Executive Summary

This Evaluation Report sets out to **evaluate the contribution of Structural Instruments to ensuring Romania's conformity with the Acquis Communautaire** and also includes considerations of the **contributions made towards conformity by investments from other sources**, the **consequences of non-conformity.** It also **identifies where future investments can be made through Structural Funds**.

The Terms of Reference comprise *four evaluation questions* with several sub-questions and each of the questions is considered in turn in this Executive Summary:

Q1. 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 analysis under Q1 points to the fact that **where administrative measures are to be addressed there is a high degree of conformity with the acquis. It is in the areas that require significant investment that greatest challenge lays.** The temporary measures and wavers referred to in Annex VII of the Accession Treaty are contained by Table 1 - *Overview of transition measures*, at the end of this section.

While meeting the obligations of the Accession Treaty, i.e. conforming with the provisions and meeting the deadlines agreed, remains valid, **much of the legislation in force at the time was drafted has now been superseded by new legislation**. The newly introduced legislation, amending or corresponding to Transition Measure Legislation is contained by Table 2.

Invariably, the new legislation sets stricter or higher targets. 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.

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 investments. The majority of new Directives and Regulations are of an administrative nature and, as such, there was the potential that compliance could be supported by the Operational Programme Administrative Capacity Development. However, this observation is not informative. If the funding requirements and allocations are plotted against legislative requirements it becomes apparent that **the greatest investment was and still is required in the environment and transport areas subject to transition measures in the Accession Treaty. Also, the significant investment needs for compliance with the energy acquis is apparent.**

For the **Energy** acquis the investment needs span 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 CO_2 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.

Within the **Environmen**t sector over 800 acts of community legislation are currently in force. Although there is an overlap between the various environmental domains in the sense that a single intervention can contribute towards compliance in more than one area (e.g. air quality and industrial emissions), investment needs to ensure compliance with the acquis are identified in the following areas:

- Air quality;
- Industrial pollution control;
- Waste management;
- Water quality;
- Nature protection;
- Flood risk management;
- Nature protection.

As they were at the time of Accession, the domains requiring the most significant in terms of investment remain the same.

For the **Transport** sector investment needs have focused on the **obligation to comply with Directive 96/53/ EC which entails the upgrading of the secondary road network**. This has been supported by the Sectoral Operational Programme Transport. Further investment needs have arisen due to community legislation introduced post-accession. Investment needs are identified in the following areas:

- Establishment of the single European railway area with interoperability and common safety standards;
- Performance and interoperability of surveillance for the Single European Sky;
- Interoperability and technical specifications of the river information systems;
- Reception facilities for ship generated waste and cargo residues.

Other areas include chapters like the common market or industrial policy, where formal compliance is achieved by means of legislation alignment, whereas de facto **compliance is achieved by private entities (providers and goods and services) which need to adapt their products so as to respect certain regulations** (such as car breaking mechanisms and other safety requirements). Whereas this compliance is of indirect nature and does not fall under the scope of this evaluation, it must be noted that some of investments may have been supported through Structural Instruments, although it is not possible to identify and analyse them statistically.

Conclusions

While many of 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.

Q2. 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, ERDB)? What are the sums allocated (Priority Axis/ Key areas of intervention) through Structural Instruments that are aimed at financing these needs

In response to Q2 **a comprehensive list of interventions** was drawn up with funding allocated and presented as an Annex to the Main report. Over 1,000 projects were identified that could be correlated with specific community legislation where investment was required for compliance.

Outside of the three sectors requiring heavy investment - Energy, Environment and Transport - it was not possible to identify any significant funding that directly supports acquis compliance. **Investments may be made or loans taken out to support initiatives that are consistent with the acquis, but this would be coincidental**. The task was to identify which interventions have been undertaken with the purpose of meeting the acquis obligations or are *de facto* doing so. **In the majority of cases, programmes and projects are not specifically designed with the objective of meeting acquis compliance. Obvious exceptions are the provisions under the Sectoral Operational Programmes Environment and Transport were funding was targeted at the Annex VII Transition measures.** Therefore, judgements had to be made as to the degree of support the intervention provided for acquis compliance. The primary consideration was based upon whether the inclusion or exclusion of an intervention would be misleading in terms of the purpose of the evaluation.

For compliance with the acquis for the **administrative measures cites under the Annex VII transition measures it was found that these had been accomplished without the need for additional investment.** For new acquis, 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. 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 which can be financed through projects under Sectoral Operational Programme Administrative Capacity Development or other specific measures.

However, the use of the funding is more opportunistic due to its availability rather than utilised because of need. The only instance where there was a systematic use of EU funds was the grants provided to the National Institute of Statistics in respect of specific requests from Eurostat.

Indirectly, the EU acquis may generate investment needs for companies or other stakeholders, in order to comply with new rules, regulations or standards. Investments for replacing or modernising equipment or technological processes may be funded through Sectoral Operational Programme Increasing Economic Competitiveness (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 make a positive contribution to meeting horizontal objectives like energy efficiency and compliance with EU standards**.

The situation for the energy, environment and transport sectors is predictably complex.

In respect to the **Energy sector**, the primary area of support from Structural Instruments was from the SOP IEC, Priority Axis 4. The support targeted three areas: energy efficiency, energy transport and distribution, and renewables. Additional funding has been re-allocated within the Regional Operational Programme (ROP). Funding from OP Administrative Capacity Development was allocated but only indirectly supported the energy acquis.

Of the non-structural instrument support for the energy sector the primary funding was from the European Investment Bank, European Bank of Reconstruction and Development Romanian Fund for Energy Efficiency the national budget and bilateral grants

Environment sector has the dedicated SOP Environment.

Priority Axis (PA) 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.

Other non-Structural Instrument funds were allocated through Life +, Global Environment Facility (GEF), Financial Mechanism of the European Economic Area (EEA), Integrated Nutrient Pollution Control (INPC), financed by World Bank (WB), and the Environmental Fund

Compliance with the **transport** acquis is supported by SOP Transport and the national budget. The funding is allocated by transport mode: road, rail, air, water. Legacy funding from the pre-accession funds continues to make a contribution and national funds are significant. Loans have been taken out from the European Bank for Reconstruction and Development, European Investment Bank and the Council of Europe Development Bank and are included in the National Plan for Infrastructure.

<u>Conclusions</u>

Under the 2007 – 2013 programming round for the Structural and Cohesion Funds (SCF) 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). However, **there is no systematic approach to allocating funds in respect of acquis compliance. Programmes and projects are initiated according to the strategic planning and priorities inherent within the Operational Programmes**. Acquis compliance for the overwhelmingly large part concerns administrative and technical matters related to transposition. However, in the areas where investment is required this amounts to a considerable volume of funds. Other than SCF funding, national funds have been utilised – including bank loans, and there has been other IFI support.

Q3. What is the current and forecasted progress for the KAI / relevant projects, identified for Q2? What are Romania's perspectives in regards to meeting targets identified at Q2 for projects financed from Structural Instruments and Public Funds? In the case of failure to achieve these results, what are the consequences which may result from this hypothesis?

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.*

Other than the Energy, Environment and Transport sectors, the majority of EU legislation requires procedures to be implemented rather than targets to be attained. 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. Whereas strengthening administrative capacity or upgrading information technology may be needed on a case by case basis, there were no instances were significant investment was needed.

In general, the administrative issues laid out in Annex VII of the Accession Treaty have been addressed and the outstanding obligations are in the environment and transport sectors (and the issue of oil stocks). The subsequent additional requirements of the environment and energy acquis and the fulfilment of the Annex VII obligations represent the areas where significant investments have been needed and made to ensure progress towards compliance with the acquis.

While infringement proceedings are underway for the **Energy sector**, regarding the liberalisation of the electricity and gas markets, this is more of a political issue than investment. Considerable investments are being made in the **electricity** transmission and distribution network through SOP IEC and EIB and EBRD loans in order to meet the requirement of "*ensuring a secure and efficient long-term supply*". Transelectrica, the national electricity transmission company, pursues a development plan to 2019. Some initial indicators for the operational programme have been abandoned (e.g. projects for reducing the environmental impact of large combustion plants) and other information is not available so it is not possible to arrive at a definitive assessment. However, the current difficulty for the transmission network is a result of the proliferation of renewables. Additional infrastructure is required to connect the renewables and to accommodate the intermittent nature. The intermittent supply also requires back-up generation.

For obligations regarding interoperability, Romania has electricity connections with all neighbouring countries.

The **natural gas** infrastructure is antiquated and requires maintenance and upgrading. Of its 1,238 gas metering stations, 948 were being equipped with SCADA systems in 2012. The target of 150 km of the distribution network to be extended or modernised has been exceeded and 207 km of works undertaken. Currently, Romania has only one operational interconnector (with Hungary) and this is not bi-directional as required. Pipelines are being constructed for connections with Bulgaria and Moldova.

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 3.000 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%.

Infringement proceedings are underway regarding **energy efficiency** in buildings. The government drafted a legislative proposal. The National Multi-annual Plan to Increase Energy Performance of Buildings proceeds and additional funding has been made available under the Regional Operational Programme though savings and re-allocations from other KAI.

In respect to complying with the **environment** acquis, Annex VII of the Accession Treaty details the requirements and timetable for the supply of **drinking water and wastewater treatment**. The targets are incremental until 2018. 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 Environment has achieved 78% of the 2012 target for water supply and 33% of the target for wastewater treatment facilities. 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 there was only increases of 12% for collection and 11% for treatment, it appears that there may be a shortfall against the 2013 target. New legislation regarding tertiary treatment poses an additional difficulty.

For waste management the SOP Environment has provision for 37 projects and the aim is that integrated **waste management** systems will span the entire country. Currently 24 projects are under implementation and 13 under preparation/approval. 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. At present, 33 compliant landfills are in operation. The 2010 target - 25% reduction in the amount of biodegradable waste landfilled compared with the 1995 baseline - for processing biodegradable waste has been exceeded with a 37% reduction achieved. Other than for waste from electrical and electronic equipment, WEEE recycling targets have been met.

Compliance with the habitats and birds directives is supported though the assistance to **Natura 2000 sites**. Currently 272 management plans have been drafted and 5 approved. The total number of plans covers approximately half of all Natura 2000 sites. There are no acquis targets as such but there is a requirement to work towards a 'favourable conservation status. Management Plans are seen as the mechanism to achieve this.

Sector Operational Programme Environment supports flood risk management. All river basins have flood risk management plans. This is the requirement of the relevant Directive but, particularly for Romania, the implementation of flood prevention measures is of more and practical benefit.

Seven district heating plants are being rehabilitated. As of the end of 2012, 23 installations incinerating hazardous waste were operational; 8 operators 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. This fulfils the respective obligations under the Accession Treaty.

In respect to **Transport**, Annex VII of the Accession Treaty requires the upgrading of secondary roads to withstand a load of 11.5 tonnes per axle. The target for 2013 was 8.260 km and for 2011 was 7.289 km. The actual achievement for 2011 was 6.028 km. In view of the shortfall the 2013 target was reduced to 7.886 km. Approval of this deviation from the Annex VII commitment is awaited from the European Commission.

The absence of intermediary indicators for the transport sector and the unavailability of monitoring data presents difficultly in establishing the current progress. While considerable funds are being invested, the achievement targets are in the future. According to the TEN-STAC report (Scenarios, Traffic Forecasts and Analysis of Corridors on the Trans-European Network) 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.

Consequences of non-achievement of targets in programmes / projects / measures contributing to the transposition and implementation of the 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. Non-compliance with EU acquis also bears legal consequences consisting in legal liability and through the infringement procedure can trigger economic consequences through penalties. Also, there are inevitable functional consequences, affecting EU citizens and business.

Founding treaties of EU have provided for the infringement procedure, currently under articles within the Treaty on the Functioning of the European Union (TFEU). Romania is part to the EU Pilot procedure. **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).** This gives the Member State the opportunity to comply voluntarily with the EC position and without the initiation of formal infringement proceedings. The first stage is for the EC to send a "letter of formal notice" requesting the Member State to submit its observations. In view of the response the EC may then send a 'reasoned opinion' presenting the case for why it considers there has been an infringement and specifies a timescale for the Member State to comply. If the Member State fails to do this the EC may decide to refer the case to the European Court of Justice (ECJ). The ECJ may apply financial penalties. These are calculated on the basis of 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 according the particular circumstances concerning each MS.

Mathematical formula:

[640 € x (coeff. 1 to 3) x (coeff. 1 to 20) x 3,38]

For <u>lump sums</u> 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 € x (coeff. 1 to 20) x 3,38 : (number of days of infringement)]

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. However, in 2012 Romania had 44 open infringement cases but no referral to the ECJ. This may be a proof both that the EU Pilot does fulfil its inductive function and that Romania has managed to finally comply with EU requirements before the critical phase of the referral to the Court. Cases opened against Romania in EU Pilot concern a broad range of sectors and generally refer to delayed or partial transposition of directives and/or their implementation rather than are related to investment needs in those particular areas. 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 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 € 2,163 - 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 mention that ECJ has already established that penalties and lump sums can be applied in a cumulative manner and has already resorted to such cumulative sanctions.

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 cast 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. This approach of ascribing monetary value to items with no market price was controversial when first introduced and requires considerable resources to undertake even for a single policy or intervention.

Similar calculations are made for transport routes; monitory values given for travel time reduction, safety, contribution to global warming, intermodality and modal rebalancing. An example based on this model finds delays in constructing a railway between Curtici and Brasov incurring 'losses' of M€ 120 per year.

Conclusions

Overall good progress has been made in respect of respecting the provisions of the Accession Treaty. Where investment has been required this has generally been foreseen as long-term and incremental – the longest transition period being until 2018. 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.

For 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 **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 in the sector which will incur costs but the target dates are generally sometime 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 increases. 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 make 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. 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 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. However, irrespective of the risk of infringement penalties, the investments will have to be made. This cost remains constant.

Q4. 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 Transport infrastructure**. Additional acquis in these sectors also brings new investment needs.

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

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. 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**.

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. The strategy has 5 targets and in the same context the EC make specific recommendations for Romania. These are not directly linked to specific articles of the acquis. The Romanian Partnership Agreement for the 2014 – 2020 programming period, *inter alia*, addresses the Europe 2020 strategy and the Romania specific recommendations.

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, **the Energy sector will require significant investment of the next period**. 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. Also, to reduce the strain on energy production and distribution the most effective means is to increase energy efficiency.

For the **Environment sector, the priorities for investment through the Structural Instruments 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 Water Framework Directive is far reaching and the demands are challenging and its linkage with the Floods Directive has a particular resonance in Romania. In some respects this is complemented by the **Marine Strategy Framework Directive which foresees** Good Environmental Status of the EU's marine waters by 2020.

The Structural Instruments allocation 2007 – 2013 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. 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 reduction, re-use and recycling, little has been done for energy from waste with only two waste to energy plants planned 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.

The areas of **Air Quality and Noise** are now a risk of non-compliance and incurring penalties and therefore need to be given consideration as to the investment needs and sources of funding. The implementation of EIA, SEA and the related INSPIRE Directives also need to be given further attention.

Romania has impressive biodiversity and array of biogeographical habitats this brings responsibilities under the **Habitats and Birds directives** and further investment is needed in order to meet those responsibilities.

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; 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.

While the obligations concerning the load capacity of the road network remain immediate Romania has longer-term responsibilities for the TEN-T. This will require extensive investment in the infrastructure. Coupled with this are requirements for interoperability and ensuring safety standards.

Conclusions

Although the targets set-out in the Accession Treaty still hold good, much of the concerned legislation has been superseded and more demanding targets set. This is a double blow to countries like Romania as the race is still on to bring the infrastructure up to the levels from which the new targets were originally set. It is highly unlikely that sufficient EU funding will be available in the 2014 – 2020 funding round to meet these challenges. With Bulgaria, Romania has the lowest GDP per capita of all Member States (1/2 average) it is difficult to see that the investments can be made from the national budget either.

Given limited funds for investment, choices have to be made as to where investment should be made. Acquis compliance is one of many considerations. In terms of this evaluation which is concerned with the investment needs arising from acquis compliance, overwhelmingly this investment equates with infrastructure development. Whereas the target dates for compliance in Annex VII of the Accession Treaty and some of the new acquis are fixed and should be adhered to, others are more open and, in practice, can be adopted as old infrastructure reaches the end of its lifetime and is replaced by new infrastructure. Whether this cycle should be pre-empted is a matter for policy, or better, the merits of the investment beyond acquis compliance.

In practice programming for 2014- 2020 will be dominated by the Europe 2020 strategy but within this framework there are opportunities to secure funding to meet acquis obligations.

Recommendations for investment considerations - Energy

- **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.
- **Support for energy recovery from industrial discharges** e.g. hydrogen emissions from chemicals manufacture.

Recommendations for investment considerations - Environment

- **Expanding public access to water supply services, sewerage and wastewater treatment**
- **Further development of waste management infrastructure and related services,** including improving integrated systems already implemented by favouring solutions for reuse, recycling and energy recovery.

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 effort to fulfil its communitarian obligations, in particularly 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 complementarity with flood risk prevention.

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

Investments are also needed for air quality protection. There are several urban agglomerations were 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 of air quality management and financing to implement the necessary measures. New acquis obligations will also require an upgraded monitoring system. 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.

The current Structural Fund assistance supports the development of management plans for the Natura 2000 sites. Further support is required to complete the process.

No Structural Instruments funding under the SOP ENV has been allocated to ensuring compliance with the **Environmental Noise Directive (2002/49/EC**). Although some progress has been made support should be provided to ensure acquis compliance.

Consideration should be given to support **EIA and SEA** and the public consultation process and providing public access to environmental information.

In view of the **Soil Thematic Strategy** and a proposal for a Soil Framework Directive with the objective to protect soils across the EU consideration should be given to supporting the identification of areas at risk and the elaboration of remedial plans.

The **Marine Strategy Framework Directive** 2008/56 aims to achieve Good Environmental Status of the EU's marine waters by 2020. Consideration should be given to support the implementation of this Directive.

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.

Recommendations for investment considerations - Transport

- Continuing the **road infrastructure** development under the SOP Large Infrastructure together with Regional Operational Programme ;
- Locating and 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, for efficient supply in large urban areas in Romania;
- Developing the **efficient rail connections** with regional and international airports with intermodal passenger facilities in large urban areas;
- Modernising **rail crossing border connections** though removing technical and logistical barriers;
- Developing the **European Rail Traffic Management System** (ERTMS) level 2 on the rail TEN-T corridors;
- **Modernising rolling stock** and its adjusting the provision to the users' needs in terms of energy and financial efficiency;
- Gradual **implementation of ERTMS level 1** on the non TEN-T railway network to ensure interoperability;
- Strengthening the **maintenance and repairs system** (including materials and equipment recovery) for the railway infrastructure and rolling stock with associated/needed personnel training programs;
- Modernising/upgrading the **regional airport infrastructure** (including info-infrastructure equipment for air traffic management);
- Modernising/ upgrading the **maritime and IWW port infrastructure** and related rail connections to the national railway network;
- Modernising the **management and monitoring system for IWW freight** and passengers traffic flows in ports, in terms of waste and residues securing (including a "one- stop-shop" information system for this purpose).

Table I - Overview of transition measures[1].

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, Rules on competition	Fiscal Aid	2010	Aligned
		Free Trade Areas	2011	Aligned
		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	
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

[1] Transition measures are stipulated for the Freedom of movement for persons and cigarette excise duty but are protectionist measures imposed by other Member States, and are not considered within this evaluation. The agriculture and fisheries sector is not within the remit of this evaluation and therefore transition measures for the agricultural acquis are also not considered

Table II - 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