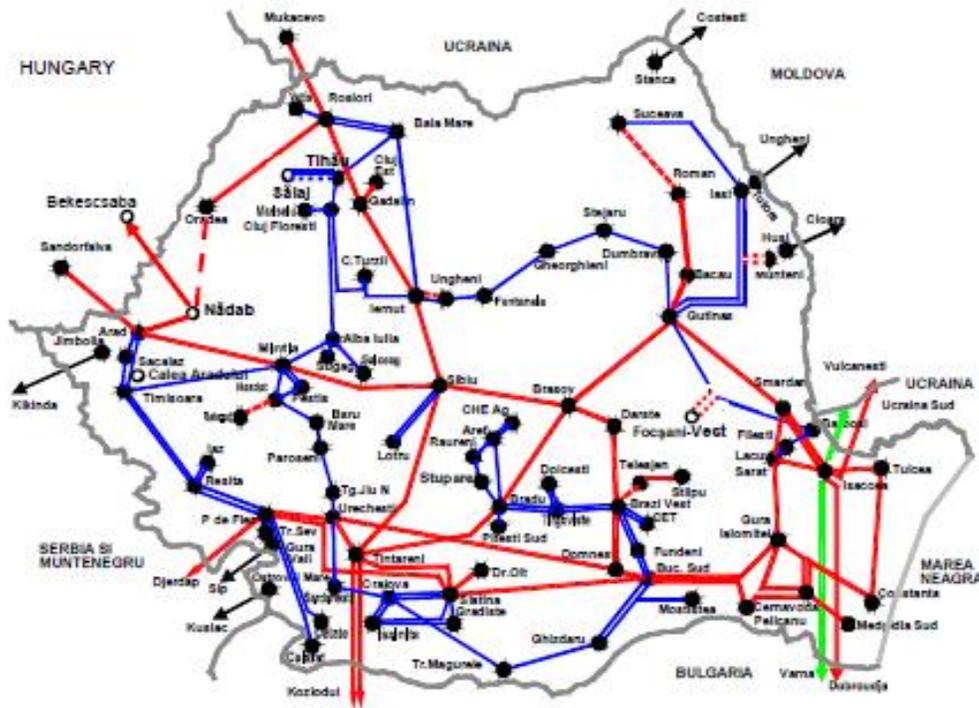
One particular example is statistics – our examination showed numerous EU regulations concerning the field of adapting country databases, indicators and other specific topics to the European norm, with the scope of integrating the broader outcomes of national inquiries: *comprehensive and comparable set of data on transitions from work into retirement, list of information to be collected in 2010 by the ad hoc module on reconciliation between work and family life, comprehensive and comparable set of data on employment of persons with disabilities* etc. In such cases, the responsible authority (be it the Ministry of Labor or the National Statistics Institute) have the guidelines and the clear roadmap of the needed actions, with no evident necessary investments to sustain the required legislative/procedural changes.

While these were largely administrative issues, the Energy, Environment and Transport sectors required significant investment in order meet the Annex VII obligations and acquis introduced subsequently. The progress made is discussed below.

ENERGY

For **electricity**, Directive 2009/72 concerning the common rules for the internal market in electricity the EC has filed a case at the European Court of Justice against Romania for failing to liberalise the market. In terms of investment in the production, transmission and distribution of electricity there has been considerable investment under SOP IEC and loans from the EIB and EBRD. Although there are insufficient data available to present a comprehensive assessment of progress made to the upgrading of the network, as of

September 2013, 96 km of the targeted 100 km of electricity network was extended/modernized. Regarding electricity interconnectivity, Romania already has several 400 kV interconnections with its neighbours (red on the map below). There are also a number of 110 kV lines with Ukraine and Serbia (black lines on the map).



CAPTION:

- 110 kV OHL: —
- 220 kV OHL: — (..... : operates at 110 kV)
- 400 kV OHL: — (- - - : operates at 220 kV; 400kV OHL Nădab – Oradea under completion)
- 750 kV OHL: —

Source: Transelectrica, 2010

Romania’s **natural gas** infrastructure is old and most of the pipelines (approx. 70%) exhibit advanced deterioration. The Directives set as targets “ensuring a secure and efficient long-term supply” which implies not only building new infrastructure, but also “maintenance” that is modernizing the existing infrastructure on both transmission and distribution segments. In Romania, Transgaz is the operator of the national gas transportation system.

Of its 1,238 gas metering stations, 948 were being equipped with SCADA systems in 2012. The 5 gas compressor stations have equipment dating from the 1970s and need to be upgraded in order to be able to ensure reliable gas transportation at the required technical parameters. Works are being undertaken to upgrade the gas distribution network and are focused in Bucharest and Cluj-Napoca and the target of the natural gas distribution network to be extended or modernised was exceeded - 207 km against the target value of 150 km).

While for electricity, Romania is fairly well interconnected with its neighbours, the same cannot be said for natural gas. Currently, Romania has one operational interconnector with Hungary; the Arad-Szeged pipeline inaugurated in 2009 with an operational capacity of 1.7 Bcm. The Giurgiu-Ruse pipeline is under construction. The Ungheni-Iasi pipeline is being constructed at a cost of M€ 26.4 with M€ 7 funding from the Joint Operational Program "Romania -Ukraine-Republic of Moldova 2007-2013", funded through European Neighbourhood and Partnership Instrument.

However, **the new energy acquis explicitly requires mandatory permanent bi-directional capacity**. This requires either ensuring reverse flow in the existent pipelines (such as Arad-Szeged) or building a parallel pipeline for export purposes. The objective of ensuring the interoperability of Romania's gas system with that of its neighbouring countries does not refer only to the physical existence of the gas pipeline, but also to solving the question of the pressure difference. For instance, in Romania's domestic gas transportation system the pressure is between 6 and 35 bar. The transit of gas through Romania takes place via dedicated pipelines which currently are not connected to the main Transgaz system. The pressure in the transit lines is higher: 54 bar. In Hungary's system the typical pressure is 63 bars (with a minimum at the country entry point of 38-40 bar and a maximum of 63-75 bar. In order to ensure the interoperability and to allow natural gas to flow from Romania to Hungary, the construction of a new compressor station is required which is estimated to cost around M€ 15-17.

As with electricity, Romania is subject to proceedings taken by the EC at the European Court of Justice for failing to liberalise the gas market.

As of 2011, Romania already met and exceeded the target set by the Renewables Directive (2009/28/EC) in terms of renewable energy share in final energy consumption. The current capacity is 3000 MW, 301 MW being installed with support of SOP IEC.

However, Romania's progress towards achieving a 10% share of renewable in transportation (under the same Directive) has been slow and requires additional efforts in order to be accelerated. In 2011, the share of biofuels in transportation was just 2%.

Other obligations that require **major investments stem from the Directive for energy performance in buildings (2010/31/EU known as the 'EPBD') and the new Energy efficiency Directive (2012/27/EU known as the EED) that was adopted in order to speed up the transposition of the 2010 buildings Directive.** Romania's national building stock is dominated by the residential sector (5.1 million buildings that number 8.5 million individual dwellings). Even at the EU level, buildings account for 40% of the total energy consumption and 36% of greenhouse gas emissions. Hence, EU's recent focus (through these 2 Directives) on building renovation and the transition to nearly zero energy buildings.

However, **energy efficiency** attracted little interest during 2007-2013 and some of the funds initially targeted for energy efficiency were reallocated to RES projects. Within PA 4, the budget for KAI 2 was supplemented by M€ 200. HG (Government Decree) 248/2012 was adopted to approve the state aid scheme and completed by HG 750/2008 regarding regional state aid for valorisation of RES.⁸

Among industry, one obstacle was the fact that energy efficiency measures are made based on an energy balance, which not all big companies have. Banks did not have specific instruments to support energy efficiency projects. For many residential consumers, the co-financing rate was simply too high. This is also the issue facing the national thermal rehabilitation program, where there is a very generous support scheme (80%). However, given many Romanian's very low incomes, it is difficult for them to provide the remaining 20% share of the costs.

Under ROP Axis 1, KAI 2, funding was made available to support energy efficiency in residential buildings. This was relatively recent and a result funding opportunities arising

⁸ Ministry of Foreign Affairs, *Short Progress Report on the Implementation of the National Reform Program 2011-2013*, March 15, 2013, Annex 1, pg. 14.

from regulatory changes. Regulation 397/2009 allowed thermal rehabilitation of buildings to be eligible for financing through ERDF („*In each Member State, expenditure on energy efficiency improvements and on the use of renewable energy in existing housing shall be eligible up to an amount of 4% of the total ERDF allocation*”). Consequently, and with some delay, a new financing scheme was developed for energy efficiency in urban areas and the call was launched in 2012. The total value of ERDF and national financing is ~ M€ 22.8. The funds shall be made up of savings realised from ongoing projects/projects about to be finalised, and an expected reallocation of funds between operational programmes. 78 project applications have been received, of which 6 have been rejected, leaving 72 projects eligible for financing. As of October 2013 only one contract has been signed.

In respect of Directive 2010/31 infringement proceedings have been initiated and a reasoned opinion sent in October 2013. As with the more long-standing issue of oil stocks, the oil stocks Directive 2009/119 is not yet transposed and is also subject to infringement proceedings. A reasoned opinion was sent in June 2013, but in the meantime the government drafted a legislative proposal in August and is currently in the Chamber of Deputies being debated under a fast track procedure. and is expected to be adopted into law in the near future.

ENVIRONMENT

Wastewater

Under the terms of the Accession Treaty, **Romania obtained transition period for collecting, discharging and the treatment of urban wastewater for 263 agglomerations with a population of more than 10,000 until 31 December 2015 and for 2,346 agglomerations with population between 2,000 and 10,000 until 31 December 2018. Transition periods were obtained also for drinking water until 31 December 2015, in order to comply with Directive 98/83.**

SOP ENV Priority Axis 1 supports compliance with Directive 91/271/EEC concerning urban waste-water treatment and Directive 98/83/EC on the quality of water intended for human consumption. Funds are targeted to increase the coverage of population connected to basic water services on a regional basis from 52% to 70% and increase the volume of wastewater treated from 35% to 60%. This entails constructing or rehabilitating 170 wastewater treatment plants and 240 localities to be provided with new/rehabilitated water facilities. This is to be achieved through 43 major projects and 2 minor projects.

The total value of projects is of M€ 5,382.93 of which M€ 3,365.69 represents EU funds (~62.5% of the total value).

By mid 2013, 149 localities were supported by projects for water supply and 40 wastewater treatment plants have or are being constructed or rehabilitated. This indicates that SOP ENV has achieved 78% of the 2012 target for water supply and 33% of the target for wastewater treatment facilities.

Assuming that all agglomerations with more than population of 10,000 are included in the 45 proposed projects and that the technical solutions ensure compliance with the directive requirements, it is expected that the 2015 target for drinking water quality to be met. However, considering the progress so far, further efforts are required to meet the 2015 target for waste water treatment.

Other funds financing water/wastewater management projects are represented by the Environmental Fund, EEA Grants, LIFE+ and the Integrated Nutrient Pollution Control project (World Bank reimbursable financing). The National Programme for Rural

Development also supports water and wastewater systems in rural areas, but this falls outside the remit of this report.

The Environmental Fund financed ~292 water and wastewater systems projects for towns and communes. The total budget allocated from the EF was M€ 333.51. One EEA grant was also identified for wastewater management, with a total value of € 3,559,590. Within the Integrated Nutrient Pollution Control supported by the World Bank, 8 sewage systems in rural areas were financed, with a total value of M€ 10.67. The project also contributes to the protection of waters against pollution caused by nitrates from agricultural sources with 10 projects for collecting and depositing waste and constructing manure platforms in rural areas being financed. The total value of the INPC project is of M€ 56.22 . Nitrate pollution abatement from agricultural sources was also supported by LIFE+ under a project developed by the National Institute of Hydrology and Water Management (ANAR) with a value of € 698,319. EEA Grants supported compliance with the Water Framework Directive with projects amounting to M€ .1,48

According to the National Administration for Romanian Waters (ANAR) analysis, in 2012 the collection level of the biodegradable organic load from wastewater was 58.95%, and the treatment the level was 48.32%. The 2013 target is 69% for wastewater collection and 61% for wastewater treatment for agglomerations with populations of more than 10,000. **Considering that between 2007 and 2012 the capacities increased with only 12% for collection and 11% for treatment, it appears that there may be a shortfall against the 2013 target.**

New acquis has introduced higher quality parameters for waste water treatment with a deadline of 2018. This will require tertiary treatment facilities to be installed in WWTPs which will add 20% to construction costs. This is a double blow to Romania as the costs would be lower had this requirement been included at the design stage of the current works.

Waste management

Also under the terms of the Accession Treaty, **Romania obtained transition periods for compliance with acquis concerning packaging and packaging waste, landfill and waste from electric and electronic equipment.**

SOP ENV PA 2 KAI 2.1 aims to have 30 integrated waste management systems at county / regional level operational by 2015, benefiting ~8 million inhabitants. The target of SOP ENV

is to close 133 non-compliant landfills. Meeting obligations required the closure of 241 non-compliant landfills, the construction of 40 new landfills, recycling, processing and associated infrastructure.

Priority Axis 2, KAI 2.1 project portfolio includes a total number of 37 projects. Currently, 24 projects are under implementation (signed contracts) and 13 under preparation/approval. Under the approved projects 18 new landfills will be constructed, 3 existing landfills will be extended and 117 non-compliant landfills will be closed. The total value of the 24 contracted projects is of M€ 967.39, of which M€ 565.40 represents EU funds (about 58.44% of the total value).

The total value of all the 37 projects is of approximately M€ 1,578.38, of which approximately M€ 1,014.13 represents EU funds (~ 64.25% of the total value).

Other funds financing waste management projects are LIFE+, EEA Grants and the Environmental Fund. The National Programme for Rural Development also supported waste management systems in rural areas.

The Environmental Fund financed projects both for public authorities and economic operators, covering diverse waste streams. While the total budget allocated from the EF was of M€ 27.05 the total value of the projects was not available. LIFE+ supported 4 projects, with a total value of € 4,543,984 , of which € 2,051,782 was EU funds. In this area EEA grants of M€ 2 contributed to projects with a value of M€ 2.4. Other assistance had been provided by the pre-accession funds ISPA and Phare.

The National Environmental Protection Agency (NEPA) reports that during the period 2004-2012 the activities ceased at 190 non-compliant landfills and, for the majority, closure is a result of the integrated waste management systems supported under SOP ENV. Currently ~50 non-compliant landfills have not yet ceased activity; the deadline being 2017. Currently 33 compliant landfills are in operation.

The 2010 target for processing biodegradable waste has been met; a reduction of 25% biodegradable waste landfilled from the 1995 baseline. The NEPA reports a reduction of 37%. The target for 2013 is 50% and the figures are not yet available. Currently, there are more than 70 composting installations and platforms. All SOP ENV waste management projects include provision for biodegradable waste treatment facilities.

For packaging waste, the overall recycling target recovery rate set for 2011 was met. The recycling targets for plastic, paper, glass, metals and wood were also achieved. Currently

106 transfer and sorting stations are operational or being prepared for operation. The investments partially support compliance with the new Waste Directive (Directive 2008/98). This increases the recycling target to 50% by weight for paper, metal, plastic and glass from household and similar waste streams. However, the facilities to accommodate this are not universal and further investment will be required in the collection and processing systems.

WEEE collection has been more problematic with the Accession Treaty target of at least 4 kg collection per inhabitant per year. Producers are responsible for the end of life management of waste electrical and electronic equipment returned to them and consumers are able to return their waste equipment free of charge. The current WEEE Directive will be replaced as of 14 February 2014 by Directive 2012/19. The new target is for 85% of WEEE to be collected which equates to 20 kg per person per year. This would appear to be very challenging for Romania.

Rehabilitation of contaminated sites

Although not required by a certain Directive, the rehabilitation of contaminated sites can contribute to the reduction of surface and groundwater pollution, soil and subsoil pollution, air pollution and to human health protection. Under SOP ENV PA2, KAI 2.2, there are 5 projects, with a total value of M€ 92.99. A further project awaits approval.

Nature protection

The implementation of Natura 2000 network and the adequate conservation of habitats, wild flora and fauna require important investments.

The establishment of the Natura 2000 network in Romania was commenced in 2007. In 2012, Romania proposed to add a further 150 sites to the Natura 2000 network and to expand some of the existing sites. To date there are 531 Natura 2000 sites, of which 383 are Sites of Community Importance (SCIs) and 148 Special Protection Areas (SPAs). The total surface of the SCIs is of 4,152,152.607 ha, while the SPAs surface is of 3,694,394.291 ha. The total surface area of the Natura 2000 sites is 5,573,265 ha.

SOP ENV, through PA4, is to develop 237 management plans for Natura 2000 sites by 2015 and that 60% of the area of the sites should benefit from nature conservation measures. Priority Axis 4 includes a total of 205 projects, with a total value of M€ 227.39 (VAT included), of which the € 166.19 represents EU funds (~73.1% of the total value).

Although there is insufficient data to permit a detailed analysis of the number and surface area of the sites supported by the projects, a summary analysis shows that approximately 181 SCIs (Habitats Directive) are supported by projects, representing 47.2% of the total number of SCIs in Romania. The approximate surface area of the SCIs supported is of 2,734,517.73 ha, representing about 65.9% of the total of all SCI surface area. The number of SPAs (Birds Directive) covered by projects is of 86 - 58.1% of the total number of SPAs - with a surface area of 2,678,042.17ha - 72.5% of the surface area of all SPAs. In a number of cases sites are both SCIs and SPAs.

A number of 272 management plans have been drafted and 5 approved. If all plans are approved this will amount to approximately half of the Natura 2000 sites. Preparing management plans is not compulsory under the Directives but is a mechanism to help ensure compliance and 'favourable conservation status.

The analysis presented above refers to projects related to Natura 2000 sites, which fall under the provisions of the acquis (Habitats and Birds Directives). The projects financed under SOP ENV also cover natural protected areas of national interest, which are not designated under the previous mentioned Directives. However, in many cases these are included or intersect Natura 2000 sites.

Flood risk management and coastal erosion

Investments are made under SOP ENV PA5 KAI 5.1 not only for the development of flood risk management plans, but also to implement some specific measures. A number of 21 projects have been developed for protection against flooding and the protection of 10 km of shoreline. 1,500,000 inhabitants should benefit from the projects by reducing flood risk by 30% and increasing beach area by 30% in the targeted areas. Priority Axis 5, KAY 5.1 includes a projects portfolio of 33 projects, of which 17 projects are contracted, 4 are approved and 12 under preparation/approval. The total value of the contracted projects is M€ 116.36 of which the M€ 78.45 is EU funds (~67.42% of the total value). The 4 approved projects and the projects under preparation will further increase the investment. Of the 17 contracted projects, 10 develop plans for the prevention, protection and mitigation of the effects of flooding and the other 7 include works for preventing and minimising the risk of flooding.

Additional financing was made available through the Environment Fund for flood prevention and mitigation to a value of M€ 125.75. Also, funding of M€ 973.46 was made available through EEA Grants for projects with a total value of M€ 1,422.83.

For the prevention of coastal erosion, two projects were contracted under SOP ENV, PA5, KAI 5.2, with a total value of M€ 145.77. The major investment is represented by protection and rehabilitation measures in the southern section of the Black Sea shore in the Mamaia-Sud area, Tomis-Nord, Tomis-Centru and Eforie Nord, in which about 7.3 km of beaches will be protected and their surface extended by ~33.3 ha.

Industrial pollution control

Under SOP ENV PA3, there are 7 projects for rehabilitation of district heating systems, with a total value of M€ 429.65, of which the M€ 172.98 represents EU funds.

Other projects for large combustion plants are supported under SOP IEC – Energy sector.

The Industrial pollution control and risk management section of Annex VII of the Accession Treaty also includes the Directive on the incineration of waste. Currently, there is no operational waste incineration installation in Romania.

As of the end of 2012, a number of 23 installations incinerating hazardous waste were operational; 8 operator incinerating their own waste and 15 for third parties. There were 7 co-incineration cement works. Old medical waste incineration plants have been closed according to schedule. Currently the medical wastes are treated by incineration or by thermal treatment (neutralisation). LIFE+ has supported the microwave treatment of medical waste with funding of 300,580.00 lei towards a project value of € 623,553.

TRANSPORT

Actual progress of relevant projects for Accession Treaty compliance

The project investments for the upgrading of the national roads on secondary routes and their gradual opening for heavy vehicles with different weight and dimensions are finished according with an agreed schedule in XIII stages, and the total planned funds of M€ 6489.3 as in table 4 below:

Table 22: Targets for up-grading secondary roads

Year	2007	2008	2009	2010	2011	2012	2013	Total
Km in working stage	3031	2825	1656	1671	1518	1529	1554	
Km finished/delivered	960	1674	528	624	504	543	471	
Cumulate works[km]	3916	5590	6118	6742	7246	7789	8260	8260

At the end of 2011, a study was undertaken to assess the progress made in meeting the Accession Treaty obligations regarding the upgrading of roads. The findings were that about 6,028 km of roads had been upgraded from a target of 7,246 km at the end of 2011 amounting to approximately 83% of the target.

The Ministry of Transport proposed and the Romanian Government approved rescheduling the remaining works in order to recover the delays, as follows:

Table 23: Rescheduled works

Years	2007	2008	2009	2010	2011	2011, accomplished	2012, initial planned	2012, re-scheduling	2013, initial planned	2013, re-scheduling	Total initial/re-scheduled
Km in working stage	3031	2825	1656	1671	1518	-	1529	2324,15 km in works progress + additional new 690 km in preparing stage	1554	1721,69 km in progress	
Km finished/delivered	960	1674	528	624	504	-	543	507	471	1350,50 km completed	
Cumulate works [km]	3916	5590	6118	6742	7246	6028	7789	6535	8260	7886	8260/7886

This rescheduling aimed at 7,886 km secondary roads to be upgraded by the end of 2013, less than the stipulated minimum of 8260 km set out in the Accession Treaty. Acceptance of this by the EC is awaited.

However, the Romanian Ministry of Transport Annual Report⁹ released in May 2013 stated that in 2012 feasibility studies for only 1,100 km of national roads on the secondary routes had been initiated and a the list of projects drafted for upgrading works *in case of the funding sources are available*. It can be concluded from this that there was no certainty that the rescheduled target for the end of 2013 – 7886 km – would be achieved.

During 2011 the European Commission observed several problems with acquisition procedures and inconsistencies in reported data, particularly from supervising and audit institutions. In consequence, the funding flows to the National Company for Highways and National Roads were blocked on 16 July 2012. In April 2013, the EU financing was restarted.

However, considering: (i) -the new structure of the transport infrastructure central administration in Romania (the creation of a separate departmental structure for large infrastructure, (ii) – the projects' maturity, and (iii) - the lessons learned from the difficult past experience in project management, it is expected that Romania will accomplish the assumed task in the coming years.

Current progress for KAI/ relevant projects

The following Table 24 depicts a synthesis of the EU legislative framework for the Transport domain, for which the structural funds have utilisation. It presents a brief description of each regulation/decision, the relevant SOP/ PA and KAI for implementation, immediate achievement indicators, result indicators and related time marker (if any).

Table 24 for the most part, reveals a major inconsistency concerning the Framework Document for Implementing SOP-T: the absence of rigorous planning for the years 2007-2013. Instead, there are numerous targets for 2015 and no other timescales are specified.

⁹ http://www.mt.ro/nou/ img/documente/raport_2012.pdf, pg. 6

Only for the acquis legislation referring to the road network upgrading are there annual targets (implementation indicators and result indicators), but they are defined only for 2012 to 2015.

There are acquis requirements without results indicators, and also there is acquis without any kind of indicators (i.e. Commission Regulation (EU) No 164/2010 concerning the technical guidelines for the planning, implementation and operational use of river information services (RIS)).

The Management Authority for the Sectoral Operational Program – Transport has recently redesigned its web site (<http://www.ampost.ro>) with headings for reporting physical progress, and respectively financial progress for each project. (E.g. http://www.ampost.ro/pagini/orastie_sibiu) Nevertheless, to date, no content has been published and consequently, it is not possible to extract project data in order to compare and assess financial spending and physical progress in respect of transport infrastructure obligations.

Moreover, even the SMIS indicators refer only to the financial progress and there is no reference to the physical progress, or to the relationship between funds spent, physical achievement and the projected timescales: E.g. by each year of implementation, and for every funded project.

Table 24: EU acquis, KAI, Outputs and Results

EU Acquis	Brief Description	Respective PA/KAI	Outputs/ -year/cumulative value	Results/year/value
<p>Directive 96/53/EC of 25 July 1996 laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic</p>	<p>A Member State may not reject or prohibit the use in its territory: - in international traffic, of vehicles registered or put into circulation in any other Member State for reasons relating to their weights and dimensions; in national traffic, of vehicles registered or put into circulation in any other Member State for reasons relating to their dimensions, provided that such vehicles comply with the limit values specified in Annex I</p>	<p>SOP-T PA 2 KAI 2.1</p>	<p>The length of upgraded/modernized national roads other than TEN-T (km): -2012/ 164,052 -2013/ 164,052 -2014/ 291,149 -2015/ 302,796</p> <p>The length of new roads - highway (km): -2015/13.632</p> <p>The length of new roads - national roads (km): -2013/40,615 -2014/ 51,175 -2015/ 100,535</p>	<p>The monetary value of saved time for freight and passengers on a new or upgraded road – road infrastructure (M€ /year)/ -2012/48,350 -2013/ 63,320 -2014/108,007 -2015/182,384</p>
<p>Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area</p>	<p>Member States shall develop their national railway infrastructure by taking into account, where necessary, the general needs of the Member States may also provide the infrastructure manager with financing consistent with its functions, the size of the infrastructure and financial requirements, in particular in order to cover new investments. Member States may decide to finance those investments through means other than direct State funding.</p>	<p>SOP-T PA 1 KAI 1.2</p>	<p>The length of upgraded /modernized railway on TEN-T (km)/ 2015/209.18 km</p>	<p>The monetary value of saved time for freight and passengers on a new or upgraded (M€ /year)/ 2015/86,925</p>

EU Acquis	Brief Description	Respective PA/KAI	Outputs/ -year/cumulative value	Results/year/value
				<p>The diverted (shifted) passengers from road transport to rail (Mln. passengers -km/ year)/</p> <p>2015/ 306,75</p> <p>The diverted (shifted) freight volume from road transport to rail (including intermodal terminals (Mln. ton-km/year)/</p> <p>2015/ 1.719</p> <p>Priority projects on TEN-T accomplished -railways (%) /</p> <p>2015/43.85</p> <p>Market share (%) /</p> <p>2015/15</p>
<p>Directive 2008/57/EC on the interoperability of the rail system within the Community ; Commission Directive 2011/18/EU of 1 March 2011 amending Annexes II, V and VI to Directive 2008/57/EC on the interoperability of the rail system within the Community</p>	<p>Establish the conditions to be met to achieve interoperability within the Community rail system in a manner compatible with the provisions of Directive 2004/49/EC. These conditions concern the design, construction, placing in service, upgrading, renewal, operation and maintenance of the parts of this system as well as the professional qualifications and health and safety conditions of the staff who contribute to its operation and maintenance.</p>	<p>SOP-T PA 2 KAI 2.2</p>	<p>The upgraded/modernized railway stations (number)</p> <p>-2012/ 3 -2013/ 12 -2014/12 -2015/18</p> <p>The upgraded bridges and tunnels for railways (number)</p> <p>- 2012/4 - 2013/17 - 2014/17 - 2015/ 98</p>	<p>The diverted (shifted) passengers from road transport to rail (Mln. passengers -km/ year)/</p> <p>2015/306,75</p> <p>The diverted (shifted) freight volume from road transport to rail (Mln. tonne-km/ an) /</p> <p>2015/ 1.719</p>

EU Acquis	Brief Description	Respective PA/KAI	Outputs/ -year/cumulative value	Results/year/value
Directive 2008/110/EC amending Directive 2004/49/EC on safety on the Community's railways (Railway Safety Directive)	Development and improvement of railway safety. Member States shall ensure that measures to develop and improve railway safety take account of the need for a system-based approach	SOP-T PA3 KAI 3.2	Road-rail grade-crossing (number) - 2014/112 - 2015/112	Casualty reduction (casualties / million passengers -km) - 2015/ -20%
			The length of protected villages (which are linearly located on roads) (Km) -2015/36	Deadly casualty reduction (deadly casualties /million passengers-km) 2015/ 20%
Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky	This Regulation lays down requirements on the systems contributing to the provision of surveillance data, their constituents and associated procedures in order to ensure the harmonisation of performance, the interoperability and the efficiency of these systems within the European air traffic management network (EATMN) and for the purpose of civil/military coordination.	SOP-T PA 2 KAI 2.4	Upgraded/ modernized (number) 2015/2	-
Commission Regulation (EU) No 164/2010 concerning the technical guidelines for the planning, implementation and operational use of river information services (RIS) referred to in Article 5 of Directive 2005/44/EC on harmonised river information services (RIS) on inland waterways in the Community	RIS should be developed and implemented in a harmonised, interoperable and open way. The technical specifications should take due account of the work carried out by relevant international organisations. Continuity shall be ensured with other modal traffic management services, in particular maritime vessel traffic management and information services.	SOP-T PA3 KAI 3.2	-	-

EU Acquis	Brief Description	Respective PA/KAI	Outputs/ -year/cumulative value	Results/year/value
<p>Regulation EC 1137/2008 and Commission Directive 2007/71/EC of 13 December 2007 amending Annex II of Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues</p> <p>and</p> <p>REGULATION (EC) No 923/2009 amending Regulation (EC) No 1692/2006 establishing the second 'Marco Polo' program for the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo II)</p>	<p>Directive focuses on ship operations in European Union ports. It addresses in detail the legal, financial and practical responsibilities of the different operators involved in delivery of ship-generated waste and cargo residues. This Directive covers all ships, whatever their flag, including fishing vessels and recreational craft, putting in at a Member State port, apart from warships and ships belonging to or operated by a State for non-commercial governmental purposes all Member State ports.</p>	<p>SOP-T PA 3, KAI 3.3</p>	<p>Projects for the environment protection (number)</p> <p>2015/1</p>	<p>-</p>

Given the above indicators, a rigorous assessment of the progress towards meeting all the community acquis is a difficult task – particularly in respect of the results indicators. The TEN-STAC report¹⁰ specified that the results indicators are possible to be quantified only with a transport model (specific software package) for Romania. Even so, this would also require yearly traffic counts for calibration of this transport model. Currently, a transport model is being developed within the framework of the Romanian General Master Plan, 2013.

¹⁰NEA coord., TEN-STAC: Scenarios, Traffic forecasts and Analysis of Corridors on the Trans-European network. 2004

Q.3.b Consequences in case of non-compliance with the acquis

This section contains the analysis of consequences which may result from failure to achieve the expected results in programmes / projects / measures contributing to the transposition and implementation of EU acquis, failure which would occur immediately after the expiry of transition periods laid out in Annex VII of the Accession Treaty.

The Accession Treaty provides for a relatively wide range of temporary measures and waivers, particularly with regard to EU policies in transport (article 6) and environment (article 9), and one measure related to energy (article 8).

Furthermore, a volume of acquis has been introduced post-accession which also requires significant investments. Many of the investment intensive obligations – energy, environment and transport – laid out in Annex VII were based on EU legislation in force at the time. This legislation has largely been superseded by more demanding legislative requirements.

Consequences of non-achievement of targets in programmes / projects / measures contributing to the transposition and implementation of EU acquis will obviously have a direct impact on both the level of legal harmonization within the European Union and on Romania's compliance with EU acquis, ultimately on its effective participation within EU. Apart from these inevitable *functional* consequences, affecting EU citizens and business, non-compliance with EU acquis also bears *legal* consequences consisting in legal liability of relevant administration and ultimately Romania (mainly through the infringement procedure), which triggers *economic* consequences through penalties and lump sums.

A brief analysis of the specificities of post-accession in Romania will be followed by a short presentation of the infringement procedure and its latest evolutions after the coming into force of the Lisbon Treaty and the generalisation of the EU Pilot procedure to all 27 member states (MS), including the potential impact this might have on Energy, Environment and Transport sectors in Romania.

The recent case law of the European Court of Justice (ECJ) on infringements allows for reckoning possible economic consequences of non-compliance with EU acquis and estimate potential costs.

I. Context of Romania's Post-accession

Based on the experience gathered during the enlargement process from 12 to 15 MS, the European Commission decided to change its approach with regard to the Accession and during the next waves of enlargement resorted to an incentive-based method in order to promote the candidate countries compliance with the acquis. More specifically, during the enlargement processes from 15 to 27 MS, conditionalities have been imposed prior to accession rather than negotiating transitional and temporary measures post-accession. However, even under this new approach, total compliance upon the effective day of accession remains an unachievable target and therefore a limited number of temporary measures have been included in all treaties of accession concluded after 1995 (see Annex VII of the Romania and Bulgaria's Accession Treaty).

This new approach raised concerns with regard to its implied potential for post-accession non-compliance with EU law by new MS, particularly immediately after accession when temporary measures have been agreed upon. Indeed, lack of external (EC) pressure on new MS might allow them with a greater margin of discretion and ultimately, may entail non-compliance with EU acquis. In order to deal with this potential danger the EC decided to accompany temporary measures and waivers with specific financial assistance for programmes / projects meant to contribute to the transposition and implementation of targeted EU acquis. Failure of such projects equates failure to achieve targets set in the Accession treaty and entails legal liability of the concerned state mainly through the infringement procedure.

At a general level, *transposition* of EU acquis by MS which joined EU after 2004 (Romania included) is better than the one of MS which joined EU before 2000 at a similar period in time, despite the sometimes politically contestable character of reform processes thus induced. ***Upon accession Romania displayed a rate of 0,4% non-compliance with the***

transposition of EU acquis and the figure diminished during the initial phase of membership.¹¹

However, a less positive record can be noticed (both in general and with regard to Romania) as far as *implementation* is concerned. A good indicator of compliance in this respect are the statistics of the EC on infringement procedures, particularly those related to article 258 TFEU. The latest published EC statistic goes back to 2013¹² and Romania was ranking sixteenth in 27 at the end of 2012, with a total of ***25 infringements procedures opened in May 2013¹³ and no condemnation by the ECJ.***¹⁴ In this context, and particularly during the initial phase of membership, the importance of an efficient administration for the successful implementation of EU acquis is crucial, the more so since usual factors of external pressure are less influential and the impact of EU institutions has changed in nature and kind.

However, it should be noted that up to a certain point for any new MS, that immediate full compliance with EU acquis can sometimes have negative consequences. Particularly in the area of environment, but also in sectors such as energy and transport, new MS may be confronted with potentially unbearable difficulties for both their administration and businesses resulting from the *supplementary costs* needed for the immediate enforcement of the entire EU law (additional public institutions and standards) and urgent adaptation of various production processes (that put a burden on already fragile economies).

This line of argument is generally met with scepticism at the level of EU institutions and does not prevent the respective MS from being held responsible for non-compliance for two main reasons:

- (i) the very purpose of temporary measures and waivers is to deal with such difficulties

¹¹Dimitri Papadimitriou, David Phinnemore, *Romania and the European Union: From Marginalization to Membership*, Routledge, London, 2008.

¹²http://ec.europa.eu/eu_law/docs/docs_infringements/annual_report_30/sg_annual_report_monitoring_eu_law_131023.pdf

¹³http://ec.europa.eu/internal_market/scoreboard/performance_by_governance_tool/infringements/index_en.htm

¹⁴ In one case brought in front of ECJ (C-522/09, 14 April 2011, Commission/Romania) the Court found that the letter of formal notice did not sufficiently identify the grievance regarding the insufficient designation of Special Protection Areas.

- (ii) such aggregated additional costs are generally lower than those resulting from non-compliance for both EU and the concerned MS (administration and private actors included).

Therefore, once enshrined in the Accession Treaty, temporary measures are compulsory and can give rise to infringement procedures.

II. Legal consequences

Failure to achieve targets set in the Accession Treaty, as well as failure to achieve targets set by the EU law established after Romania's accession, implies lack of legal harmonisation across EU, with all consequences that may derive from this situation; variation in administrative practices of different MS, market distortion, un-fair competition, increased costs for businesses and ultimately citizens displeased with public services.

In order to prevent these consequences, founding treaties of EU have provided for the infringement procedure, currently under articles 258, 259 and 260 of the Treaty on the Functioning of the European Union (TFEU). The infringement procedure represents a significant share (roughly half) of the total case law in front of ECJ. Since the beginning of the new millennium the means of implementing infringement proceedings have undertaken regular reforms, particularly the strengthening of the mechanism for financial sanctions.

A. Infringement procedures

Article 258 TFEU deals with infringement for what can be considered as an objective non-compliance with EU law, i.e. non-respect of obligations imposed on a MS by EU law in the most general legal meaning of the term (primary and secondary law, as well as case law of ECJ) and irrespective of any subjective circumstances (mere negligence¹⁵ or technical difficulties¹⁶) or nature of national standards concerned¹⁷. Once the main tool for dealing with non-transposition of directives, infringement under article 258 has gradually become

¹⁵ C-333/99, 1 February 2001, Commission v. France

¹⁶ C-259/03, 14 July 2005, Commission v Denmark

¹⁷ Although national law may be fully compliant, deviant administrative practices can be object of infringement procedures, C-156/04, 7 June 2007, Commission v. Greece

an efficient means for dealing with non-enforcement of EU law. More than half of infringement procedures originate in *individual complaints* addressed to the EC by citizens or businesses, while the share of *ex officio* procedures initiated by the EC is significantly lower (roughly 30%) and *defaults of notification of directives transposition* currently represents less than 20%.

The EC is not framed by a specific deadline for referring an infringement to ECJ, save for the situation where an excessive duration of the pre-litigation phase would impede upon the rights of the defence of the concerned MS.¹⁸ The administrative (pre-litigation) phase is meant primarily to allow MS to actually comply with EU law and in subsidiary to avoid expensive litigation costs. Therefore the exchange of letters (first warnings and reasoned opinions) between the EC and the concerned MS aims to determine and circumscribe the precise object of litigation.

Grievances presented by the EC have to be identical in both phases of the procedure¹⁹ although national legal provisions invoked by the EC as infringing EU law may be considered differently since they could have changed during the proceedings.²⁰ The EU law infringed upon has to be that cited in the initial communication of the EC, irrespective of its possible evolution or further transformation.²¹

Rulings of the ECJ under article 258 are merely identifying infringements²² and do not have any other legal consequences than publicly observing that a MS is not respecting its obligations.²³ However, since not even article 260 fixes a specific delay, MS are considered to be under the obligation to enforce such a ruling immediately.²⁴ In practise, MS and EC commonly agree on a calendar for enforcement.

If, despite such a first ruling, MS still fail to implement EU law the EC may open another infringement procedure under article 260 TFUE.

¹⁸ C-287/03, 12 May 2005, *Commission v. Belgium*

¹⁹ C-227/01, 16 September 2004, *Commission v. Spain*

²⁰ C-221/04, 18 May 2006, *Commission v. Spain*

²¹ C-33/04, 8 December 2005, *Commission v. Luxembourg*

²² C-104/02, 14 April 2005, *Commission v. Germany*

²³ Save for the situation where the ECJ may oblige the concerned MS to suspend the application of offending national legal standards, C-193/07, 25 January 2008, *Commission v. Poland*

²⁴ C-278/01, 25 November 2003, *Commission v. Spain*

Article 259 TFEU deals with infringements initiated by MS against other MS. In practice it has been extremely rarely used for reasons of diplomacy and retaliation.

Procedures under article 260 TFEU were created through the Maastricht Treaty in order to encourage MS to enforce judgements of the ECJ pertaining to infringements. The Treaty of Lisbon has expanded its scope and efficiency. Currently, paragraph 1 obliges MS to comply with ECJ judgements on infringements, paragraph 2 removes the pre-litigation phase of a reasoned opinion and requires only the letter of formal notice for a referral to the ECJ that leads to financial sanctions of a MS non-compliant with previous infringement rulings of the Court, and paragraph 3 addresses the issue of non-transposition of directives by adding expediency and financial sanctions to an infringement procedure conducted under article 258. In this last case, rulings of ECJ under article 258 cease to have a purely declaratory character and acquire an enforcement incentive directly proportionate with the amount of financial penalties inflicted upon the concerned MS.

Specifically, if the EC refers a MS to the ECJ it can propose that the Court imposes financial penalties based on the

- (i) duration of infringement
- (ii) severity of infringement
- (iii) size of the MS

B. EU Pilot procedure

In 2007 the EC suggested a project based on a partnership approach between EC and MS in order to ensure the correct implementation of EU law, provide rapid answers to citizens and businesses and solutions to problems encountered in the enforcement process. Initially started on a voluntary basis with only 15 MS, after 2010 the EU Pilot procedure has been extended to 25 MS, Romania included.

EU Pilot is the main tool for the EC to communicate with MS on issues pertaining to the correct *implementation* of EU law at an early stage (before an infringement procedure is launched under article 258 TFEU). This replaces the previous regular practice of the administrative letter (pre-litigation phase) sent by EC to MS. However, if urgency or another overriding interest requires immediate launching of an infringement procedure under

article 258 TFEU, *infringement procedures can be launched without previous contacts through EU Pilot.*

EU Pilot deals with complaints received from citizens and businesses, as well as with own initiatives of EC or initiatives of EC upon referral from European Parliament. MS are given ten weeks to reply to the questions raised and propose solutions compatible with EU law. Within the next ten weeks EC assesses the MS reply and uploads it into the EU Pilot database. An infringement procedure under article 258 starting with a letter of formal notice is launched only if no solution compatible with EU law is found.

EU Pilot proved efficient as far as nearly 80% of the 2121 procedures initiated between April 2008 and September 2011 completed the process in the system due to acceptable solutions identified by MS. The remaining 20% continued with an infringement procedure under article 258 TFEU. It is worth mentioning that 49% of these procedures originated from complaints, 7% from citizens and businesses, and only 44% were created at the initiative of EC.

Sector wise, 33% of issues registered in EU Pilot concern environment, while only 8% concern transport and mobility.

Romania has joined EU Pilot at the beginning of 2011 and by the end of that year 64 cases concerning Romania had been opened in the system. On average Romania replied within a deadline of 77 days, which is considered compatible with the ten weeks benchmark. Romania has managed to avoid ECJ rulings on infringements at an early stage e.g. by adapting its national standards to EU requirements (e.g. Romanian law on water policy has been adapted in order to comply with the water framework directive, particularly with rules on management plans, public consultation and control measures.)

The EU Pilot is intended to become the main instrument of the EC in dealing with correct and full implementation of EU law as it offers quick and efficient solutions *at an early stage*. However, *whenever this partnership approach fails, the EC intends to maintain the same vigour with regard to infringement procedures.*

III. Economic consequences – costs penalties & lump sums

According to article 260 TFEU, in case of non-compliance with EU law, *id est* non-communication of measures adopted in order to transpose directives the EC can have recourse to financial sanctions “when it deems appropriate”, which means the EC is sovereign in taking such a decision.

Article 260 TFEU and particularly its paragraph 3 are governed by three general principles:

- The sanctions must be geared to the essential objective of the instrument, namely full compliance of all MS with EU law both in terms of legal standards and administrative practice
- Sanctions inflicted must be foreseeable for the MS and applied according to a clear and uniform method
- Amount of penalties and lump sums must ensure the deterrent effect

There are two elements that a MS may be required to pay:

- (i) lump sum – depending on the time elapsed since the original ECJ ruling
- (ii) daily penalty for each day after a second ECJ ruling and until the infringement ends

The EC is solely responsible for taking note that an infringement has ended.

It is important to remind that *article 260 paragraph 3 TFEU cannot be used when non-legislative directives (id est those adopted through a legislative procedure) are not transposed.*

Penalties & Lump sums

C (2012) 6106 final Communication of the EC on updating of data used to calculate lump sum and penalty payments to be proposed by the Commission to the Court of Justice in infringement proceedings is based on development in the inflation and GDP of each MS, and the current weighting of MS voting rights in the Council.

The mathematical calculations of penalties are based on a flat-rate of 630 Euro/day, multiplied with a coefficient from 1 to 3 for the duration of the infringement and multiplied

with a severity coefficient from 1 to 20, further adapted with an invariable coefficient resulting from various information concerning each MS.

Mathematical formula:

$$[640 \text{ €} \times (\text{coeff. 1 to 3}) \times (\text{coeff. 1 to 20}) \times 3,38]$$

For lump sums the flat rate is currently 210 Euro/day, which is to be multiplied with a coefficient from 1 to 20 for the severity of the infringement, adapted with an invariable coefficient for each MS and divided to the number of days for which the infringement lasted.

Mathematical formula:

$$[210 \text{ €} \times (\text{coeff. 1 to 20}) \times 3,38 : (\text{number of days of infringement})]$$

This amount is to be paid only if the final result of the above-mentioned calculations exceeds the minimum ceiling provided for each state. For Romania this ceiling is € 1,740,000.

Penalties and lump sums are paid in the budget line “own resources of the EU” following a decision of the EC notified to the concerned MS. Payment obligation “shall take effect on the date set by the Court in its judgement”.

The present evaluation report cannot second guess what an ECJ court decision would be or what penalties/lump sums would be imposed upon Romania. Moreover, there is no hint in the case law of the ECJ (see below *Relevant case law of ECJ*) with regard to specific amounts of penalties/lumps sums that would be commonly or generally used in certain areas or sectors of the acquis. Rather, criteria used by the Court in order to fix the amount of penalties are correlated with the behaviour of the concerned member state: unwillingness to transpose legislation perceived as systematic or wilful neglect of its implementation

draws harsher penalties, while mere late transposition due to circumstantial factors may even appeal to total pardon.

Expressed in figures, in the specific case of Romania penalties may vary between € 2163 - 129.792/day, while lump sums have a minimum ceiling of€ 1,740,000 and may go as high as deemed appropriate by the Court. It is important to note that the ECJ has already established that penalties and lump sums can be applied in a cumulative manner and has already resorted to such cumulative sanctions.

Relevant case law of ECJ

Article 260 TFEU provides ECJ with a certain margin of discretion in dealing with financial sanctions. The Court has used it to a large extent and its case law illustrates vividly the activist stance the ECJ had adopted with regard to this power that it has acquired relatively recently.

C-304/02, 12 July 2005, Commission/France – the amount of the penalty is fixed according the degree of persuasion it may have upon the MS failing to comply with EU law requirements. Other criteria taken into account are: the duration of the infringement and its severity. In doing so the ECJ also takes into account the consequences of the infringement upon public and private interests as well as the urgency for the concerned MS to comply with its obligations under EU law.

C199/04, 18 July 2006, Commission/Italy; C-503/04, 18 July 2008, Commission/Germany – penalties are to be imposed as long as the infringement exists, that is since the previous ECJ decision finding the MS has infringed EU law (rendered under article 258 TFEU) and until the Court examines again the facts under article 260 TFEU.

C-304/02, 12 July 2005, Commission/France; T-139/06, 19 October 2011, France/Commission – Article 260 TFEU allows the ECJ to impose sanctions consisting of lump sums *or* penalties. The ECJ considers that the procedure provided by article 260 TFEU is meant to encourage MS to comply with previous ECJ decisions finding it has infringed EU law and thus ensure an effective implementation of EU law. Both penalties and lump sums have the same objective and therefore their cumulative application is possible and depends on their potential aptitude to determine the MS to comply with EU law requirements. It is

up to the ECJ to determine in each case the degree of persuasion or deterrence of possible sanctions and to adapt them to the specific circumstances. The Tribunal may impose cumulative penalties and lump sums.

C-177/06, 14 March 2006, Commission/France – the duration of the infringement is to be determined by the ECJ taking into consideration the moment when it deals with facts and merits and not the moment when it received the referral of the EC

C-278/01, 25 November 2003, Commission/Spain – ECJ may fix the penalty as to make it adapted with the circumstances of the case and proportionate with the infringement as well as with the capacity of the concerned MS to effectively pay.

Some examples of penalties and lump sums in the case law of ECJ:

Case	Infringement	Penalty	Lump sum
C-387/97, 4 July 2000, Commission/Greece	Wrong enforcement of EU law	€ 20,000 /day	-
C-278/01, 25 November 2003, Commission/Spain	Non-enforcement of EU law	€ 624,150 /year	-
C-503/04, 18 July 2008, Commission/Germany	Wrong enforcement of EU law	no penalty	no lump sum
C-304/02, 12 July 2005, Commission/France	Non-enforcement of EU law	€ 57,761,250 /semester	M€ 20
C177/04, 14 March 2006, Commission/France	Incomplete transposition of a directive	€ 31.650 /day	-
C-199/04, 18 July 2006, Commission/Italy	Non-enforcement of EU law	no penalty	no lump sum
C-109/08, 4 June 2009, Commission/Greece	Non-enforcement of EU law	€ 31.536 /day	M€ 3
C-496/09, 17 November 2011, Commission/Italy	Non-enforcement of EU law	-	M€ 30

Functional consequences

For EU the cost of lack of harmonization in the transposition and implementation of EU law means additional administrative efforts (mainly with enforcement and litigation).

For citizens and businesses the lack of harmonization in the transposition and implementation of EU law means aggregated additional costs resulting from

(i) failure to benefit of the positive outcomes that would have resulted from harmonised standards (e.g. monetary value of saved time for freight and passengers for new or upgraded infrastructure)

(ii) economic costs related to the adaptation to various standards across EU.

For Romania the lack of harmonisation in the transposition and implementation of EU law, particularly with regard to the temporary measures during the initial phase of Accession, may translate into loss of funds, waste of administrative capacity, failure to benefit of the positive outcomes that would have resulted from harmonised standards, other economic costs. Commonly functional consequences of failing to meet acquis obligations are calculated by ascribing monetary values to lost savings resulting from non-compliance. For the transport sector calculations can be based on the lost savings from potentially reducing travel time, accident reduction and environmental cost. Environmental savings can be attributed to health benefits, resource cost savings, benefits to the ecosystem (where there is a willingness to pay) social benefits (amenity) and benefits through increased employment and, say, tourism. The same principles can be applied to the energy sector in respect of traditional LCP power generation and there is also the value of energy security to be taken into account. An example of these calculations for a railway line follows:

Example of calculating losses incurred through failure to meet acquis targets.

Subsections of Rail corridor TEN-T 22

Project #	Project name	Proposed final aggregated sections		Sub-sections (30.09.2003 list + last DG TREN precisions)	Subsection start date	Subsection end date
P22	Railway line Athina-Sofia-Budapest-Wien-Praha-Nürnberg/Dresden	P22.1	Railway line Greek/Bulgarian border-Kulata-Sofia-Vidin/Calafat	P22 BG Kulata – Vidin/Calafat	2010	2015
		P22.2	Railway line Curtici-Brasov (towards Bucuresti and Constanta)	P22 RO Curtici - Brazov	2005	2010
		P22.3	Railway line Budapest-Wien , cross-border section	P22 A Budapest – Sopron – Wien P22 HU Budapest – Sopron – Wien	2004 2004	2010 2010
		P22.4	Railway line Brno-Praha-Nürnberg , with NürnbergPraha as cross-border section.	P22 CZ Brno-Praha-Czech Border P22 D CZ Border Schirmding – Marktredwitz – Nürnberg	2003 2012	2015 2015

For the Curtici-Brasov section of the expected impacts are related to the reduction in the travel duration by the 78 minutes for passenger traffic and by 120 minutes for freight traffic.

Objectives of project accomplishment

Sections of the Project	Objectives	Description	Start date	End date
P22.2 Railway line Curtici – Brasov (towards Bucuresti and Constanta)	The objectives of this project are mainly the increase in traffic safety and the reduction in the travel duration that will be of 78 minutes in passengers' traffic and of 120 minutes in freight traffic.	The line will be rehabilitated on its total length of 481 km and it is located in the centre of Romania, in the Transylvania region. This project involves 2 tunnels with a total length of 1448 m. The expected capacity is 148 trains/ day. The design and interoperability standards will be in compliance with EU and UN/ECE standards. In particular they will be AGTC and AGC parameters for railways.	2005	2010

Forecast impacts of P22.2 accomplishment

Type of impacts	Description	value/year
REDUCTION OF TRAVEL TIME	Changes in monetary value of the reduction of passenger travel time	Saving M€ 94.4 yr
	Changes in monetary value of the reduction of freight travel time	Saving M€ 14.8 yr
ENVIRONMENTAL	Change (in monetary value) of the transport	Saving M€ 3.2 yr

Type of impacts	Description	value/year
SUSTAINABILITY	contribution to global warming	
TRANSPORT SAFETY	Variation on monetary value of accidents	Saving M€ 6.7 /yr
INTERMODALITY	Quantitative appraisal of the project's contribution for an intermodal transport system	mln Tonnes / yr 3.1
MODAL REBALANCING	Volume of road freight traffic shifted to rail, IWW or sea transport	mln. tonnes·km / yr 2292
	Volume of road and air passenger traffic shifted to rail ()	mln.passenger·km / yr 409

In monetary terms, because the delay in finalising the P22.2 in due time (2010), there is an annually about M€ 120 loss, which amounts to an accumulated loss of about M€ 360 over three years until the end of 2013. If the project is not be completed until after 2020 the accumulated loss will be ~ Bn€ 1.2.

IV. Existing infringements procedures opened against Romania

Despite the fact that an important number of temporary measures and waivers have been provided in the Treaty of accession of Bulgaria and Romania with regard to EU policies **in transport so far no infringement procedure has been initiated against Romania in this sector** (the procedure based on late transposition of Directive 2008/110/EC pertaining to the safety of the European rail transport system has been classified in April 2013 although another one is under way on the same topic for non-compliance).

By the end of 2013 warnings (first letters and reasoned opinions) have been issued by the EC against Romania as follows:

A. Environment

The EC has issued *reasoned opinions* for non-compliance with:

- Directive 85/337/CEE on environment impact assessment
- Directive 1992/43/EEC on birds and habitats (including Natura 2000)
- Directive 2008/50/EC on ambient air quality and cleaner air

- Directive 2008/98/EC on waste management framework
- Directive 2010/63/EU on protection of animals used for scientific purposes (replacing Directive 86/6069/EC)
- Directive 2011/37/EU on end-of-life vehicles
- Directive 2011/97/EU storage of metallic mercury considered as waste (amending Directive 1999/31/EC)

The EC has issued *reasoned opinions* for lack of information on the transposition of Directive 2010/75/UE on industrial emissions

B. Energy

The EC has issued *reasoned opinions* for the non-compliance with:

- Directive 2010/31/EU on energy efficiency in buildings

Directive 2009/119/EU on minimum stocks of crude oil and petroleum products

The ECJ has *pending cases* against Romania on infringement procedures related to:

- Directive 2009/72/EU on electricity

Directive 2009/73/EU on natural gas

Related to these two pending cases note has to be taken to the *Federutility* judgment (Case C-265/08) where ECJ expressly enumerated the criteria under which regulated prices could be compatible with Internal Energy Market legislation, namely: the measure must be adopted in the general economic interest, be in compliance with the principle of proportionality, be clearly defined, transparent, non-discriminatory and verifiable, and guarantee equality of access for EU energy companies to national consumers. In all other cases penalties can be imposed.

It should be noted that in all these areas a continuous dialogue between Romanian public administration and the EC does exist and any proceedings could come to an end provided compliance with EU law is notified to the EC or ensured via national legislation and/or institutional practices. For instance, as a reaction to the EC's formal notices regarding faulty transposition of Directive 85/337/CEE (Environment Impact Assessment) and of Directive 92/43/CEE (Habitat) Law n°226/2013 on the protection of environment has been adopted as to replace previous legal framework deemed non-compliant. Thus two more infringement procedures in the environment sector may be classified during 2014.

However these are administrative / technical matters and neither are a result of lack of investment.

With regard to letters of formal notice and reasoned opinions for the time being there are three possible solutions:

- (i) actual litigation avoided by ensuring compliance with EU law
- (ii) the case is lost by EC (as in the case of water policy)
- (iii) the case is won by EC and penalties may ensue

With regard to pending cases for the time being there are three possible solutions:

- (i) proceedings closed by ensuring compliance with EU law
- (ii) the case is lost by EC (as in the case of water policy)
- (iii) the case is won by EC and penalties may ensue

Conclusions

Other than the issue of oil stocks, **the administrative issues requiring compliance in the Accession Treaty have been addressed.** The areas where investment has been made are the environment and transport sectors. Although the sums invested are substantial, the investment required was even greater and the allocations for the 2007 – 2013 SCFs would not meet all the needs. However, **the scheduling of compliance was generally incremental with the longest transition period being until 2018.** This would appear to anticipate additional funding being available under the 2014 – 2020 period. The funding of the necessary infrastructure has not been solely through SCFs but substantial sums have been invested through national funds often through securing bank loans.

The Ministry of Foreign Affairs monitors progress made towards meeting the Annex VII Accession Treaty obligations. **However, there would appear to be no systematic monitoring of investment programmes or projects and their contribution towards meeting the obligations – either the Annex VII provisions or newly introduced acquis.** **Neither are there indicators for acquis compliance set against the operational programmes, or simply data that could be extracted for that purpose is not recorded.** **Also, there is no systematic monitoring of investment made to ensure compliance with acquis introduced since accession.** (Obviously in respect of SCFs there is more difficulty

with new acquis as this would have been introduced after the programming had been finalised.) Whereas this, at first sight, may appear to be an oversight, **the line ministries are fully aware of their responsibilities in respect of conformity with the acquis.** Undoubtedly much of this does feed into programming but the mechanism by which it does is not clear. Obviously, programming and prioritisation of investment cannot be solely based on acquis compliance to the detriment of the multitude of other claims.

It should be borne in mind that most of the provisions of Annex VII concern administrative tasks to be undertaken rather than investment needing to be made. On balance, it would be unfair to overly criticise Romania's performance in meeting the acquis obligations and the achievements can best be described as 'mixed'. In the areas requiring substantial investment the forecast was for a long-term investment programme. The substantial infrastructure works could not be completed overnight. Many of the large scale projects comprised a multitude of interrelated contracts. It is almost the nature of programming that ambitious targets are set and it becomes almost inevitable that some slippage would occur.

In case of **ENERGY sector the electricity and gas network infrastructure** there are few defined targets but rather general aims regarding security of supply, interoperability and efficiency. The interim targets set unilaterally have been achieved although considerable investment is required over the coming years. **Somewhat ironically in meeting the targets for renewable electricity generation (wind and solar) has created a new burden for the electricity network, as new infrastructure needs to be constructed to transmit the electricity from where it is generated and not wanted to where it can be used, and to accommodate the intermittent supply.** Other measures are required of the sector which will incur costs but the target dates are generally some time in the future, the targets themselves more generic and measures to be adopted more flexible or will fall upon the private sector.

The primary challenges for the ENVIRONMENT sector are water supply and waste water treatment and waste management. Good progress has been made in the water sector with the operators organised and drinking water access and waste water treatment plants constructed and / or rehabilitated. Whether the target dates will be met is debateable but the levels of supply are on course to be achieved. **Additional challenges lay ahead with**

more strict requirements to be met under new legislation and the volume of work expanding as the geographical catchment is to increase. Waste management is more problematic with further efforts required to ensure the closure of non-compliant waste dumps and the construction of landfills. Other than for electronic waste (WEEE) recycling targets are being met. Other areas of intervention have been supported which contribute towards acquis compliance and, overall, progress has been satisfactory.

Although the absence of intermediary indicators made an assessment of the current status difficult, the TRANSPORT sector has been more problematic with noticeable delays in infrastructure construction. The targets have been revised downwards and presented to the European Commission. A response is awaited.

An argument could be put forward that the risk of infringement procedures and ultimate financial penalties should incentivise and prioritise investment in measures to achieve acquis compliance. Obviously this evaluation cannot second guess what the ECJ court decision would be or what penalties would be imposed. The formulae for calculating the penalties are dependent on judgements as to the variables. However, historically, it should be noted that **infringement procedures tend to be initiated by the EC when there is a perceived systematic unwillingness to transpose legislation or wilful neglect of its implementation.** Where countries are taking genuine measures to ensure compliance this appears to abrogate the need for, or purpose of, initiating infringement procedures. However, irrespective of the risk of infringement penalties, the investments will have to be made. This cost remains constant.

More difficult to calculate is the projected losses to be accrued by not making the investment / adopting policy and so forth. A complex set of econometrics can be applied which allocate a monetary value to intangibles and this is extrapolated and used to demonstrate the cost effectiveness of an investment for which there is no obvious financial return. **However, it is not within the remit of this project and there are no resources to perform these calculations for all of the possible interventions which could contribute towards ensuring acquis compliance.** What should be borne in mind is that similar calculations can be made for investments which do not contribute to acquis compliance; for example, providing the population with clean drinking water is meritorious as is education and health care.

EVALUATION QUESTION 4

Are there other fields in the case of which Structural or Cohesion Funds that may, now or in the future, aid Romania in fulfilling its communitarian obligations in the present of future programming period?

It is apparent that the areas of the *acquis* requiring further investment and the most significant funds are predominantly those from within the group granted transition measures under the terms of the Accession Treaty: *water, waste management and the road transport infrastructure*. Additional *acquis* in these sectors also brings new investment needs.

For the *energy sector* investment needs has arisen because of the strain put on the infrastructure as a result of Romania meeting its renewable targets and the challenges of interoperability.

The specific issues regarding these sectors are discussed below in dedicated sections.

For the remaining *acquis* there is less need and likelihood that specific targeted European funding is required due to the operational nature of the *acquis* governing these domains.

Certain institutions, such as the National Statistics Institute or the Competition Council, implemented different pre-accession projects aimed at administrative capacity building, in the view of adopting new EU norms and now continue to use the available EU funds to continue for the same purpose and because the funds are available and earmarked.

In general, the responsible institutions favour investing in capacity building and strengthening the internal staff capabilities, rather than what may come as an alternative – technical assistance, external specific expertise or investing in equipment or infrastructure.

Therefore, there is a case to be made for maintaining clear funding opportunities in general for capacity building and human resource development, for the institutions required to implement the EU legislation, without linking the funding to some specific piece of legislation. Likewise, institutions such as those mentioned in the analysis should benefit, in the future, from structural funds aimed at supporting their specific activities, to help accelerate the *acquis* compliance.

Also the *Europe 2020 Strategy* needs to be taken into account. The strategy aims at economic recovery following the financial crisis of 2008 and the subsequent economic down-turn. The Strategy has 5 targets:

Table 25: Europe 2020 Targets – EU 27

Domain	EU Indicator
Employment	75% of the 20-64 year-olds to be employed
Research and Development	3% of the EU's GDP to be invested in R&D
Climate change and energy sustainability	Greenhouse gas emissions 20% (or even 30%, if the conditions are right) lower than in 1990 20% of energy from renewables 20% increase in energy efficiency
Education	Reducing the rates of early school leaving below 10% At least 40% of 30-34-year-olds completing tertiary level education
Fighting poverty and social exclusion	At least 20 million fewer people in or at risk of poverty and social exclusion

As with each of the Member States, Romania have specific targets:

Table 26: Europe 2020 Targets – Romania

Domain	Indicator
Employment	70% of the 20-64 year-olds to be employed
Research and Development	2% of the EU's GDP to be invested in R&D
Climate change and energy sustainability	Greenhouse gas emissions - 19% 24% of energy from renewables 20% increase in energy efficiency
Education	Reducing the rates of early school leaving below 11.3% At least 26.7% of 30-34-year-olds completing tertiary level education
Fighting poverty and social exclusion	At least 580,000 fewer people in or at risk of poverty and social exclusion

The EC also makes specific recommendations for Romania:

- Implementation of the precautionary programme to support economic stability (a subsequent 2 year Bn€ 4 agreement with the IMF and EC in place since July 2013)
- Improve tax collection and compliance

- Pursue health sector reform to increase efficiency
- Improve youth employment through the National Plan for Youth Employment, adopt legislation to counter poverty and social exclusion.
- Education reform to reduce early school leaving and, improve access for disadvantaged people and align tertiary education with the needs of the labour market.
- Strengthen governance and the quality of public administration
- Improve the business environment through e-government, support for research and development, reduce the administrative burden for SMEs, improve the efficiency and independence of the judicial system and combat corruption.
- Liberalise electricity and gas prices and improve energy efficiency and interconnection, adopt a long-term transport policy and improve broadband infrastructure.

While a number of the targets and recommendations coincide with or have a basis in Community legislation – Directives and Regulations – and are discussed in the following sections, others do not.

The draft of the Romanian Partnership Agreement for the 2014 – 2020 programming period, *inter alia*, addresses the *Europe 2020 Strategy* and the Romania specific recommendations. Although it is not within the remit of this project to conduct an ex-ante evaluation of the Partnership Agreement, it should be noted that the overall content presented under 11 thematic objectives is germane to both the Europe 2020 objectives and Romanian’s convergence and development needs. While the Partnership Agreement does not necessarily identify or highlight areas where investment is required to achieve *acquis* compliance the primary areas are accounted for:

Thematic Objectives

1. Strengthening research, technological development and innovation
2. Enhancing access to, and use and quality of, information and communication technologies
3. Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector and the fisheries and aquaculture sector

4. Supporting the shift towards a low-carbon economy in all sectors
5. Promoting climate change adaptation, risk prevention and management
6. Protecting the environment and promoting resource efficiency
7. Promoting sustainable transport and removing bottlenecks in key network infrastructures
8. Promoting employment and supporting labour mobility
9. Promoting social inclusion and combating poverty
10. Investing in education, skills and lifelong learning
11. Enhancing institutional capacity and an efficient public administration

Notwithstanding accusations that opportunities were lost under the 2007 – 2013 funding round, the questions remain that, given finite resources, *are the acquis targets achievable and do they take priority over other areas of intervention?* At a time of subdued economic growth and the escalation of acquis and targets, particularly in the environment and energy sectors, Romania has a considerable challenge as it has not yet reached parity with the old member states at the time of Accession.

ENERGY

As of 1 July 2013, the energy acquis comprised over 400 documents. Of these, the acquis requiring compliance and investment has been the primary focus. The transitional periods stipulated by Romania's Accession Treaty target the environmental impacts of companies active in the energy field, and therefore fall under the Environment chapter. Thus, for the energy sector attention focuses on the obligations arising from the acquis introduced since 2007.

Energy is one of the sectors that require significant investments over the next period²⁵, a situation which is due to the neglect of the sector since 1989 and its use as an instrument to subsidize individuals and economic operators over the past 23 years. Also, there are a number of obligations that arise with the transposition and

²⁵ Annually, some Bn€ 3 to 4 worth of investments are required in energy (all sectors), according to OMV Petrom the only gas and oil producer on Romanian market . That translates into a Bn€ 21-28 investment need over the 2014-2020 period.

implementation of the new energy acquis – of the Directives enacted since 2007, the Directives of the Third Energy Package (TEP) are significant because the ‘Electricity Directive’ (2009/72/EC) and the ‘Natural gas Directive’ (2009/73/EC) have onerous financial implications.

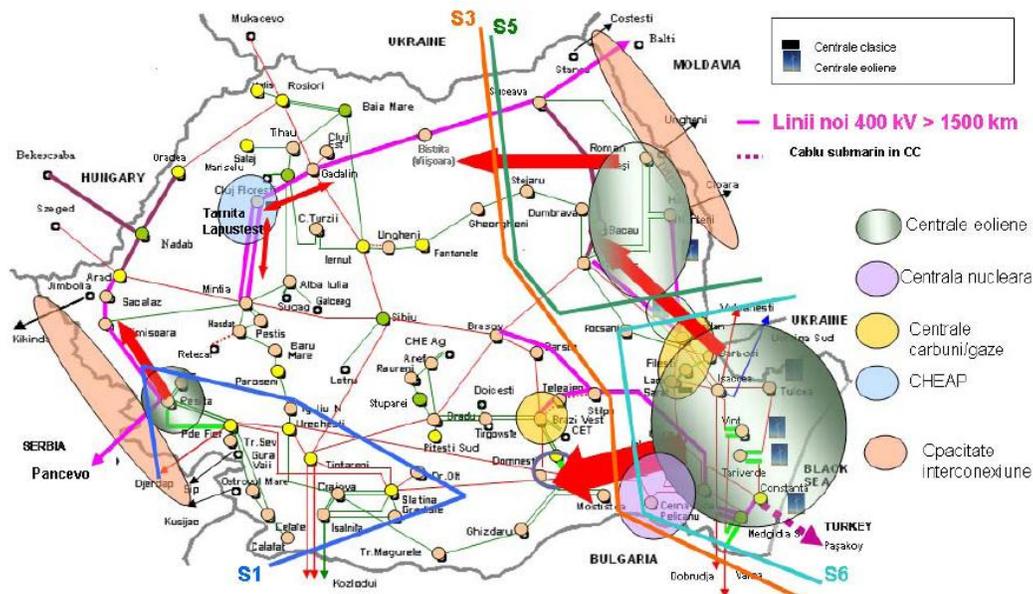
To meet the requirements of the Natural Gas Directive to ensure the security and efficiency of the gas supply network, **this will require new infrastructure and rehabilitation of the existing facilities. This inevitably entails the need for continued financing through the Structural Funds.** Also, the creation of a common energy market in Europe (set to be achieved by 2014) entails interconnectivity of the electricity and natural gas networks between Member States. That in turn requires investments in capacity for cross border exchanges and system interoperability.

Currently, Romania only has one gas interconnection – with Hungary – a further interconnection is being constructed with Bulgaria. As mentioned previously, the installation of a pipeline is not the only consideration. The technical operating parameters also need to be compatible. Romania’s domestic gas transportation system the pressure is between 6 and 35 bar. The transit of gas through Romania takes place via dedicated pipelines which currently are not connected to the main Transgaz system. In order to ensure the interoperability and to allow natural gas to flow from Romania to Hungary, the construction of a new compressor station is required which is estimated to cost around M€ 15-17.

For electricity, the investments should target first and foremost network consolidation, to enable the grid to accommodate with a growing quantity of intermittent power generated by renewable energy sources. This also entails investments in new and efficient power generation to compensate for the unreliability of the wind and solar renewables. Power generated by, e.g. new gas-fired or hydro pumped storage power (e.g.: the Tarnita Lapustesti project) plants will be required to ensure the system has enough balancing capacity.

Transmission System Operator (Transelectrica) has prioritised development needs for the period until 2019.

Transelectrica Network Development Plan for 2010-2019



Source: Transelectrica

The green circles indicate the wind projects and their location (Dobrogea and Moldova); the orange circles indicate the future interconnection requirements (with Ukraine and Serbia); the blue circle is the Tarnita Lapustesti hydro storage project; the yellow circles are gas or coal-fired projects, while the violet circle designates the nuclear project (Cernavoda units 3 and 4). The pink lines indicate the required new 400 kV lines that have to be constructed in the next period. Of these, Transelectrica's priority interconnection projects²⁶ are:

- 400 kV Axis Iron Gates-Resita-Timisoara-Sacalaz-Cetatea Aradului-Arad;
- 400 kV Resita- Pancevo (new interconnection between Romania and Serbia);
- 400 kV Gadalin-Suceava (new line, direction Moldova);
- 400 kV Suceava - Balti (new interconnection between Romania and Moldova).

The provisions and overlap between the Electricity and the Renewable Directives are evident. In fact, the measures address the same problem and reinforce each other. For instance, art. 16 of **the Renewables Directive specifically states the need to develop the**

²⁶ Transelectrica, Network Development Plan for 2010-2014 and tentatively 2019, pg. 126.

transmission and distribution grid infrastructure, intelligent networks and storage facilities as to permit an increasing contribution of electricity from renewable energy sources. Technical adaptations are required to allow the electricity grid to operate with a higher intake of renewable energy. Wind and solar power have different cost structures, dispatch ability and size, hence the need to account for these differences in the transmission system. The power grid was designed for uptake of conventional energy and the growing share of wind and solar creates technical problems with grid stability. **Investments are required to modernize the grid in order to be able to deal adequately with the changing mix of electricity generation.** This entails investments in grid connections, grid reinforcements and a fair cost sharing between Transmission System Operators (TSOs), Distribution System Operators (DSOs) and producers of renewable energy. Both Directives (gas and electricity) target the introduction of smart meters (e.g.: for 80% of electricity consumers by 2020) a provision which carries significant financial weight and is part of the wider EU effort to promote the development of smart grids.

In summary:

The Directives in the energy sector having the most significant financial implication for Romania in the coming period are:

The Electricity Directive (2009/72/EC

The Natural Gas Directive (2009/73/EC);

The Energy Performance of Buildings Directive (2010/31/EU)

Energy Efficiency Directive (2012/27/EU)

Recommendations for financing priorities to be considered in the energy sector:

- **Modernising the energy infrastructure** (transport and distribution networks – gas, electricity, heat) to reduce the losses and inefficient energy consumption due to the extended use of existent installations, many passed their projected lifetime; and the commissioning of modern, more efficient power plants;
- **Consolidation of electricity network** in order to integrate and accommodate a higher share of renewable energy entering the grid, following the boom of wind farms witnessed since 2008 and are now becoming operational;

- **Interconnection of gas and electricity networks** with neighbouring countries;
- **Smart metering and development of smart grids;**
- **Increase energy performance of buildings** (Directive 2010/31/EU requires that until December 31, 2018, all buildings occupied or owned by public authorities should be a „*nearly zero-energy building*”; and, after 31 December 2020, all new buildings);
- **Increase energy efficiency in final consumption, in services, and in public institutions** (Dir. 2012/27/EU).
- Support for **energy recovery from industrial discharges** e.g. hydrogen emissions from chemicals manufacture.

Main arguments/justifications:

Electricity Directive (72/2009/EC)

The investment needs in electricity are estimated at some Bn€ 10. The main area that requires investment is grid reinforcement; required in order to accommodate integration a larger quantity of intermittent renewable power into the system, and also to ensure the safe functioning of the system (that implies ensuring adequate balancing capacity and investing in new, ideally gas-fired, power plants). **The financing priorities from Structural Funds during 2014-2020 should target the elements with maximum impact for stabilizing the National Energy System (NES) and which are complimentary to initiatives at EU level, such as the *Connecting Europe Facility*, where Romania participates in 7 eligible Projects of Common Interest (PCI), of which 2 concern electricity and 5 natural gas:**

- 1) **Cluster Bulgaria-Romania** with the following projects: domestic line Cernavodă – Stalpu; domestic line Gutinaş-Smardan; domestic line Gădălin-Suceava.
- 2) **Cluster Romania-Serbia** with the following projects in Romania: interconnector Reşita-Pancevo; domestic line Porțile de Fier-Reşita; domestic line Reşita-Timişoara/Săcălaz; domestic line Arad-Timişoara/Săcălaz.
- 3) **Cluster integration of the transit and transmission system and implementing the bi-directional flow in Romania:** reverse flow at Isaccea; building the pipeline to connect the transit line (with gas towards Bulgaria) with the National Transport System.

4) **Cluster increased storage capacity in South-East Europe:** increase storage capacity at the Depomureş UGS.

5) **Cluster AGRI** (Azerbaijan–Georgia–Romania interconnector): gas pipeline Constanța (Ro)-Arad (Ro)-Csanadpolota (Hu); LNG terminal at Constanța.

6) **Cluster Southern Gas Corridor (SGC):** onshore pipeline via Romania (1.318 km length, 23 Bcm/an initial capacity).

7) **Cluster maritime transport Bcm/yr form Caspian region (Azerbaijan and Turkmenistan) to RO:** underwater gas pipeline between Georgia and Romania (“White Stream”).

The *Connecting Europe Facility* targets cross-border projects that bring benefits to other Member States. Romania, however, has specific domestic needs, created by the entry into the grid of a growing share of renewable energy. **The national energy system has to be strengthened by stabilizing elements that can counterbalance intermittent energy. Therefore Structural Funds should maintain the possibility to finance domestic infrastructure.**

Natural Gas Directive (2009/73 EC)

70% of the pipeline comprising Romania’s national gas transportation system is antiquated and degraded. It requires not only construction of new infrastructure for transport and distribution segments, but also maintenance of the existing infrastructure to meet the objective of the Directive 2009/73 in „ensuring a long term, secure and efficient supply”. During 2007-2013, structural funds contributed to the implementation of SCADA system in the entire Tarnsgaz network. During 2012, 948 of its 1238 gas metering stations were equipped with SCADA systems. Romania has to build interconnectors with its neighbours and secure the reverse flow of these pipelines.

Romania has to invest in cross-border capacity and system interoperability in order to contribute to the over-arching goal of creating a common energy market. At present, Romania has only one operational cross-border gas pipeline (Arad-Szeged), but it can only import from Hungary to Romania. **The new energy acquis requires that a permanent bi-directional capacity between Member States is mandatory.** This will require additional investments to address the question of the pressure difference between Hungary and

Romania. In Romania, the pressure in the domestic system is lower than in Hungary. The cost of a new compressor station can be as high as M€ 15-17, but this is necessary for two-way flow interoperability.

Energy Efficiency Directives (2010/31/EU and 2012/27/EU)

Thermal rehabilitation of buildings and energy efficiency are fields in which EU funds can have the highest impact, since the benefits will be concrete and immediately felt by the majority of Romanians. Therefore, **energy efficiency measures and thermal insulation of public and residential buildings should be a priority during 2014-2020**. If the design of the works takes into account avoiding unnecessary solar gain caused by the inappropriate installation of additional glazing thereby cancelling out heating energy savings with air conditioning expenditure, these projects will have a direct and immediate impact on energy consumption and citizens' purses. Currently, only 6-7% of the multi-storey apartment blocks are thermally renovated. Half of the Romanian population resides in apartment blocks and dealing with the projected rises in energy prices will be a widespread difficulty. These projects also have further widespread utility as they also create employment. According to the *BPIE Romania Country Initiative*, of the total thermal rehabilitation costs, 40% are labour costs, so that a Bn€ 1 investment can create ~ 70,000 jobs. In addition, the principal construction material (polystyrene) is produced in Romania. Increased thermal comfort can bring environmental benefits (reduced CO2 emissions) and contribute towards compliance with the 2020 climate goals.

ENVIRONMENT

The priorities for investment through the Structural or Cohesion funds remain in the areas of water supply, wastewater collection and treatment and waste management. For these areas there are still steps to be taken in order to comply with the obligations laid out in the Accession Treaty and subsequent acquis. The current funding allocated to the water and wastewater domain amounts to only 30% of the estimated funds required to comply with the Accession Treaty targets. Additionally, new water acquis will require further investment for tertiary wastewater treatment for agglomerations of 10,000 inhabitants or more. The SCI allocation 2007 – 2014 provided for ~70% of the required investment for integrated waste management; predominately to facilitate the closure of non-compliant landfills and the construction of compliant landfills. The estimated investment required is as follows:

Recommendation for financing priorities to be considered in the environment sector:

- 1. Expanding public access to water supply services, sewerage and wastewater treatment** (an estimated investment requirement of ~ Bn€ 10.20)
- 2. Further development of waste management infrastructure and related services, including improving integrated systems already implemented by favouring solutions for reuse, recycling and energy recovery** (an estimated investment requirement of ~ Bn€ 1.00).
- 3. Also the provision for drinking water quality monitoring needs further investment. The acquis obligations are not just that a target number of the population have access to drinking water but also that its quality reaches prescribed standards.**

Improving the quality of water bodies should also play an important role in Romania's efforts to fulfil its communitarian obligations, in particular the Water Framework Directive target to achieve a good status for all waters by 2015. Based on the River Basin Management Plans consideration could be given to the restoration of historically altered waters, restoring lateral and longitudinal connectivity particularly where there is complementarities with flood risk prevention.

Recommendations for investment consideration:

4. **Reducing risk and flood damage through support ecological restoration of wetlands and floodplain restoration;**
5. **Support projects to restore longitudinal connectivity of rivers;**
6. **Support projects for the protection and rehabilitation of the coastal zone.**

It is likely that further support will be required for **waste management**. There has been an over-emphasis with disposal although this is the last resort in terms of the waste hierarchy (Reduce, Re-use, Recycle, Recovery (waste to energy) and disposal). While efforts have and are being made for reducing, re-use and recycling, little has been done for energy from waste – only two energy from waste plants are scheduled to be operational by 2020. The traditional approach is incineration but newer and more efficient technologies are emerging. Although it is acknowledged that the Romanian electricity market presents some difficulties for the viability of energy from waste production consideration should be given to this as it promises long-term benefits for both waste management and energy security.

Investments are also needed for **air quality protection**. There are several urban agglomerations where the air quality standards set by Directive 2008/50/EC concerning ambient air quality and cleaner air for Europe are not met. They require programmes for air quality management and financing to implement the necessary measures. Directive 2008/50/EC increases monitoring parameters and also states that air quality information shall be made available to the public in accordance with INSPIRE.

Recommendations for investment consideration:

7. **Support the development of air quality management plans, implementation of air quality monitoring and pollution reduction measures according to the air quality management plans**

Emissions from large combustion plants contribute to air pollution and a stricter regime will come into force with the IED Directive 2010/75/EU.

Recommendations for investment consideration:

8. Continuation of support for rehabilitation of large combustion plants will also be needed. Directive 2010/75/EU on industrial emissions is to be taken in consideration

Nature protection targets are still dominated by the need to complete the process of management plans preparation and approval for Natura 2000 network. Currently, management plans for about half of the Natura 2000 sites are prepared or under preparation. Consideration should be given to completing this process.

9. Implementation of Adequate Management Systems for Nature by continuing the development of management plans of protected areas, as well as project implementation support capacity assessment, ecological restoration and biodiversity conservation (an estimated investment requirement of ~M€ 200)

Despite the huge investment necessity (Bn€ 14 according to National Strategy for Management of Contaminated Sites), the rehabilitation of historically contaminated sites made little progress and remains an important candidate for future aid under Structural funds.

10. Support Rehabilitation of contaminated sites through project specific investigation, monitoring and remediation

Horizontal Legislation

Noise

No funding SI funding under the SOP ENV has been allocated to ensuring compliance with the Environmental Noise Directive (2002/49/EC). Member States are required to draw up 'strategic noise maps' for major roads, railways, airports and agglomerations. Some progress has been made with noise maps for roads and railways from funds under SOP-T PA 3. However, of the 19 agglomerations required to develop noise maps only 5 have done so. **The deadline has now been exceeded and Romania is defaulting on its acquis obligations. The reason cited for the noise maps not being developed is a lack of capacity and/or funding.**

Recommendation for investment consideration:

11. Support the development of noise maps and implementation of noise reduction measures

A supplementary field that can be taken in consideration though not connected to a particular EU target, is the enforcement of SEA (Strategic Environmental Assessment) and EIA (Environmental Impact Assessment) directives. Financial support here should consider development of decision support systems (computer-based applications to support the decision making process and public consultations (Aarhus Convention) for assessing cumulative impacts of proposed plans & projects.

Recommendation for investment consideration:

12. Support to increase capacity to implement the EIA and SEA, mainly by improving public consultation and cumulative impact assessment.

Another area that may be needed to be supported in the future is related to soil protection. According to the European Commission, different EU policies (for instance on water, waste, chemicals, industrial pollution prevention, nature protection, pesticides, agriculture) are contributing to soil protection. But as these policies have other aims and other scopes of action, they are not sufficient to ensure an adequate level of protection for all soil in Europe. For these reasons, the Commission adopted a Soil Thematic Strategy (COM 2006) 231) and a proposal for a Soil Framework Directive (COM 2006) 232) on 22 September 2006 with the objective to protect soils across the EU. The Strategy and the proposal have been sent to the other European Institutions for consultation. The adoption of the directive is likely to lead to requirements including the identification of areas at risk of erosion, organic matter decline, compaction, salinisation and landslide and that preventative measures should be taken. The proposed Directive also contains the requirements for contaminated sites identification, management and remediation.

Recommendation for investment consideration:

13. Support the implementation of risk areas identifications for soil, elaboration of management plans and implementation of preventative measures.

The Marine Strategy Framework Directive 2008/56 aims to achieve Good Environmental Status (GES) of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend.

14. Support the implementation of measures designed to achieve or maintain Good Environmental Status of marine waters.

TRANSPORT

Although within the transport sector new acquis has been introduced which will require investment, **significant investments are still required to fulfil obligations assumed under the Accession Treaty.** The current priorities are in consideration of the logical continuity of the large investment already committed, and gradual structural changes of the Romanian economy from being a consumer / beneficiary dominated area to a full EU member having committed and specific objectives for production within the EU.

The following table considers again the main EU Acquis obligations, the main Romanian needs for socio-economic and environmental development, and the main project proposals.

Table 27: Recommendations for investments consideration (priority projects)

EU relevant acquis	Romanian development needs in terms of socio-economic and environmental issues	Priority Proposal projects
Directive 2012/34/EU establishing a single European railway area	<p>Improving the accessibility of large scale economic industrial activities in Romania and good connections with European and non- European countries;</p> <p>Improving the attractiveness of the Romanian zones with large scale development potential in case the production/services activities including transversal (meaning horizontal) and touristic/ amenity potential;</p> <p>Developing trans-Carpathian connections through reliable rail links.</p>	<p>-Continuation of the works on the TEN-T rail IV and IX corridors;</p> <p>-Developing the intermodal public freight terminals for the integration of the main traffic rail, road, IWW and maritime flows from national level with the local level;</p> <p>-Developing the efficient rail connections with regional and international airports with intermodal passenger facilities in large urban areas;</p> <p>-Modernisation of the rail crossing border connections through removing technical and logistical barriers</p> <p>-Developing the European Rail Traffic Management System (ERTMS) level 2 on the rail TEN-T corridors</p>
Directive 2008/57/EC on the interoperability of the rail system within the Community ; Commission Directive 2011/18/EU amending Annexes II, V and VI to Directive 2008/57/EC on	<p>Improving the accessibility of large scale economic industrial activities in Romania and good connections with European and non- European countries;</p> <p>Improving the attractiveness of the Romanian zones with large scale</p>	<p>-Modernisation of the rolling stock and its to the users needs, in terms of energy and financial efficiency</p> <p>-Gradual implementation of ERTMS level 1 on the non TEN-T railway network to ensure</p>

EU relevant acquis	Romanian development needs in terms of socio-economic and environmental issues	Priority Proposal projects
the interoperability of the rail system within the Community	<p>development potential for production/services activities including transversal (meaning horizontal) and touristic/ amenity potential</p> <p>Improving the traffic safety and transport security for freight and passengers</p>	interoperability
Directive 2008/110/EC on safety on the Community's railways (Railway Safety Directive)	Developing an integrated, efficient, greener and safer system for the passengers and freight transport and traffic	Strengthening the maintenance and repairs system for the railway infrastructure and rolling stock
Commission Implementing Regulation (EU) No 1207/2011 laying down requirements for the performance and the interoperability of surveillance for the Single European Sky	Improving the traffic safety and transport security for freight and passengers	Modernizing/upgrading the regional airport infrastructure (including info-infrastructure equipment for air traffic management)
Regulation EC 1137/2008 and Commission Directive 2007/71/EC on port reception facilities for ship-generated waste and cargo residues	<p>Improving the traffic safety and transport security for freight and passengers</p> <p>Developing an integrated, efficient, greener and safer system for the passengers and freight transport and traffic</p>	<p>Modernizing/ upgrading the maritime and IWW port infrastructure and related rail connections to the national railway network ;</p> <p>-Modernizing the management and monitoring system for IWW freight and passengers traffic flows in ports, in terms of waste and residues securing</p>
Directive 96/53/EC of 25 July 1996 laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic	Improving passenger mobility at international and also national, regional, local levels, and improving freight accessibility for distribution/supply, in a territorially balanced manner and complementarities with rail and IWW transport	-Continuing the road infrastructure development