Ministry of the Environment

# Romania's Road to Accession: The Need for an Environmental Focus

#### **THEMATIC REPORT**



**DANCEE** Danish Cooperation for Environment in Eastern Europe Ministry of the Environment

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## 1. Introduction

In December 2002, the European Council in Copenhagen concluded negotiations for the biggest enlargement in the history of the European Union. On the first of May 2004, the 15 current Member States will be joined by ten of the 13 candidate countries,<sup>1</sup> which will bring 75 million new citizens into the European Union.

The European Council reaffirmed the irreversibility of the accession process for Romania and Bulgaria and confirmed the objective to grant them membership in 2007. The Council recognised their progress in meeting the accession criteria so far, but underlined also that major reforms still needed to be implemented. A roadmap put forward by the European Commission just before the Council provides Bulgaria and Romania with clearly identified objectives and gives both countries the possibility of setting their own pace of accession. Furthermore, The European Council stressed the importance of the countries stepping up their preparation, including ensuring that the Copenhagen criteria are met,<sup>2</sup> and implementing the commitments undertaken so far.

This strategic report looks at the situation of Romania. At this stage of the enlargement process and after the renewal of the EU commitment to Romania, it is important to ensure that Romania's own quest for accession does not lose momentum. This will require Romania to devote more attention than ever to the serious environmental problems it faces, including to strengthen the government's ability at national,

<sup>1.</sup> The ten countries which will join are Hungary, Poland, Czech Republic, Slovakia, Estonia, Latvia, Lithuania, Slovenia, Cyprus and Malta.

<sup>2.</sup> The Copenbagen criteria require for EU membership that the candidate country must achieve: (1) stability of institutions guaranteeing democracy, the rule of law, buman rights and respect for and protection of minorities; (2) the existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union; and (3) the ability to take on the obligations of membership including adherence to the aims of political, economic and monetary union. Also, the candidate must have created the conditions for its integration through the adjustment of its administrative structures, so that European Community legislation transposed into national legislation is implemented effectively through appropriate administrative and judicial structures.

regional and local levels to meet the administrative and investment challenges in the environment sector.

Denmark has provided significant support to both Bulgaria and Romania in the area of environment, aimed at assisting them to solve their most urgent environmental problems and to build the environmental management structures needed to implement the EU environmental requirements.<sup>3</sup> Under the Government Strategy on Support to Eastern Europe 2002, Danish bilateral assistance to the CEE applicant countries will cease in 2004 when they have been accepted as members. For the intervening period until the end of 2003, Danish assistance is to focus on enabling the applicant countries to achieve the requirements of EU membership, including in the environment sector.

The purpose of this report is to identify the key problem areas and challenges related to the EU environmental *acquis* that Romania will need to address in order to stay on track for accession by 2007. It reviews the priority actions and assistance needed by Romania to succeed in the accession process. Finally, it considers the measures that should be taken in the near future to maintain Romania's pace in carrying out the reforms, investments and capacity building required to meet the obligations of EU membership.

The aim is to identify the major pre-accession challenges which Romania faces today in the environment sector, as a possible guide for future actions by the Romanian Government and other donors.

The contents of this report have been requested by the Romanian environmental authorites in the co-operation with the Danish Ministry of the Environment as a rounding-off of the Danish-Romanian efforts. The purpose of the report is to illustrate the status of the environment and indicate possible solutions to the problems.

<sup>3.</sup> From 1993 to 2001 Denmark has provided support to 76 projects in Romania for a total value of 34 MEUR.

## 2. The Race for Accession

Enlargement negotiations were formally opened on 31 March 1998 with the so-called Luxembourg group of countries - Estonia, Poland, Czech Republic, Hungary, Slovenia and Cyprus.<sup>4</sup> Following strong pressure from the remaining countries, it was agreed at the December 1999 European Council in Helsinki to take a more flexible, multi-speed approach to enlargement and to admit all of the candidate countries to negotiations.<sup>5</sup> Formal negotiations were then opened on 15 February 2000 with the Helsinki Group, *i.e.*, Bulgaria, Latvia, Lithuania, Romania, Slovakia and Malta.

## 2.1 The Process of Negotiating Accession

Accession negotiations are carried out individually with each country, on the basis of a thorough screening of the *acquis* (as divided in 31 chapters based on different policy sectors). During the screenings, the applicant countries are asked:

- if they accept the targeted chapter
- if they intend to request transitional periods after accession for achieving compliance
- if national legislation fully complies with the acquis (if not, target dates for full compliance)
- if administrative structures are able to implement the *acquis* (if not, target dates for completing administrative framework)

A chapter is provisionally closed when the EU is satisfied that the applicant country can effectively meet the obligations therein at the time of accession or within an agreed transition period. The EU has agreed to consider transitional periods if the applicant countries will not be able

<sup>4</sup> The decision that some of the CEE applicant countries had achieved sufficient progress in meeting the basic requirements of a democratic political system, a functioning market economy and ability to assume the obligations of EU membership to begin negotiations towards eventual membership was taken in late 1997 at the European Council in Luxemburg, after the July 1997 publication of the European Commission's policy document, Agenda 2000.

<sup>5</sup> The European Council in Helsinki also confirmed the status of Turkey as an applicant country.

to comply fully with the requirements of the respective legislation on the day of EU membership, e.g., where financially heavy investment will be required or where immediate compliance would have unacceptable social implications. The table on the next page provides an overview of the status of accession negotiations as of December 2002.

The main sticking points in the last sprint for accession were the chapters on agriculture, financial and budgetary provisions, and institutions. The agriculture chapter negotiations opened up tensions between those Member States that are currently receiving large net benefits from subsidies and direct payments under the existing Common Agricultural Policy (CAP) and those candidate countries who were initially told that their farmers would not enjoy such generous subsidies for the initial period after accession.<sup>6</sup> Nonetheless, the outcome of the European Council in Copenhagen was a tailor-made package which satisfied the applicants' concerns, including a rural development package of 5.1 billion EUR for 2004-2006, direct aids for farmers to be phased in over ten years starting with 25% of the full EU rate in 2004, 30% in 2005, and 35% in 2006, as well as full and immediate access to CAP market measures (e.g., export refunds).

The financial and budgetary provisions chapter determines what each Member State (and soon-to-be Member States) will pay into the EU budget. Although negotiations of this particular chapter lasted until the very last minute of the Copenhagen summit, negotiators of the applicant countries went back home with the EU commitment to allocate a total of 40.9 billion EUR during the first two years of membership. Computations put on the negotiating table in September 2002 indicated that a few of the candidate countries might initially pay more into the EU budget than they would receive in benefits.<sup>7</sup> While the new Member States would be eligible for higher amounts of aid from EU agricultural and regional subsidy payments, these funds would not be available until after the new Member States would be required to start paying into the EU budget.<sup>8</sup> In light of this reasoning, the Copenhagen Council

<sup>6 &</sup>quot;Newcomers will receive less regional aid", by Judy Dempsey and Michael Mann, Financial Times, 28 January 2002.

Direct benefits of EU membership are expected to include a considerable increase in EU assistance through Structural and Cobesion Funds, and other programmes.

 <sup>&</sup>quot;EU: Study Finds Easterners May Be Net Payers into Budget" by Breffni O'Rourke in Radio Free Europe, 26 March 2002.

decided to provide prospective members with an additional package of 987 MEUR for temporary budget compensation during the period 2004-2006. In addition, a special cash flow facility amounting to 2.4 billion EUR is to be allocated during the same period of time.

#### Table on Accession Negotiations (European Commission website)

20 December 2002

No.	CHAPTER	СҮР	CZ	EST	HUN	POL	SLO	BUL	LAT	LIT	MAL	ROM	SLK
1	Free movement of goods	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	***0	Х
2	Free movement of persons	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	***0	Х
3	Free movement of services	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	****0	Х
4	Free movement of capital	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	*0	Х
5	Company law	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
6	Competition	Х	Х	Х	Х	Х	Х	*0	Х	Х	Х	0	Х
7	Agriculture	Х	Х	Х	Х	Х	Х	***0	Х	Х	Х	****0	Х
8	Fisheries	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
9	Transport	Х	Х	Х	Х	Х	Х	*0	Х	Х	Х	*0	Х
10	Taxation	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	**0	Х
11	EMU	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
12	Statistics	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
13	Social Policy	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
14	Energy	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	***0	Х
15	Industry	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
16	SMEs	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
17	Science & Research	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
18	Education & Training	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
19	Telecommunication	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
20	Culture and audiovisual	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
21	Regional Policy	Х	Х	Х	Х	Х	Х	**0	Х	Х	Х	***0	Х
22	Environment	Х	Х	Х	Х	Х	Х	**0	Х	Х	Х	***0	Х
23	Consumers & Health												
	Protection	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
24	Justice & Home Affairs	Х	Х	Х	Х	Х	Х	*0	Х	Х	Х	***0	Х
25	Customs Union	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
26	External Relations	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
27	CFSP	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
28	Financial Control	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	***0	Х
29	Financial & Budgetary												
	provisions	Х	Х	Х	Х	Х	Х	**0	Х	Х	Х	****0	Х
30	Institutions	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
31	Other	Х	Х	Х	Х	Х	Х	~	Х	Х	Х	~	Х
Chap	iters opened	31	31	31	31	31	31	30	31	31	31	30	31
Chap	oters closed	31	31	31	31	31	31	23	31	31	31	16	31

0: Chapters opened, under negotiation

X: Chapter provisionally closed

\*: Chapter opened to negotiations under the Swedish Presidency (First semester 2001)

\*\*: Chapter opened to negotiations under the Belgian Presidency (Second semester 2001)

\*\*\*: Chapter opened to negotiations under the Spanish Presidency (First semester 2002)

\*\*\*\*: Chapter opened to negotiations under the Danish Presidency (Second semester 2002)

~: Chapter not yet opened to negotiation

Provisional closure of the institutional chapter resulted in a EU commitment that acceding States will be able to participate in the 2004 European Parliament elections and that commissioners from the new Member States will join the current Commission as from the day of accession on 1 May 2004. A new Commission should take office in November 2004, the date on which the provisions contained in the Nice Treaty concerning the Commission and voting in the Council will enter into force.

Nonetheless, the chapter on institutions cannot be fully decided before the EU Member States agree on how to reform the EU governance framework so that it can cope with ten new Member States. The various issues at stake are being discussed in working groups in the context of the Convention on the Future of Europe, which has been working since 2001 on a draft European constitution. The first outline for a European constitution was released on 28 October 2002.<sup>9</sup>

The first section describes the EU as "a Union of European States which, while retaining their national identities, closely co-ordinate their policies at European level, and administer certain common competencies on a federal basis". The draft suggests that a President be appointed to run the European Council and act as the union's driving force and figure head. It also proposes creation of a Congress of the Peoples of Europe – a body of national and European members of Parliament – to confirm the appointment of the President and to review the state of the union. The draft notes an intention to set out clearly defined areas of exclusive EU competence, areas where competencies are shared between the EU and Member States and areas of national competency.

Areas to be clarified include the size of the European Commission, whether the European Parliament should have one or two chambers, and the number of official languages in an enlarged EU, so it is not clear how the draft constitution will reform the EU institutions. Target date for finalisation of the constitution is summer 2003, when the next Intergovernmental Conference (IGC) will take place.<sup>10</sup> The new Member

<sup>9.</sup> For the draft Constitution see

http://european-convention.eu.int/docs/sessplen/00369.en2.pdf.

<sup>10. &</sup>quot;A Constitution for a Europe of Elites", Financial Times, 6 November 2002, p15.

States will participate fully in this IGC, and Romania and Bulgaria have been granted an observer status.

Much remains to be done before accession effectively takes place in spring 2004. The text of the Accession Treaty, a 6,000-page tome, will need to be finalised and agreed by all parties. It will need European Parliament approval and unanimous decision by the Council of Ministers.<sup>11</sup> The Accession Treaty will be signed by the fifteen Member States and the ten Member States-to-be in Athens' Acropolis on 16 April 2003.

After signature, the Treaty will be submitted for ratification by all 25 States in accordance with their respective constitutional requirements. It is envisaged that for all Candidate Countries, except Cyprus, referenda will take place. Hungary's referendum is the first one scheduled in April 2003, followed by Slovakia, Poland and the Czech Republic before the summer starts. The European Commission will be monitoring the interim period to provide further guidance to the acceding states and to make sure that they are indeed carrying out all the promises made during negotiations. In addition, safeguard clauses to be attached to the Accession Treaty will provide for measures to deal with unforeseen developments that may arise during the first three years of accession.

#### 2.2 Romania's Negotiations with the EU and Public Support for Accession

In 1974, Romania became the first country of Central and Eastern Europe to open official relations with the European Community, when an agreement including Romania in the Community's Generalized System of Preferences was signed. Formal diplomatic relations between Romania and the European Union were opened in 1990, after the demise of communism in Romania.

Romania became party to a Trade and Co-operation Agreement with the EU in 1991 and its Europe Agreement with the EU entered into force in 1995. The Europe Agreements started the enlargement process and covered trade, political dialogue, commitment to legal approxima-

<sup>11.</sup> Article 49 of the EU Treaty establishes the procedure for EU membership including an unanimous decision from the Council after consulting the Commission and after receiving the assent of the European Parliament, which shall act by an absolute majority of its component members.

tion, and co-operation in fields of industry, environment, transport and customs.

On 22 June 1995, Romania submitted its formal application for EU membership. Four years later, in the Commission's Regular Report of 1999 on Romania's Progress Towards Accession, the Commission recommended the commencement of accession negotiations with Romania.<sup>12</sup>

The EU started formal accession negotiations with Romania in February 2000. In 2001, the EU drew up an Accession Partnership for Romania and all the other candidate countries, outlining the priority actions to be taken by each candidate country, for programming of EU financial assistance for implementation.

By the end of 2001, Romania had provisionally closed negotiations on nine of the 31 chapters of the *acquis*. By November 2002, Romania had closed a further 6 chapters. This leaves Romania with 16 chapters still to negotiate including Chapter 22 on Environment.

On 13 November 2002, the European Commission issued a new roadmap for Romania<sup>13</sup>; one month later the European Council in Copenhagen endorsed the document. The roadmap aims to support the 2007<sup>14</sup> target date for accession by identifying short and medium term benchmarks against which Romania's progress can be monitored, and by providing increased financial assistance from the date of the first round of accessions. It will be updated periodically according to new developments and progress in negotiations, including any new issue that may arise in the revised Accession Partnerships to be adopted in 2003.

There is strong support for enlargement in Romania. In March 2002, the Commission's first Eurobarometer report on the candidate countries showed that 78% of Romanians surveyed thought accession would

<sup>12.</sup> The Commission's Regular Report of 1999 on Romania provided that the start of accession negotiations was conditional upon the improvement of the situation of children in institutional care and the drafting of a medium-term economic strategy.

<sup>13.</sup> Roadmaps for Bulgaria and Romania, Communication from the Commission to the Council and the European Parliament, 13 November 2002, COM (2002) 624 final.

<sup>14.</sup> Romania has set the year 2007 as its indicative date for accession; this decision was endorsed by the European Council in Copenhagen on 12-13 December 2002.

bring advantages to their country.<sup>15</sup> In July 2002, another poll revealed that, if a referendum on joining the EU was to be held then, 76% of those interviewed would vote favourably, and only 4% said they would vote against accession.<sup>16</sup>

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#### 2.3 The Environment Chapter in the Accession Negotiations

Romanian's image of the EU

The environmental *acquis communautaire* are considered among the most difficult of any of the Chapters to implement. Formal opening of negotiations of the Environment Chapter took place for the front running applicant countries towards the end of 2000. In March 2001, Slovenia became the first applicant country to close provisional negotiations on the Environment Chapter. By the end of 2001, eight of the candidate countries had provisionally closed their Environment Chapter negotiations. Malta was the most recent country to provisionally close the Environment Chapter on 30 September 2002, while Bulgaria and Romania are still in negotiations.

<sup>15. &</sup>quot;First Eurobarometer report on candidate countries publisbed", Commission Press Release, DN: IP/02/426, 18 March 2002.

 <sup>&</sup>quot;IMAS: Over three fourths of Romanians would vote for country's accession to the EU", Institute of Marketing and Public Opinion Polls, 16 July 2002.

A chapter is provisionally closed only when the EU considers that a candidate country understands the obligations and investments needed and has a plan for carrying out all that is required. If a transitional period after the date of accession is requested, the plan must give details on the actions that will be taken in order to achieve compliance by the end of the extra time period, including how such actions will be financed.

Concerning transition periods for the environmental acquis, DG Environment has signalled the following acceptable and non-acceptable positions:

- a) Acceptable: urban wastewater treatment and large combustion plant requirements
- b) Negotiable: packaging waste and industrial pollution prevention and control (IPPC) requirements
- c) Unacceptable: all framework Directives (e.g., air quality, waste and hazardous waste framework, radiation protection), nature protection, access to information, environment impact assessment

The table below provides the transition periods that have been agreed to date with those candidate countries that have provisionally closed the Environment Chapter.

Sector/Directive			Transitio	n periods ag	reed at prov	Transition periods agreed at provisional closure of Environment Chapter	e of Enviror.	ıment Chaptı	лč	
	CY	CZ	EE	НU	LT	LV	MT	ΡL	SK	SLO
Water										
- Urban wastewater treat	2012	2010	2010	2015	2009	2015	2007	2015	2015	2015
- Drinking water			2013			2015	2005			
- Dangerous substances							2007	2007	2006	
Waste										
- Landfill			20092			2004		2012		
- Packaging	2005	2005		2005	2006	2007	2007	20073	2007	2007
- Incineration of Hazardous										
waste/ municipal waste (old)									2006	
- Shipment of waste								2012		
Air quality										
- VOCs Stage I			2006			2008	2009	2005	2007	
- Sulphur content of fuel	2004				2007			2006		
Industrial pollution										
- Lg Combustion Plants	SP	20071		2004			2005		2007	
- IPPC		2012						2010	2007	2011
Nature										
- Wild Birds							2008			
Chemicals										
- Asbestos						2004				
Radiation Protection										
- Medical Exposures						2005		2006		
1 Carried Darries and the free of the Array	Cod ormer	boos airea	and long of	lorio oscioci	for control of	andeline for	diamido faos	as its bailows	at the Dhale	die ood

1 Special Provisions mean that Cyprus has been given a special emissions level for emissions of sulphur dioxide from its boilers at the Dhekelia and Vasilikos combustion plants.

2 Oil shale only (hazardous waste).

 $3\ {\rm For}$  certain types of waste the period could be extended after accession to 2012.

Requests for transitional measures need to be justified by detailed implementation plans ensuring that compliance with the *acquis* will be reached over time. These plans also allow Candidate Countries to define intermediate targets which will be legally binding. Transitional requests will become Annexes to the Accession Treaty and will be closely monitored upon accession. Hence, transitional measures aim to allow the future Member States to deal with the legacy of the past but do not allow efforts to attract new investments with lower environmental standards.

### 2.4 Romania's Negotiating Challenge in the Environment Sector

Romania was the last CEE candidate country to open negotiations on the Environment Chapter in March 2002. The Ministry of Waters and Environmental Protection (MWEP) has lead responsibility for negotiation of this chapter. The position paper prepared by the MWEP for these negotiations assumes an accession date of 1 January 2007 as a working hypothesis for finalising its preparations for EU accession. It has pledged to implement the environmental *acquis communautaire* by

Sector	Directive	Transition period	
		requested	
Air quality	Control of VOC Emissions during Storage & Distribution		
	(94/63/EC)	2010 (3 years)	
Waste	Packaging Waste (94/62/EC)	2010 (3 years)	
management	Landfill (99/31/EC)	2017 (10 years)	
	Waste Incineration (2000/76/EC)	2010 (3 years)	
Water quality	Urban Wastewater Treatment (91/271/EC)	2022 (15 years)	
	Drinking Water (98/83/EC)	2022 (15 years)	
	Dangerous Substances Discharged into the Aquatic		
	Environment (76/464/EEC)	2015 (8 years)	
	Nitrates Pollution (91/676/EEC)	2014 (7 years)	
Industrial pollu-	Integrated Pollution Prevention & Control Directive		
tion control &	(IPPC) (96/61/EC)	2015 (8 years)	
risk management	Solvents (99/13/EC)	2015 (8 years)	
	Large Combustion Plant (88/609/EEC, as amended		
	by 2001/80/EC)	2012 (5 years)	

Transition periods requested by Romania in environment sector

that date, except for the following Directives, for which it has requested transition periods.

The information the MWEP has submitted for these transitional period requests has not yet satisfied the Commission. It has given the MWEP a deadline of October 2003 to submit additional information on its plans for effective enforcement of the *acquis* and for institutional development of the national, regional and local administrative structures for environmental management. Within that time period, the MWEP must also prepare clear implementation plans including financing strategies for all Directives where there may be delays in implementation, with a possibility of revision of some transition periods. This will require compilation of inventories of the investment projects, estimates of costs, and realistic plans for financing and construction of infrastructure.

In response to the EU's request for further information, the MWEP is currently preparing a Complementary Position Paper for Environmental Protection, to be finished in October 2003. It expects to reach provisional closure of the Environment Chapter sometime in 2004.

In the meantime, the MWEP has set the ambitious goal for itself of completing legal transposition for all environmental *acquis*, as the stood at 2000, by the end of 2003, and to complete a process of setting in place the necessary administrative structures to be able to demonstrate preparedness for implementation – and readiness for accession – as early as possible. Such a goal is intended to meet the short-term benchmarks laid out in the Commission's roadmap, which emphasise the need to focus on developing implementation capacities (including increasing human resources at local level and developing implementation plans together with financing strategies via a coherent legislative procedure.

### 2.5 EU Assistance for Accession

The European Community finances three pre-accession instruments to assist the CEE candidate countries in their pre-accession preparations.

The PHARE Programme, which has an annual budget of 1,560 MEUR, aids the candidate countries by providing technical assistance, often in the form of twinning programmes involving Member State officials with specific administrative experience, and by investing in the more impov-

erished regions of applicant countries. The SAPARD programme, in contrast, finances agricultural and rural development, and can sometimes be used to finance certain types of environmental measures for rural communities. ISPA – the Instrument for Structural Policies for Pre-accession – splits its annual budget of 1,040 MEUR 50/50 between major environmental projects and transport infrastructure projects.

During the eight-year period 1992–1999, the PHARE programme provided approximately 1.2 billion EUR of assistance to Romania – an average of 150 MEUR a year. In the three-year period 2000-2002 the total financial assistance available to Romania amounted to some 260 MEUR from PHARE, 150 MEUR from SAPARD, and between 208 and 270 MEUR from ISPA – an average of 220 MEUR a year. The new roadmap for Romania indicates that this amount should increase progressively from 2004 to reach the level of an additional 40% in 2006. However, such an increase will be conditional on making progress as set out in the roadmaps and on ensuring sufficient absorptive capacity to effectively use the funds. The Accession Partnerships will continue to be the basis for programming pre-accession assistance, but will need to be complemented with the priorities established in the roadmaps, Regular Reports and revised National Development Plans.

The EU also provides other sources of assistance. DG Enlargement's TAIEX Directorate provides technical assistance and advice on transposition, implementation and enforcement of the acquis through expert missions, seminars and workshops. The current 2000-2004 phase of LIFE, the Financial Instrument for the Environment, has a budget of 640 million EUR which it uses for co-financing environmental initiatives within the EU and candidate countries including Romania. Lastly, there is the TEMPUS programme aimed specifically at the higher education sector. Institutions from existing Member States are paired up with institutions in a partner country to assist the institutions in their modernisation through a project-structured relationship.

Since 1999, the Commission has been working with the candidate countries to assist them to move towards decentralised implementation, approval for project selection, tendering and contracting by Candidate Countries of PHARE and ISPA projects. To help the Candidate Countries prepare for taking on full responsibility and liability for the management of all Community assistance, an Extended Decentralised Implementation System is currently being prepared (EDIS).<sup>17</sup> Under this system, all responsibility for procedural management of EU funds will be passed over to the candidate country's implementing agencies once a country has set in place the necessary financial accountability systems and the Commission is satisfied that Community funds will be handled appropriately. At this point the Commission's role will change from exante approval of projects to that of general monitoring and ex-post evaluation of selected projects.

Implementation of SAPARD has been decentralised from the start of the programme in 2000. Bulgaria was the first country to receive approval for SAPARD implementation. Romania received approval in July 2002.

The final aim of such process is to prepare the Candidate Countries to effectively manage larger funds, such as the Structural and Cohesion funds, under the final monitoring and auditing of the Commission's services.

The EDIS process is going very slowly for all candidate countries and none have qualified to date. The candidate countries have been set the deadline of the end of 2002 for implementing EDIS. Romania has designed an action plan to meet the EDIS requirements – "Strengthening Institutional and Administrative Capacity to manage EU funds", and this plan has been approved by the Government. According to the Commission's strategy report 2002 the work on getting this system put in place should be accelerated.<sup>18</sup>

Romania has a large task ahead if it is to meet the EDIS criteria. While the EU provides technical assistance and financial support, there are many conditions attached including technical hurdles before the funding can be accessed. This means that Romania has difficulty in absorbing all of the EU's help. The flexibility of bilateral assistance is invaluable support for Romania to meet the various conditions attached to EU assistance, e.g. preparation of documentation for infrastructure projects.

Co-ordination Regulation 1266/99 on co-ordinating aid to the applicant countries in the framework of the pre-accession strategy and amending Council Regulation 3906/89/EEC as amended.

 <sup>&</sup>quot;Towards the Enlarged Union. Strategy Paper and Report of the European Commission on the progress towards accession by each of the candidate countries", Brussels, 9 October 2002, COM (2002) 700 final, at page 29.

# 3. Romania's Environmental Approximation Status and Specific Implementation Challenges

For the purposes of approximation, the European Commission has subdivided the environmental *acquis communautaire* by sector. This section looks at the status of approximation in Romania for the major environmental sectors covered by the *acquis*. Each sector's section starts with a sketch of the actual situation, and then reviews the measures in place and still needed in order to achieve compliance by the date of accession.

Concerning legal transposition, the MWEP has set itself the ambitious goal of completing the adaptation of Romania's legal framework to the EU requirements by the end of 2003. Its lawyers and technical specialists are working to draft the necessary legislation and supplementary administrative regulations, and to get these drafts through the legislative process within the MWEP's self-imposed deadline. Some outside observers are concerned that the transposition process is outpacing Romania's capacity to set in place the necessary administrative structures and systems for setting the requirements into practice. Moreover, the roadmap for Romania reveals significant concern regarding the lack of realistic deadlines and cost assessments to implement effectively the vast bulk of newly adopted legislation. The sections below pay special attention to this concern.

### 3.1 Horizontal measures

This sector includes a number of administrative requirements that cut across all environmental topics, such as public access to environmental information and environmental impact assessment (EIA) of proposed development projects. In its negotiations with the candidate countries, the EU has placed great emphasis on the need to set these procedures in place as quickly as possible, not least of all because EIA with public participation is a fundamental pre-condition for eligibility of infrastructure projects for EU funding.

The MWEP considers approximation with EU obligations in this area as a short-term priority<sup>19</sup> to be achieved between 2002-2004. Similarly, the

<sup>19.</sup> Position Paper of Romania for Chapter 22 on Environmental Protection, 18 October 2001.

recent roadmap for accession has explicitly established as a short-term benchmark the need to adopt secondary legislation on environmental impact assessment and access to information, and to improve public consultation with all relevant stake holders at different stages of the legislative process. The Emergency Governmental Ordinance No. 91/2002 amending the 1995 Environmental Protection Law provides the legislative framework to enable subsequent regulatory acts for implementation of the EU requirements in this sector.

Romania was one of the first countries to ratify the 1998 UNECE Convention on Access to Information, Public Participation and Access to Justice in Environmental Matters (Aarhus Convention), via Law No. 86/2000. Moreover, it ratified the UNECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) in March 2001.

The MWEP completed transposition of the EU access to environmental information requirements by a Governmental Decision on Free Access to Environmental Information.<sup>20</sup> The GD lays out a schedule for completing an inventory of environmental information and the public authorities holding such information (by October 2002) and for its publication (by November 2002), but as of February 2003, the inventory had not yet been completed.

Since 1996, the MWEP, in co-operation with ICIM,<sup>21</sup> has prepared an annual *Report on the State of the Environment*, which is published at the MWEP web site (www.mappm.ro) and linked through EIONET at the European Environment Agency. The 2001 Report is available on-line, but only in Romanian. In addition, each of the 42 county-level Environmental Protection Inspectorates (EPIs) publishes an annual report based on local data.<sup>22</sup>

Responsibility for the implementation of a 2001 Public Communication Strategy on dissemination of environmental information rests with the

Governmental Decision no. 1115/2002 at Free Access to Environmental Protection (publisbed 28.10.2002).

<sup>21.</sup> The National Research-Development Institute for Environmental Protection, under the MWEP.

<sup>22.</sup> The National Commission for Nuclear Activities Control also prepares an Annual Report on Environmental Radioactivity Surveillance in Romania.

MWEP's Directorate for Public Relations and the Public Relations, Mass Media, Local and International Programmes within the 42 EPIs. However, the MWEP has only limited human resources for these tasks (6 persons at central level, and one person at each EPI) and is seeking to increase the current staff.

A fully EU-compliant EIA procedure was established in 2002 via a Governmental Decision on Procedure for Environmental Impact Assessment.<sup>23</sup> The MWEP issues permits for major projects and for international and transboundary projects, while smaller projects fall under the responsibility of the county-level EPIs. The existing EIA system is managed by the Directorate for Permitting and Certification within the MWEP and the Agreements, Permits, and Notification Offices within the EPIs. However, again the human resources are limited (10 persons at central level, of which 5 are directly involved in approving the EIA, and an average of 5 persons in each EPI); the MWEP has applied for additional budget in the hope that it can double staffing in this area by early 2003.

The new system aims to ensure public participation at different stages of the EIA procedures. Citizens are initially notified via local press and public notices at EPI premises, and given the opportunity to comment on the EIA or environmental audit report.

However, the public participation procedure does not yet fully work in Romania. Current EIA meetings are too often a one-way process of information sharing, limited to provision of technical and often complicated information to the public, rather than vehicles for fostering a genuine public debate on an intended project. *A Handbook on Public Participation in EIA Procedures,* issued by the NGO Ecosens, and a PHARE 2000 technical assistance project are expected to assist in implementation of the EIA Directive. The PHARE project will include a guide on the EIA process, campaigns for greater awareness and understanding of the EIA requirements, and training.

Transposition of the newer EU requirement on strategic environmental assessment (SEA) of plans and programmes has started, but implementation will not be fully in place before 2004. Structures for public partic-

<sup>23.</sup> Governmental Decision No 918/2002 (OJ No 686/17.09.2002).

ipation at central level are also lacking, *e.g.*, interministerial working groups for adoption of legislation or approval of environmental programmes do not include civil society representatives. On the other hand, civil society is very involved at local level. Romania's Local Agenda 21 programme<sup>24</sup> establishes a structure for drawing up local environmental action plans (LEAPs) with the involvement of representatives from local businesses, the local administration and civil society.<sup>25</sup>

#### Major challenges for the horizontal sector

- How to improve administrative capacity at central and local level for managing horizontal requirements, e.g., through increasing number of staff and ensuring adequate training
- Building of additional support for a strong environmental protection regime through *inter alia* public campaigns for environmental awareness and participation
- How to ensure stronger public participation in central-level decision-making concerning environmental protection as well as in the environmental impact assessment process, and for projects and plans with potential environmental impact (SEA)

## 3.2 Industrial Pollution Control and Risk Management

The EU requirements with respect to industrial pollution control pose some of the biggest challenges to Romania, because of Romania's historically large base of industrial installations, most of which date back to the 1980s and earlier. Use of old production equipment with poor operating efficiency results in poor performance in comparison to Western European standards. The non-ferrous metallurgical facility at Copsa

<sup>24.</sup> Romania's Local Agenda 21 programme started in November 2000 and is currently implemented in Ploiesti, Galati, Targu, Mures, Baia Mare, Iasi, Ramnicu Valcea, Giurgiu, Oradea, and Miercurea Ciuc with the support of United Kingdom and Canada. A previous pilot project to prepare a LEAP for Piatra Neant was supported by Denmark. The National Forum on Sustainable Growth of Local Communities, "A way towards the Integration in the European Union" on April 2002, decided to extend the programme to 40 additional towns.

<sup>25.</sup> A National Coordinating Committee composed of officials of the MWEP and other relevant ministries, research institutes and NGOs (Ecosens, Pro Democratia, and the Strategy and Development Foundation) follows the development of the LEAPs.

Mica, for example, emits high levels of SO<sub>2</sub>, lead and cadmium for kilometres around. The severe environmental contamination has led to major public health problems, including congenital malformations or dysfunction in more than 50% of the local children born today.

Yet many local economies, including that of Copsa Mica, are highly dependent on the jobs provided by their industrial resource base, and the social costs that would be incurred by closing these polluting facilities are considered unacceptably high.

In recognition of the massive (mostly private sector) investment needed to reduce environmental impacts from its industries, the Romanian government has requested the following transition periods for this sector:

Integrated Pollution Prevention &	
Control Directive (IPPC) (96/61/EC)	2015 (8 years)
Solvents Directive (99/13/EC)	2015 (8 years)
Large Combustion Plant Directive (88/609/EEC,	
as amended by 2001/80/EC)	2012 (5 years)

Romania's negotiation position for approximating this sector foresees complete transposition by the end of 2003. The MWEP plans a significant training effort to be sure that the competent authorities understand the measures needed to implement the legal provisions, which will enter into force by the end of 2005. Existing industrial activities will have ten years (2006 – 2015) to achieve compliance with the new provisions. Activities and installations that are not able to comply by 2015 will then be closed.

The European Commission's 2002 Regular Report noted the extensive work still needed for implementation of EU requirements for this sector. The key EU requirement is the Integrated Pollution Prevention and Control (IPPC) Directive,<sup>26</sup> which requires major industrial installations to have an integrated permit covering impacts on all environmental media (water, air, waste), with emission limit values based on best available techniques (BAT). A preliminary inventory carried out in 1999 found 873 industrial installations subject to IPPC requirements, of which 728 were currently in operation. The inventory did not include food pro-

<sup>26.</sup> Council Directive 96/61/EC concerning integrated pollution prevention and control (IPPC).

duction, animal farms and landfills. After carrying out a second inventory in 2002, the MWEP determined the number of installations to be closer to 2900, *i.e.*, some 70 installations for each of Romania's 42 Environmental Protection Inspectorates (EPIs) to handle.

This is an environmental management challenge for which few of the EPIs are prepared. Under the permitting procedure established in Romania's 1995 Environmental Framework Law, the MWEP issues permits for activities of national importance and investments involving more than one county, e.g., hazardous and radioactive waste disposal, large industrial plants, while the 42 county-level EPIs issue the remaining permits. An environmental impact assessment is needed before a permit can be issued and the basic procedure requires public consultation. The requirements of the permits are established by the EPIs on a case-by-case basis, and are not based on the EU standard of best available techniques (BAT).

But a large number of activities are subject to permitting requirements, and the lack of staff at the county-level EPIs has resulted in most applications being processed without adequate evaluation of the potential environmental impacts. As of 1999, most industrial activities coming within the IPPC Directive still operated without a permit, and of those that did have permits, only 20% complied with permit conditions.<sup>27</sup> Thus the system does not yet correspond to the EU requirements.

The IPPC Directive will place significant new demands on the MWEP and the county-level EPI officials responsible for permitting and enforcement, because it requires complex judgements about the tradeoffs between emissions to different environmental media and the process options for each plant. The EPIs lack capacity for the time- and resource-consuming process of making installation-specific determinations of best available techniques (BAT)<sup>28</sup>, and there is no central-level

<sup>27. &</sup>quot;Baseline Study: Romanian Approximation Strategy for the Industrial Pollution Control Sector", by COWI & CarlBro International for the Romanian Ministry of Waters and Environmental Protection, through the DANCEE programme, August 1999. The 1999 study estimates that as few as 25% of all Romanian installations coming within the IPPC Directive bold environmental permits.

 <sup>&</sup>quot;Administrative Capacity for Implementation and Enforcement of EU Environmental Policy in the 13 Candidate Countries", Service Contract B7-8110/2000/159960/MAR/H1, by ECOTEC Research and Consulting in association with the Institute of European Environmental Policy, at page 143.

source of information on BAT to provide technical guidance for a particular installation. On the other hand, each EPI has staff with expertise on different types of installations and the various environmental media, which could provide a knowledge base of expertise for integrated permitting.

In March 2002, Romania adopted an Emergency Governmental Ordinance on integrated pollution prevention and control (IPPC)<sup>29</sup> requiring all facilities subject to its provisions to ask for an evaluation, and to begin integrated permitting in January 2003. Six months after the ordinance was published, no facilities had asked for this evaluation, and the MWEP had not yet issued guidance on how the competent authorities will issue permits.

The MWEP plans to establish a five-person unit on industrial pollution control and integrated permitting within the Directorate for Ecological Control and Monitoring, and to augment each EPI with an additional 3 to 7 employees for integrated permitting, depending on the number of IPPC installations in the respective area. However, as of October 2002 gov-ernment funds for these additional positions had not yet been allocated.

Though additional technical assistance for implementing the IPPC Directive is foreseen under the PHARE 2001 programme, the tight timeschedules established by Romania's transposing legislation and the formidable technical challenges posed by integrated permitting may require technical assistance support and major capital investment for years to come. One option for Romania would be to establish a list of priority sectors for phasing in integrated permitting, perhaps starting with thermal power plants, chemical facilities, refineries, and metallurgical facilities. Each of these sectors already has a professional association and a research institute in place, which would facilitate the process of implementation. In that vein, the MWEP - in co-operation with the Cement Industry Owners Association - is currently involved in a pilot project for implementation of BAT in the cement industry supported by the Danish Ministry of Environment, and it also co-operates with the NGO Ecosens to establish a Pollution Release and Transfer Register (PRTR) in accordance with IPPC requirements.

<sup>29.</sup> By the end of 2003, the MWEP plans additional regulations to cover the setting up of a national register containing all information requested by the directives of this field and the assessment of environment pollution.

The EU requirements on dangerous substances discharged to water<sup>30</sup> were transposed by a 2002 Governmental Decision, but implementation is still in the initial stages. Since most of the substances were not previously monitored in Romania, the MWEP is working on an inventory of the industrial facilities currently discharging dangerous substances into water, and plans to issue an additional order concerning methods for measuring and analysing their concentrations in waters by the end of 2002. National Company Romanian Waters ("Apele Romane") is in process of getting its laboratories accredited and modernised to meet the EU standards for monitoring these substances in watercourses. By the end of 2005, the MWEP plans to establish intermediate emission limit values based on the technological and financial capacity of specific industries, and the impact of dangerous substances discharges on water quality. This effort will need to be closely co-ordinated with the introduction of integrated permitting under the IPPC requirements.

The Large Combustion Plant Directive<sup>31</sup> covers thermal power plants and large industrial boilers generating over 50 mega watt (MW). The MWEP plans to develop a "National Plan for gradual limitation of emissions". It is currently updating its inventory of installations subject to this directive (the 1999 baseline study identified 67 large combustion plants (LCPs) in Romania), analysing emissions for installations subject to the directive for the reference year 1989 and for the year 2001, and assessing costs for implementation on a "case by case " basis. The LCP Directive has recently been amended to require even older LCPs to be upgraded to meet stringent requirements.

Transposition of the Solvents Directive<sup>32</sup> and the Seveso II (Major Accident Hazards) Directive<sup>33</sup> will be completed by the end of 2002 via Government Decisions.<sup>34</sup> The MWEP plans for implementation of the

Council Directive 76/764/EEC on dangerous substances discharged to the aquatic environment and its 7 Daughter Directives.

Council Directive 88/609/EEC on the limitation of emissions of certain pollutants into the air from large combustion plants (LCP), as amended by Council Directive 2001/80/EC.

<sup>32.</sup> Council Directive No 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations (VOC).

Council Directive 96/82/EC on the control of major accident bazards involving dangerous substances (Seveso II).

<sup>34.</sup> The Government Decision transposing the SEVESO II Directive as drafted and approved by the Government at the end of 2002, but as at February 2003 it had not yet been published.

Seveso II Directive include setting up a Risk Secretariat employing 5 persons by 2003, to establish the procedures, perform risk assessments and reporting of major accidents to the EU. Each EPI is expected to have correspondent units for relevant activities, including drawing up a more complete inventory of the plants subject to the Directive's provisions and elaboration of internal and external emergency plans.

The Convention on the transboundary effects of industrial accidents (Helsinki) is also going to be ratified by the end of this year. A PHARE 2002 Twinning project with Germany as the primary partner will assist in developing an implementation strategy for the Seveso II, Solvents and LCP Directives. The objectives of this project include elaborating a plan for emissions reduction as well as a National Register of Pollutant Emissions.

The administrative challenges of this sector will require a concentrated effort from the MWEP and the EPIs for the next several years until initial permits are in place. But the even bigger challenge will be to work with Romanian industry to ensure the necessary investments to achieve BAT and clean up Romania's burden of past pollution.

#### Major challenges for the industrial pollution control sector

- Securing the additional budgetary resources to establish the 5person unit on integrated pollution prevention and control within the MWEP and to add additional skilled personnel at the local EPIs, for carrying out integrated permitting
- Meeting the tight statutory schedule for beginning the process of integrated permitting, and for carrying out the assessments on which the integrated permits will be based, which may require setting of priorities among industrial sectors and phasing in integrated permitting on that basis
- Ensuring that Romanian industrial facilities subject to the IPPC requirements receive adequate information on best available techniques (BAT), perhaps by establishing a central BAT resource centre and a network for distributing BAT information
- How to build capacity in integrated permitting, within industries as well as the EPIs
- How to provide industries with appropriate financial incentives to make the necessary investments in technologies and pollution control measures to comply with BAT

#### 3.3 Water Quality

EU water legislation covers a wide range of issues and is expected to be among the most difficult and expensive of the EU requirements to implement. Romania has much work to do in this sector.

The 1990s saw a reduction in the total quantity of water consumption because of diminished industrial activity and the introduction of technologies using less water. Despite this, there can still be insufficiencies of water supply for important parts of the country because of the unequal spread of water resources, frequent droughts, the lack of regularisation of river flows and the pollution of many rivers.

Out of approximately 22.4 million inhabitants only 65% (14.7 million persons) have drinkable water supplied by public service.<sup>35</sup> Romania's water distribution is uneven and water interruptions in the city of Bucharest still occur.

Two hundred and six municipal waste water treatment plants currently operate in Romania, but the general level of treatment is low with only 77% of the total flow of public sewerage being treated, and only 18% treated to EU standards.<sup>36</sup>

The investment needed to comply with EU standards on drinking water and urban wastewater treatment will strain Romania's national budget for years to come. In light of this, Romania has requested transitional periods for this sector longer than for any other sector:

Urban Waste Water Treatment (91/271/EEC)	2022 (15 years)
Drinking Water (98/83/EC)	2022 (15 years)
Dangerous Substances (76/464/EEC)	2015 (8 years)
Nitrates (91/676/EEC)	2014 (7 years)

Almost all the water *acquis* have been incorporated into national law. Approximation with the Water Framework Directive is intended to be

<sup>35. &</sup>quot;The Government's Strategy concerning the Development of Local Public Services of Communal Husbandry", Government of Romania, Ministry of Public Administration, Bucharest, 2001 at p9.

<sup>36.</sup> Ibid at p7.

accomplished in 2003 via legislative amendments to the existing Water Law 107/1996. Romania's structure for managing water has been organised on the basis of river basins since 1944, which gives it an advantage for implementing the Water Framework Directive.

Nonetheless, major implementation and enforcement challenges remain for the bodies responsible for water management shown on the organigramme in section 5.1.5. Two current institutional changes deserve attention. Firstly, the end of 2002 shall see the transformation of the National Company Romanian Waters "Apele Romane" into a Water Authority within the National Administration.<sup>37</sup> Secondly, a recent Governmental Decision provides that the Water Authority should function as the central public authority in the water sector and from now on undertake implementation of EU requirements.<sup>38</sup> This should improve the currently poor co-ordination and insufficiency of data exchange between the responsible ministries dealing with different aspects of water management, which has been a substantial obstacle to development of a financing strategy to upgrade water supply and treatment in Romania.

The 11 river basin directorates are required to monitor water quality and quantity, set quality standards, establish rules for water abstraction and issue waste water discharge permits. The 1996 Law on Water established requirements on public participation through river basin committees. The Water Framework Directive is particularly demanding as it requires Member States to achieve "good ecological status" for all surface and ground water by 2010. Romania will need to develop river basin management plans and establish programmes of measures for each river basin, a number of which may require significant investment. Implementation will require close co-ordination with industrial pollution control efforts and development of municipal waste water treatment infrastructure. Full compliance in these areas is not expected until 2015.

Under a 2.65 MEUR 2001 PHARE programme, a pilot river basin management plan will be elaborated for the Somes basin, and a cost assess-

<sup>37.</sup> Apele Romane was a joint-stock company owned by the State but self-sufficient. Its operation costs were covered by water charges paid by water users.

<sup>38.</sup> Governmental Decision of 20 September 2002.

ment methodology formulated for the Arges river basin.<sup>39</sup> But these projects will need to be followed up with additional projects for the other river basins and with long-term management plans backed by sufficient human and financial resources.



Figure 7.1. Romania hydrographic network and hydrographic basin boundaries

Much water suffers from nitrate contamination<sup>40</sup> and Romania has indicated that it is having some difficulties implementing the Nitrate Directive.<sup>41</sup> The problems are mainly linked to identification of nitrate waters and designation of vulnerable zones. A Commission for Application of Action Plan for Nitrate Waters<sup>42</sup> has been recently designated and is responsible for preparing the implementation programme for this Directive. The MWEP intends to develop an implementation programme that will reach EU compliance for new farms by 2007, and for existing

- 41. Council Directive 91/676/EEC on Nitrates from Agricultural Sources.
- 42. Made up of representatives from MWEP, Ministry of Agriculture, Food and Forestry, and Ministry of Health and Family.

<sup>39.</sup> A 2002 PHARE project (0.8 MEUR) will assist establishment of an informational system and a database for water management purposes. A bilateral project financed by the Netherlands is assisting the Mures river basin to implement the Water Framework Directive provisions.

<sup>40.</sup> There are various causes of this contamination such as chemical fertilisers used on arable land or waters charged with nitrates being evacuated into rivers and lakes. See "The Environment and Sustainable Development from Rio to Johannesburg, "Romanian Ministry of Waters and Environmental Protection, 2002 at p17.

farms by 2011. A Code of Best Agricultural Practices has been issued in the framework of a World Bank project, which includes a loan for setting up centralised water supply systems for 250 rural localities where drinking water is affected by nitrate pollution.

Implementation of the Drinking Water Directive<sup>49</sup> and Urban Wastewater Treatment Directive<sup>44</sup> requirements will be especially costly for Romania. Romania has transposed both directives but requested 15-year transitional periods for each. The Directorate of Public Health under the Ministry of Health and Family and the municipal level water services share responsibility for implementing and enforcing the Drinking Water Directive. The existing monitoring system for drinking water will have to be improved and the laboratories better equipped to ensure adequate monitoring. A general estimate is that 10 billion EUR is required to implement the Drinking Water Directive. A PHARE programme, concluded in 2002 aimed to strengthen the institutional and administrative capacity of the Ministry of Health and Family to implement the Drinking Water and Bathing Water Directives. Through this project the public health laboratories will be modernised.

Implementation of the Urban Waste Water Treatment Directive is at early stages and a general implementation plan is needed given that this will be the most expensive Directive to implement. An important step will be to designate "sensitive areas", i.e. areas that are subject to eutrophication, since the Directive requires that waste water discharged into sensitive areas receive additional chemical treatment to remove phosphates and other nutrients which contribute to eutrophication. This should be completed by the end of 2003.

Total investment required between 2002 and 2030 to rehabilitate the infrastructure of the water-sewerage services in urban areas is currently estimated at 4,2 billion EUR and in rural areas at 5,5 billion EUR.<sup>45</sup> These cost estimates are from the "Government's Strategy concerning the

Council Directive 98/83/EC on the Quality of Water intended for Drinking implemented in Romania by Law 458/2002 Concerning the Quality of Drinking Water, (OJ No 552/29.07.2002).

<sup>44.</sup> Council Directive 91/271/EEC concerning urban waste water treatment.

 <sup>&</sup>quot;The Government's Strategy concerning the Development of Local Public Services of Communal Husbandry", Government of Romania, Ministry of Public Administration, Bucharest, 2001at p24.

Development of Local Public Services of Communal Husbandry" developed in 2001 by the Ministry of Public Administration (MPA). The Strategy's findings are discussed in further detail in section 6 of this report.

The MWEP recognises the significant investment challenge posed by these two Directives and has given them top priority in its strategy for ISPA financing of environmental infrastructure as per the following table.

Approved projects <sup>46</sup>		Estimated project	ISPA commitment
		value	MEUR
ISPA 2000			
Constanta	Waste Water	98.0	44.3
Iasi	Waste Water	51.7	23.8
Craiova	Waste Water	70.6	38.3
Jiu Valley	Waste Water	9.7	5.8
ISPA 2001			
Arad	Waste Water	18.0	8.1
Braila	Waste Water	60.8	13.7
TOTAL		308.8	134.0

The MWEP has requested an additional 193.7 MEUR from ISPA for waste water treatment facilities for Brasov, Timisoara, Cluj-Napoca, Pascani, Oradea, and Focsani, but these projects have not yet received ISPA approval. To complete the technical documentation needed for project approval has proven to be a sometimes formidable hurdle and the technical assistance available through ISPA can take as much as nine months to become operational. The more flexible support of bilateral donors has been crucial in helping Romania prepare eligible projects for IPSA 2000 and 2001 and this need for technical assistance will remain for the foreseeable future.

The MWEP has compiled an initial inventory of infrastructure investment projects needed for EU compliance on the basis of information from the 42 EPIs. But the efforts of the MPA and the MWEP have not yet been combined into the type of detailed Directive-specific implementation plan needed for accession negotiations in this sector, let

<sup>46.</sup> Table on approved and proposed priority environmental projects in the water sector for ISPA financing.

alone a master plan with prioritised projects ready for further development and financing.

#### Major challenges for the water quality sector

- How to combine the planning efforts to date of the MWEP, the EPIs and the MPA on the water infrastructure projects needed in urban and rural areas in order to comply with EU standards for drinking water and UWWT, and to set priorities for further project development and financing.
- Developing more reliable and project-specific cost estimates for achieving compliance with drinking water and UWWT requirements, and a long-term implementation plan and financing strategy based on realistic transitional periods.
- Identification and designation of sensitive areas under the UWWT Directive as well as nitrate-vulnerable zones.
- Improvement of data exchange among Ministries and upgrading of laboratories to extend water monitoring to biological, microbiological and bacteriological indicators.
- Establishment of a computerised system and an information system on water management in accordance with the WFD requirements.

## 3.4 Air Quality

Because of its varied landscape, good dispersion conditions and large forested areas, Romania's air quality is generally considered good. Air quality has in fact slightly improved in the past five years due to reduced activity or shutting down of industrial facilities. However, air quality in highly industrialised urban areas is still a problem. Moreover, traffic is now a major air pollution source in urban areas due to constantly increasing numbers of vehicles, most of which are old and not equipped with catalysts to reduce concentrations of air pollutants in exhaust fumes.

Transposition of the EU Ambient Air Quality Framework Directive<sup>47</sup> and its daughter Directives is to be completed in mid 2003, though to a

<sup>47.</sup> Council Directive 96/62/EC on ambient air quality assessment and management.
large extent most requirements are already transposed into national legislation. The fast process of transposition needs to be followed by a proper and sustained process of implementation, in order to be able to comply fully with the EU requirements in the sector. The implementation costs to be covered by central and local authorities have been estimated at 200 MEUR, including investments in monitoring equipment, training, and additional administrative capacity.<sup>48</sup>

In 2001, with Danish assistance, Romania started preliminary assessment of air quality.<sup>49</sup> The first conclusions show that the air quality data collected by Romania's current system do not meet EU data quality objective requirements. Concentration levels can seldom be compared to EU limit values because of differences in sampling and analysis methods used and lack of proper equipment. Due to lack of resources at the institutions involved, monitoring equipment is poorly maintained, and assessment methods are not in compliance with EU reference methods.

Romania's ambient air quality monitoring currently involves two separate and parallel systems: the "National Air Quality Monitoring Network" operated by the county-level Environmental Protection Inspectorates (EPIs) under the MWEP, and the "Community Air Pollution Monitoring Network" operated by the local offices of the Ministry of Health and Family (MHF) and the Institute of Public Health (ISPB). In 1999, these parallel networks had respectively 350 and 86 sampling locations, and the exchange of data on air quality was poor.

To end this duplication, it is proposed that the MHF start phasing out its monitoring network, keeping a few representative stations to provide supplementary information. This would enable health authorities to focus on assessing population exposure to air pollution and the impact on health, as well as on informing the public about any air pollution

<sup>48.</sup> The cost estimates assume that all investment will be carried out during the first year and include running costs for four years (2003-2007). See PHARE project RO 9907-02-01: Pre-accession Impact Studies, "Assessment of institutional and administrative implementation requirements of selected EU Directives – Air Framework Directive and Daughter Directives".

<sup>49.</sup> The preliminary assessment campaign started under the IDAQ project for two agglomerations (Bucharest and Ploiesti) and for one mini-zone – Valea Bistritei, along Bacau and Neamt counties.

risks. It is also proposed that the MWEP limit the number of monitoring stations within its network to the minimum required by the EU Directives, and to focus on providing the necessary equipment for all stations during the next 2 years and on proper information exchange among all stakeholders.

An EU-compliant system of integrated air quality assessment and management for Romania will require replacement of existing methods of monitoring, including gradually changing to an automatic air quality monitoring system, so as to form over time a complete and relevant air pollution monitoring network. A PHARE project "Local Investment in the EPI of Bucharest for Air Quality Monitoring" (total budget 4 MEUR) will purchase automatic AQ monitoring stations for Bucharest by the end of 2003. Under the PHARE 2001 programme, 10 selected EPIs will also receive EU-compliant AQ monitoring equipment (total budget 1.46 MEUR).<sup>50</sup>

A National AQ Reference Laboratory (NAQRL) will also need to be established for purposes of auditing, quality assurance, measurement standard methods, reference standards and international comparison studies. ICIM has been appointed to this role, but will need significant investment in equipment and facilities upgrading as well as technical assistance in order to serve as the NAQRL.<sup>51</sup>

One of the objectives of air quality monitoring is to provide the information for management of air quality, a responsibility that rests primarily with local governments, in coordination with the EPIs and local health authorities.

<sup>50.</sup> A short-term effort to design a third project under the PHARE 2002 programme - "Improvement of the National Air Quality Monitoring Network" – will provide equipment and the design of an EU-compliant National Air Quality Monitoring Network (total budget 3.07 MEUR). A PHARE 1999 Cross-Border Cooperation project "Joint air quality monitoring system on the Romanian/Bulgarian boundary towns on Lower Danube" (total value 1,7 MEUR) provided equipment for AQ monitoring of four localities on the Romanian side of the Danube and four correspondent localities on the Bulgarian side. The joint monitoring system should ensure continuous AQ data exchange in the border area and provide AQ information to the public through display panels placed in the main areas of participating towns.

<sup>51.</sup> A PHARE 2002 CBC is expected to provide the necessary equipment (total budget 2.53 MEUR).

The DANCEE project assisted Romania in the designation of 11 urban areas as "agglomerations"<sup>52</sup> for the purpose of assessment and management of air quality according to EU requirements. These include the major municipalities of Romania (including surrounding communes) as well as those with city-specific air quality problems: Bucharest, Baia Mare, Ploiesti, Pitesti, Constanta, Craiova, Cluj, Iasi, Galati + Braila, Brasov and Timisoara<sup>53</sup>.



Air quality management plans are to be developed in consultation by the competent authorities, the titleholders, and any interested members of public, and may include such measures as suspension of road traffic at times when limit values are exceeded.

<sup>52.</sup> Ministerial Order no. 745/2002 of 30.08.2002 on establishing agglomerations and the criteria for classifying agglomerations and zones for air quality assessment in Romania.

<sup>53.</sup> The establishment of AQ agglomerations bas been done with the support provided by the Danish funded project – "Assistance to Romania on Transposition and Implementation of EU AQ Directives" (the IDAQ Project). The project bas also submitted to MWEP a proposal for establishment of 10 AQ zones following a Seminar involving all 42 EPIs as well as other stakebolders. The proposal was based on AQ conditions similarities in the neighbouring counties.

The results of air quality assessment, now published annually in the *Report on the State of the Environment,* will need to be made available to the public in a timely manner, as the EU Directives require. The new informational system should provide regular (daily and even hourly) information to the public, and is planned to become functional and EU-compliant no later than 1 January 2006.<sup>54</sup>

The most costly of the air sector requirements are those of the "Stage I" Directive on Volatile Organic Compounds (VOCs).<sup>55</sup> A preliminary inventory of the facilities covered identified:

- 534 facilities for petrol storage at terminal, of which 103 are considered in compliance with EU requirements;<sup>56</sup>
- 660 facilities for petrol loading at terminals, of which 60 are considered in accordance with the EU requirements;<sup>57</sup>
- 1954 petrol distribution stations, of which 511 are considered in accordance with the EU requirements.

Compliance will require significant investment, estimated at 1.3 MEUR for each storage facility and 0.45 MEUR for each petrol distribution station. All facilities for petrol loading at terminals will be expected to comply with the Directive by 2007, but Romania has requested an additional 3 year transition period for petrol distribution stations with compliance to be achieved by 2010.<sup>58</sup>

With regard to EU requirements for placing petrol and diesel fuels on the market, only unleaded petrol will be allowed as of 1 January 2005.<sup>59</sup> The sulphur content in fuel is to be reduced gradually between 2001 and 2007, and starting with 2007, companies will have to place on the

 Position Paper of Romania for Chapter 22 Environmental Protection, 18 October 2001, at page 8.

<sup>54.</sup> This was provided in the Ministerial Order no. 592/2002 of 10 June 2002 on approval of the Regulation setting limit values, threshold values, and assessment criteria and methods for sulpbur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter (PM10 and PM2.5), lead, benzene, carbon monoxide and ozone in ambient air.

<sup>55.</sup> Council Directive 94/63/EC on volatile organic compounds (Stage One).

<sup>57.</sup> Ibid.

<sup>58.</sup> As provided in Governmental Decision No. 568/2001 setting up the technical requirements for limiting the VOC emissions as a result of storing, loading, unloading and distribution of petrol to terminals or petrol stations.

Governmental Decision No. 732/2001 on setting up the conditions for placing on the market of petrol and diesel fuel.

market and/or use only fuel oil with a sulphur content of 1%. For diesel fuel, a maximum sulphur content of 0,005% of its weight will be acceptable. Implementation will require major technological refurbishment at Romania's refineries. One calculation estimated the cost of implementation at about 168.5 MEUR, while another estimated the cost at 225 MEUR for gasoline and 40 MEUR for diesel fuel.<sup>60</sup>

#### Major challenges for the air quality sector

- Establishment of full capacity within the relevant institutions in Romania for air quality modelling and assessment, and for the use of GIS systems in environmental mapping
- Completion of the transposition of the EU air quality requirements through regulations on procedures for developing and implementing air quality plans and programmes
- Establishment of a national reference laboratory for air quality analyses, along with an extensive quality control and accreditation programme covering other laboratories in the MWEP air quality monitoring network
- Preparation of emission inventories in co-ordination with activities to implement the EU industrial pollution control requirements, *e.g.*, the Polluting Emissions Register

#### 3.5 Waste Management

Waste management is an area where Romania has much to do to bring its situation up to EU standards. There is a general lack of adequate facilities to treat properly and dispose existing waste streams. Moreover, hazardous waste is often co-disposed with ordinary household waste, leading to serious pollution from inadequately protected landfills.

Of the over 55 million tons of waste generated in 2000, some 15% was municipal waste and the remaining 85% industrial and agricultural waste. Municipal waste generation has remained fairly stable since 1993, but the 40% of household waste (i.e. over 2 million tons per year)

<sup>60. &</sup>quot;Supporting the Accession Process in the Applicant Countries of Central and Eastern Europe, plus Cyprus, Malta and Turkey: Progress Monitoring Report Year 5 – 2002", by Milieu Limited, at Annex III/10 Romania, on Air Quality.

made up of recyclable materials (paper, carton, glass, plastic, metals) is not recovered, but disposed into landfills together with other urban waste. On the other hand, industrial waste has shrunk dramatically, due to decreased industrial activity, improved production technologies and better environmental management. 2001 saw a particularly steep drop in the quantity of hazardous waste generated on account of reduced activity in the field of chemical and metallurgy industries.

Waste type	1993	1994	1995	1996	1997	1998	1999	2000
Industrial (incl.								
mining waste) &								
agricultural waste	260.8	320.8	353.1	103.2	209.4	75.8	69.0	47.0
Municipal waste	8.6	6.8	6.84	6.7	6.0	5.4	6.2	8.2

#### Waste generated in Romania during 1993 – 2000 (in million tons)

Responsibility for waste management is shared by central government and by local public administration authorities. The MWEP's Waste and Dangerous Chemical Substances Management Division is responsible for transposing the EU waste management requirements, a task now largely completed, and for national strategies and implementation measures.

In accordance with the EU waste framework requirements, the MWEP has prepared a National Waste Management Strategy and a National Action Plan for Management of Industrial and Urban Waste. The National Strategy sets out the necessary steps for collecting, recycling, treating and disposal of waste, as well as future trends and cost estimations. County governments are required to elaborate County Plans for Waste Management as well, so that the final National Plan for Waste Management can be finalised in early 2003 and approved thereafter by the Government.<sup>61</sup>

But significant practical problems of implementation remain. Statistical data show only half of the population is served by municipal waste col-

<sup>61.</sup> This plan will then be updated every 5 years.

lection services. Only 2,500 of Romania's 13,000 localities have organised systems of collecting, transporting and depositing urban waste.<sup>62</sup> Villages in particular are rarely covered by municipal waste management services.

Disposal infrastructure is also a problem, with almost all waste – municipal and industrial – going to landfills. Most landfills do not have insulating linings to stop hazardous substances contaminating groundwater and as such are major sources of surface and groundwater contamination.

To meet the EU requirements, Romania – like other candidate countries – will need significant investment in waste management infrastructure, including modern landfills and incinerators, as well as capacity for collection and recycling of packaging waste. In recognition of this financial challenge, Romania has requested the following transition periods for this sector:

Landfill Directive (99/31/EC)	2017 (10 years)
Waste Incineration Directive (2000/76/EC)	2010 (3 years)
Packaging Waste Directive (94/62/EC)	2010 (3 years)

It will take up to 15 years to build the new landfills and composting facilities required for compliance with the Landfill Directive<sup>63</sup>, and to close the existing inadequate landfills.<sup>64</sup> Only eight municipal landfills out of the existing 1,250 landfill sites for municipal and industrial waste currently in use meet the Landfill Directive standards.<sup>65</sup>

According to the National Plan for Waste Management (preliminary plan), the current number of landfills will be consolidated into 127 regional landfills, with the necessary number of transfer stations established at county level. Four additional landfills are now under con-

65. UNECE Environmental Performance Review for Romania (2001), at page 111.

<sup>62.</sup> The Government's Strategy concerning the Development of Local Public Services of Communal Husbandry", Government of Romania, Ministry of Public Administration, Bucharest, 2001 at page 8.

<sup>63.</sup> Council Directive 1999/31/EC on Landfill of Waste.

<sup>64.</sup> These landfills are at Sighisoara, Constanta, Bucuresti Vidra, Bucuresti-Giulesti, Sarbi, Piatra Neamt, Braila, Ploiesti, Sibiu.

struction for the municipalities of Bucuresti-Glina, Pitesti, Slatina, and Banesti. Timisoara and Rimnica Valcea municipalities have applied for ISPA funding for landfills, and Dambovita County has applied for funding for a complex integrated waste management project including two landfills.

The requirements of the Sewage Sludge Directive<sup>66</sup> will pose significant implementation problems for Romania, with the advent of additional urban wastewater treatment. Plans are not yet in place for how this challenge will be met.

Incineration is not yet in use as a method of municipal waste disposal, due to the high humidity of Romania's household waste. But Romania – like most Member States – expects to depend on incineration as part of its overall waste management strategy for handling a range of EU requirements from packaging to medical waste. It has requested a transition period of 2010 for the Waste Incineration Directive<sup>67</sup> in order to construct incineration facilities that comply with the provisions concerning emissions of air, water and soil pollutants from incineration facilities. The estimated cost for building new municipal incinerators is 195 MEUR and for hazardous waste incinerators 1,2 billion EUR.<sup>68</sup>

Implementation of the Packaging Directive<sup>69</sup> will also require significant investment in facilities for collecting and processing packaging waste and to develop the market for secondary raw materials resulting from the recycled waste, and so Romania has also requested a three year transition period in this area. In the meantime, the legal framework has been put in place, including the introduction of economic instruments aimed at facilitating implementation. Romania already has some experience in selective waste collection, due to partial implementation in the municipalities of Rimnica Valcea, Piatra Neamt, Timisoara and Brasov. But this selective collection is for urban waste in general and not for packaging waste in particular. In order to obtain accurate data regarding the investment costs needed, a one year long pilot project will start by

<sup>66.</sup> Council Directive 86/278/EEC on Sewage Sludge.

<sup>67.</sup> Council Directive 2000/76/EC on the Incineration of Waste.

<sup>68.</sup> According to Romania's National Strategy for Waste Management.

<sup>69.</sup> Council Directive 94/62/EC on Packaging and Packaging Waste.

the end of 2002. At the end of the pilot project more accurate cost estimates will be available.  $^{\scriptscriptstyle 70}$ 

Romania intends to implement the EU requirements on waste oil by 2007. The priority will be to construct modern installations for waste oil regeneration. Though no collecting system for this category of waste is in place at this time, national legislation transposing the EU requirements has established a system for collecting and recycling waste oils as well as the legally binding duties of producers, collectors, carriers and regenerators of waste oils. A recent study<sup>71</sup> estimates that the cost of using a modern installation for waste oil regeneration is 11.8 MEUR/ year. In the absence of a competitive technology for regeneration, the waste oils could alternatively be co-incinerated in Romania's eight cement factories bringing the annual cost of disposal down to approx. 2.9 MEUR/year.

Concerning the EU requirements for specific hazardous waste streams, a Secretariat for PCB compounds has been established to co-ordinate at national level the inventory of the equipment and materials containing PCBs/PCTs and related implementation measures. Though the EU requirements for disposal of batteries and accumulators have been fully transposed,<sup>72</sup> there is no system of collecting, reusing or disposing of used batteries in Romania at this time. Also, a formal agreement must be reached between producers and traders of batteries and accumulators to inform the public about the necessity of collecting, reusing or disposing or disposing of such products turned into wastes. However, an economic instrument to stimulate the collecting of used car batteries from the population has been introduced. The costs for implementing this Directive have been estimated to range between 3.6 and 5.0 MEUR, depending on the plants' and vehicles' lifetime.

The administrative structure for implementing the Waste Shipment Regulation will be established via a forthcoming governmental decision that will nominate the responsible authority for the import, export and transit of waste and require internal application of the notification procedure for transboundary waste transport.

<sup>70.</sup> The cost assessment for the implementation of this directive is part of a PHARE 2000 program with a French twinning component.

<sup>71.</sup> Carried out by EPIQ with USAID financing.

<sup>72.</sup> Governmental Decision No 1057/2001 and Emergency Ordinance No 78/2000.

The recently enacted Directive on End of Life (EOL) Vehicles73 will also pose a significant challenge for Romania, which has 2.1 million EOL vehicles, of which 1.6 million are the locally manufactured Dacia brand. The costs that should be supported by the producers for treating EOL vehicles come to 167.8 MEUR for the entire fleet (80 EUR/vehicle), out of which 127 MEUR for the Dacia fleet alone. One difficulty is that many of the vehicle manufacturing companies from Eastern Europe or the former USSR no longer exist, so that Romania's surviving vehicle manufacturers may end up shouldering the major burden of financing the necessary collecting, recycling, reuse, and recovery system. At present, Romania has only one plant for treatment of EOL vehicles, without fluids and batteries, but this plant would have sufficient capacity to treat all domestic EOL vehicles at the cost of approximately 163 EUR/vehicle. The investment costs that will have to be supported by the national service network to implement this Directive have been assessed by ACAROM74 to 20,483 EUR for every repair and maintenance unit (Service Auto), or 32 MEUR overall.

The total estimated cost of investment for compliance with EU waste management requirements is nearly 676 MEUR, out of which nearly 360 MEUR are planned to come from external grants.75 Establishment of adequate waste management systems (sanitary landfill sites including closure of existing sites; separate collection and recycling systems) represents Romania's second environmental priority under ISPA.76 About 8,3 MEUR was allocated out of the 2002 ISPA budget for a project concerning the selective collection of household wastes in Piatra Neamt, and another 31 eligible projects have been identified in the waste management sector. In order to obtain the requested transition periods, Romania now needs to develop a detailed financing strategy to show how it will achieve the investments in waste management infrastructure to meet the EU requirements. A preliminary assessment of the overall costs for the implementation of the EU waste requirements will be made within a PHARE 2000 twinning project with France. Affordability will be a major issue for Romanian municipalities.

<sup>73.</sup> Council Directive 2000/53/EC on end-of-life vehicles.

<sup>74.</sup> ACAROM is the Romanian Vehicle Constructors Association.

<sup>75.</sup> Evaluation by Environmental Policy Unit of MWEP.

<sup>76. &</sup>quot;National Strategy for Environment ISPA Implementation", MWEP, May 2001.

#### Major challenges for the waste sector

- How to support the elaboration of county-level waste management plans so that the National Waste Management Plan can be finalised in 2003
- Development of implementation plans including financing strategies for the Landfill Directive, Waste Incineration Directive and the Packaging Directive
- Setting in place systems for collecting, reusing and disposing of used batteries, and for collecting and recycling used packaging waste

## 3.6 Nature Protection

Due to its bio-geographical position and rich level of biodiversity, Romania has highly valued natural areas and various species of fauna and flora. More than 37,500 species have been recorded in the national territory, of which 3,700 are plant and 33,082 animal species. There are 827 natural protected areas, which represent 5.18% of the national territory.

Category	Number
Scientific reserves	43
National Parks	12
National Reserves	363
• 122 botanical	
• 15 zoological	
• 65 geological	
• 58 speleological	
• 52 paleontological	
• 51 forests	
• 155 mixed	
Landscape Reserves	18
Biosphere Reserves	3
World natural heritage	1
Ramsar Sites	2

The Danube Delta Biosphere Reserve has been declared a World Natural Heritage, a Biosphere Reserve within the UNESCO-MAB Reserves Network, and a Ramsar Site. The reserve is the largest and the least damaged wetland in Europe and is managed by the Danube Delta Biosphere Reserve Authority. A number of LIFE and international projects have been developed in this area to repair the damage caused by human activity and to restore the natural habitat.<sup>77</sup>

Romanian forests are well preserved and any forest damage is mainly due to natural droughts. Forests are divided in two different categories depending on whether they have special protection functions or are used mainly economic exploitation. Forests under the first category amount to more than half of the total forest area. Monitoring of forests is undertaken by the International Co-operative Programme on Assessment and Monitoring of Air Pollution Effect on Forests (ICP Forests).

Although EC legislation in the nature protection sector will not require heavy investment, the measures needed to implement their requirements will place a heavy administrative and financial burden for Romanian authorities. Furthermore, the Commission has indicated that approximation in this particular sector needs to be prioritised to prevent irreversible damage to valuable natural areas, but also to ensure early identification of protected areas before expectations of increased land value will make it more difficult to ensure effective protection.

The competent authorities in this sector are the MWEP and the Ministry of Agriculture Food and Forests. Co-ordination of implementation activities undertaken by both institutions has not been easy and only limited achievements have been made as regards EU specific obligations (such as preparing an inventory of sites and further identification of special areas of conservation and special protection areas to prepare for the Natura 2000 network).

<sup>77.</sup> The Danube Delta National Research Institute assists in undertaking research and implementing ecological restoration works in the area. In addition, Romania takes part in the Green Corridor Programme for the Danube together with Bulgaria, the Republic of Moldova and Ukraine, which intends to protect and restore the Danube Delta Biosphere Reserve.

National legislation approximating EU standards for natural habitats is now in place.<sup>78</sup> There is a good legal framework for hunting wild animals, which is more stringent than EU requirements as it covers all wild animals and not only endangered species. In addition, integration of biodiversity protection and spatial planning has been ensured in national law.

Since 2001, the Council of Europe has been providing technical and financial assistance to implement the Bern Convention on Conservation of Natural Habitats and Wild Life in Europe<sup>79</sup> via the Emerald project. The project has set in place an Emerald Network of Protected Areas for natural habitats and wild species of European interest including an inventory of biogeographical regions and establishment of a database. Another project drew a CORINE biotope list for sites for Community importance (SCIs) under the Habitats Directive. A number of GEF projects have provided for targeted assistance to protect ecosystems in the Macin mountains and the Maramures area. During the period 2001-2002 many LIFE-Nature projects have been approved.

Cost estimates of compliance have been assessed by the Ministry of Water and Environmental Protection at 3.5 MEUR for the Habitats and 1.2 MEUR for the Wild Birds Directives, respectively. These represent public sector costs for the administrative structures needed to manage Romania's areas requiring special protection.

#### Major challenges for the nature protection sector

- Designation of a responsible institution to monitor nature and biodiversity
- Development of management plans for protected areas, as well as a national strategy with a list of priorities for such areas
- Further development of Natura 2000 lists, including identification of habitats types and distribution of species

<sup>78.</sup> Law 462/2001.

<sup>79.</sup> The Council of Europe "Convention on the Conservation of European Wildlife and Natural Habitats", Bern, 19.IX.1979, European Treaty Series/104. The Convention was ratified by Romania via Law No 13/1993.

#### 3.7 Chemicals controls

The EU requirements with respect to chemicals control are aimed at minimising risk to health and the environment, and at the same time at facilitating the trade in chemicals and chemical products through mutual recognition of safety tests and harmonised labelling and packaging standards. The CEE countries lacked similar marketplace controls during the socialist period, so the task of approximation with these requirements has required establishing new administrative structures and analytical capacity. If the proposed EU Strategy for a future Chemical Policy goes into effect, thousands of chemicals already in use will undergo review and assessment, a burden which the new Member States will be expected to share.

Romania has started to set in place the administrative framework for this sector. In 2001 it established the National Agency for Dangerous Chemical Substances and charged it with responsibility for the framework EU requirements on the classification, packaging and labelling of dangerous substances. Also in 2001, the MWEP established the Directorate for Waste and Dangerous Chemical Substance Management, which holds responsibility for the EU requirements with respect to asbestos, risk assessment of existing substances, import and export of certain chemicals, and biocides.

Romania is rather advanced in its regulatory system for genetically modified organisms (GMOs) and genetically modified microorganisms (GMMs), having fully transposed and almost completely implemented the Directive on Contained Use of GMMs<sup>80</sup>, as well as many of the provisions of the Deliberate Release of GMOs Directive.<sup>81</sup> Transposition has also been completed for the Directive on the Protection of Animals Used for Experimental and Other Scientific Purposes.<sup>82</sup>

<sup>80.</sup> Council Directive 98/81/EC on Contained Use of GMMs.

<sup>81.</sup> Council Directive 2001/18/EC on Deliberate Release of GMOs. This directive was transposed by Government Ordinance No 49/2000 on Obtaining, Testing, Uses and Commercialisation of GMOs Resulting from Modern Biotechnology. The authority responsible for implementing the Contained Use of GMMs Directive is the Public Central Authority for Environmental Protection. This authority liases with, and is provided with technical expertise from, the Bio-Safety Commission.

<sup>82.</sup> Council Directive 86/609/EEC on Protection of Animals Used for Experimental and Otber Scientific Purposes Directive. Governmental Ordinance 37/2002 regarding the protection of animals used for experimental and other scientific purposes.

In addition, Romania has taken significant steps to implement the EU requirements with respect to ozone depleting substances (ODS).<sup>83</sup> The MWEP created the Ozone Secretariat in 2001. Together the MWEP and the Ozone Secretariat are responsible for authorising the import and export of ozone depleting substances, granting exceptions, and maintaining a database on ozone depleting substances. A National Training Centre has been established at the Research Institute "ICPIAF-Cluj Napoca", which provides certification of service technicians for the refrigeration sector. Romania has been a party to the Montreal Protocol since 1993, but has still to ratify the Beijing Amendment.<sup>84</sup>

But as noted in the 2002 Regular Report,<sup>85</sup> much remains to be done in this area, particularly with respect to the framework controls. Drafting of the legislation needed to transpose the EU requirements on the classification, packaging and labelling of dangerous substances is at a very early stage, yet the stated target date for transposition is 2002. A draft Governmental Order to transpose the EU controls with respect to asbestos is also planned for 2002. The complex EU system of controls over biocides (pesticides for purposes other than plant protection) will also require a special transposition effort, possibly via a Government Decision, which is planned at this point for the year 2005. Similarly, steps have not yet been taken to implement the Regulation on Import and Export of Dangerous Substances.<sup>86</sup>

Moreover, there remains the need to develop capacity for testing of chemicals according to EU methodologies and standards, and for assessing risks associated with their use, prior to determining whether further controls are needed. This will require good laboratories accredited to EU standards for testing chemicals for various properties, as

<sup>83.</sup> Council Regulation EC/2037/2000 on Ozone Depleting Substances.

<sup>84.</sup> Currently, Romania acts in accordance to the Art. 5 of the Montreal Protocol, which stipulates ten years derogation from the application of control measures, set down by Member States to the Protocol, compared with the developed states. However, in its 2001 Position Paper Romania commits that in order to adopt the Regulation No 2037/2000 upon accession, it will comply with the time limits for ODS consumption freeze and phasing-out, which are specific to the phasing-out scheme for developed countries.

Commission Regular Report on Romania's Progress towards Accession 2002, at page 105.

<sup>86.</sup> Council Regulation EEC/2455/92 on Import and Export of Dangerous Substances.

well as specialists trained in carrying out complex risk assessments based on the data generated. Romania may need targeted technical assistance for years to come in order to develop the technical and human capacity required to meet its regulatory role in accordance with EU controls for this sector.

#### Major challenges for the chemicals sector

- Finalisation and approval of the draft legislation that will set in place the EU framework requirements on classification, labelling and packaging of dangerous substances;
- Clarification of the steps for implementing controls over the export/import of dangerous substances, and for protection of animals used for experiments;
- Gathering and reporting of data on ODS placed on the market and improvement of the monitoring system for the National ODS Phasing Out System;
- Elaboration of a chemical safety study-system, including of the existing institutional framework, to determine additional measures needed to meet EU analytical and risk assessment requirements.

## 3.8 Nuclear Safety and Radiation Protection

The two major EU accession-related issues of concern in this sector are the safety of nuclear power plants and controls to ensure adequate protection from other sources of radiation. Concerning the first of these concerns, Romania has one operative nuclear power plant and another under construction. The EU has no formal standards in the area of nuclear installation safety, which is traditionally an area of national responsibility. Nonetheless, a body of best practices has evolved in the Member States that can be used to evaluate candidate country progress towards a high level of nuclear safety in their nuclear power installations.<sup>87</sup>

<sup>87.</sup> For example, all Member States adhere to the safety principles and practices recommended by international organisations such as the International Atomic Energy Agency (IA-EA), and are contracting parties to the Nuclear Safety Convention.

Romania's nuclear power plant, Cernavoda-1, was connected to the grid in 1996. It is a CANDU reactor, a standard Canadian design that is considered to meet western safety standards. Cernavoda-2, another CANDU reactor, is under construction and 40 - 50% completed, with a projected completion date of 2005-6. Only a small percentage of work to date has been carried out on Cernavoda-3, a project that may be abandoned. The National Commission for Nuclear Activity Control (CNCAN), subordinated to the MWEP since 2001, is responsible for overseeing the Cernavoda NPPs.

A 2001 Council of Ministers Report entitled "Nuclear safety in the context of enlargement" evaluated nuclear installations in the candidate countries and in general gave Romania a favourable report in this area. It made several recommendations specific to Romania, including to:

- develop and implement an action plan for CNCAN, including a training programme and technical support aimed at strengthening the independent assessment capability of CNCAN, its inspection practice and emergency preparedness organisation, and to increase the resources of CNCAN.
- improve the financial situation of Cernovada NPP in order to ensure implementation of safety-related improvement programmes and maintenance activities;
- establish an on-site emergency operating centre well separated from the main control room, in compliance with widely applied practices within the EU.
- ensure that CNCAN has adequate resources to regulate Romania's other nuclear installations than nuclear power reactors.

Concerning radiation protection, Romania has already transposed virtually all of the EU legal requirements with respect to radiation protection, including the Basic Safety Standards Directive (BSSD)<sup>88</sup> and the EU directives on information to the public in case of radiological emergency, protection of outside workers and medical exposures. Activities to implement the BSSD have included elaboration of national and county-level plans for protection and intervention in case of a nuclear accident or radiological emergency, a system of prior authorisation for prac-

<sup>88.</sup> Council Directive 96/29/EURATOM on Basic Safety Standards.

tices involving a risk of ionizing radiation, and a National Doses and Radiation Sources Register to include all ionizing radiation sources authorized for use and/or holding. Romania has also developed international co-operation including early notification of a nuclear accident and on bilateral agreements with neighboring states.

The Directive on informing the general public about health protection measures in the event of a radiological emergency was transposed in 2000.<sup>89</sup> Romania has already developed communication systems to provide prior information on health protection measures to the population likely to be affected by a radiological emergency and trained trainers of Civil Protection Counties Inspectorates, concerning elaboration of the county-level Plans for Protection and Intervention in case of radiological Emergency.

The Directive on health protection of individuals in relation to medical exposure will pose significant costs for Romania.<sup>90</sup> The control system to ensure the safety and safe use of radiological equipment includes mandatory diagnostic reference levels for radiodiagnostic examinations and establishes dose constraints for individuals helping to support those undergoing medical exposure, as well as acceptability criteria for radiological installations. Much of the radiological equipment currently in use by dentists and hospitals will need replacement to meet these standards.

The Council Regulations establishing maximum permitted levels in contaminated foodstuffs and feeding stuffs,<sup>91</sup> as a consequence of nuclear accident or radiological emergency, were transposed in 2002 via a Joint Order of the CNCAN President, the Minister of Health and Family, and the Minister of Agriculture, Food and Forests. The process of setting up a monitoring system and improving the existing one will be finished at the end of 2002. Products that do not comply with the maximum acceptance levels are forbidden from human or animal consumption. All shipments of radioactive materials on or through Romanian territory

<sup>89.</sup> Council Directive 89/618/EURATOM on Information to the Public.

Council Directive 97/43/EURATOM on Health Protection of Individuals in relation to Medical Exposure.

Council Regulation 3954/87/EURATOM, on maximum levels of food contamination, as amended.

are regulated through an authorisation and control system set up in 2001.

#### Major challenges for the nuclear safety and radiation protection sector

• Provide further resources for CNCAN, including increased salaries and other measures to strengthen its capabilities.

## 3.9 Noise

Noise levels continue to increase in almost all Romanian cities, with the noisiest being Bucharest, Brasov and Braila. It is hoped that noise levels will come down in the future, as a series of EU directives are set in place. Most of the EU's current requirements in this sector are product standards and, according to the 2002 Regular Report, additional work is necessary to approximate these requirements.

Romania has transposed the Directive on Airborne Noise Emitted by Household Appliances.<sup>92</sup> The Romanian Accreditation Association (RENAR) is responsible for introducing the relevant European standards for testing household appliances, and the National Authority for Consumers Protection has been given responsibility for inspection and enforcement. Romania expects to have this Directive fully implemented in 2003.

The EU requirements for noise from equipment for use outdoors have not yet been transposed or implemented,<sup>93</sup> though the Ministry of Industry and Resources has produced a first draft of a study regarding the level of noise emitted by equipment for use outdoors. The intention is that this directive will be transposed by 2004, and implemented fully between 2006 and 2007.

<sup>92.</sup> Council Directive 86/594/EEC on Airborne Noise Emitted by Household Appliances. Transposition was done via Governmental Decision No 672/2001, which came into force in February 2002 and sets up the conditions for marketing bousehold appliances, depending on the level of airborne noise.

<sup>93.</sup> Drafting bas not yet begun for the Governmental decision intended to transpose this Directive, but the Governmental decision to appoint the competent authorities for this Directive is being prepared.

The greatest challenge in this sector will be giving Romanian producers sufficient time to make the technical changes to their products needed for compliance.

#### Major challenges for the noise sector

• Provision of information to Romanian producers of products subject to the EU noise requirements concerning the steps they will need to achieve compliance

## 3.10 International Conventions

Romania's Environmental Protection Strategy states its aim of strengthening its institutional capacity through participation in environmental agreements and through bilateral, regional and multilateral co-operation. The following table demonstrates Romania's position, together with the other candidate countries, with regard to selected multilateral environmental conventions:

Convention	CBD	CITES	CMS	BASEL	OZONE	UNFCCC	UNFCCD	RAMSAR
CEC Country	R A	R A	R A	R A	R A	R A	R A	R A
Bulgaria	Х	X	X	Х	Х	Х	Х	Х
Czech Republic	Х	Х	Х	Х	Х	Х	Х	Х
Estonia	Х	X		Х	Х	Х	Х	Х
Hungary	Х	X	Х	Х	Х	Х	Х	Х
Latvia	Х	X	Х	Х	Х	Х	Х	Х
Lithuania	Х	X		Х	Х	Х	Х	Х
Poland	Х	Х	Х	Х	Х	Х	Х	Х
Romania	Х	X	Х	Х	Х	Х	Х	Х
Slovak Republic	Х	Х	Х	Х	Х	Х	Х	Х
Slovenia	Х	X	Х	Х	Х	Х	Х	Х
European Union	X		X	X	X	Х	X	

Table 4.5 Stage of play of selected multilateral environmental agreements

\* R= Ratification, acceptance, approval or succession; A= Accession

Within the MWEP, international co-operation and EU integration activities are managed by the General Division for European Integration, Programmes, Projects and International Affairs. One sub-division deals with programmes, projects and international affairs, whilst the other deals with European integration. Romania's National Environmental Action Plan (NEAP) contains measures required by bi-lateral and multi-lateral conventions and lists of projects that are financed by the EU or other forms of international or bilateral co-operation.

To work alongside the NEAP inter-ministerial Committee, nine "sector" working groups were created in 1999 to co-ordinate the transposition of the environmental *acquis*, such as the working groups on climate change, on GMOs, and on ozone depleting substances. Whilst these groups work on transposing the EU *acquis* they are often simultane-ously working on implementation of international environmental agreements.

Concerning protection of the ozone layer, Romania is party to the Vienna Convention for Protection of the Ozone Layer and also the Montreal and London amendments. An Ozone Secretariat has been created within the MWEP. The Ozone Secretariat monitors and licenses imports and exports of ODS in close co-operation with the customs authorities. Romania has committed to reducing its ODS emissions to zero between 2005 and 2015. The intention is to achieve early implementation of the Montreal Protocol and to eliminate use of ODS before EU accession.

Much of Romania's international effort has been in the field of biological diversity protection. As the last table indicated, Romania became a Party to the Convention on Biological Diversity in 1994. In 2000, Romania ratified the Agreement on the Conservation of Bats in Europe, the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area as well as the Agreement on the Conservation of African-Eurasian Migratory Waterbirds. Romania is a Party to the Bonn Convention on the Conservation of Migratory Species of Wild Animals and to the Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat.

Romania is one of the six countries bordering the Black Sea, one of the world's most remarkable regional seas for its isolation (only the Bosphorus Straits as outlet) and for the size of its drainage basin (almost one-third of continental Europe). The Convention for the Protection of the Black Sea against Pollution was signed by Romania in 1992, and ratified in 1993. Romania has also ratified the Convention's three Protocols (control of land-based sources of pollution, dumping of waste, and joint actions in case of accidents e.g. oil spills). It participates actively in

the various regional projects and programmes of the Black Sea Environmental Programme, including the current Global Environment Facility (GEF) Black Sea Ecosystem Recovery Project. Romania is also a Party to the Danube Convention.

## 3.11 Climate Change

In 1994, Romania ratified the UN Framework Convention on Climate Change, (UNFCCC) and, in 2001, became the first Annex I signatory country to ratify the Kyoto Protocol.<sup>94</sup> Romania is an Annex I Party to the UNFCCC, *i.e.*, one of the industrialised countries that historically has been a significant generator of the greenhouse gases (GHG) that are now contributing to climate change.

The Annex I Parties include both relatively wealthy countries that were members of the Organisation for Economic Co-operation and Development (OECD) in 1992, like Denmark, and a number of countries with "economies in transition", like Romania. Because their per capita GHG emissions are higher than those of most developing countries, and because they have greater financial and institutional capacity to address climate change, the Annex I Parties are expected to lead the effort to modify long-term emissions trends. The countries with "economies in transition" (EIT) were given certain flexibility in this respect. Whereas the OECD countries made a commitment to return their GHG emissions to 1990 levels by the year 2000, the EIT countries were allowed to select a baseline year before the economic changes that led to big reductions in their emissions.

Romania has made a commitment to reduce its greenhouse gas emissions by 8% between 2008 and 2012, as compared to its baseline year of 1989. In 1989, Romania's total aggregated emissions of GHG, calculated as CO<sub>2</sub> equivalent, were 271 million tons. By 1994, this had dropped to 171 million tons, just 62% of its 1989 GHG emissions, a decrease largely due to industrial production cutbacks rather than to climate change measures. As of 2000, Romania's aggregated GHG emissions were calculated at 141 million tons.

<sup>94.</sup> Romania ratified the Kyoto Protocol via Law No 3/2001.

In its efforts to return to sustained economic growth, Romania's GHG emissions are expected to increase slightly till 2008 unless Romania is able to preserve the reductions in emissions by implementing energy efficiency and other GHG reduction measures.

The National Commission on Climate Change was established in 1996 as an inter-ministerial body co-ordinated by MWEP to promote the necessary measures for unitary application in Romania of the objectives of the UNFCCC and Kyoto Protocol.

Under the Kyoto Protocol's joint implementation (JI) mechanism, Romania and other EIT countries may sell any "additional" reductions in emissions to other Annex I countries that may need to buy emission reduction units (ERU) as part of their own efforts to meet their climate change commitments. Because of Romania's relatively high level of energy intensity (see discussion on energy in next section), Romania has great potential to attract investments through the JI mechanism aimed at bringing about more energy efficient and cost-effective technologies in the power, heating, transport and industrial sectors.

Towards this end, Romania has already signed JI agreements with Switzerland, the Netherlands, Norway and Austria, and is about to sign a JI agreement with Denmark. Co-operative arrangements are also in place with Sweden, Canada and the Prototype Carbon Fund. The first Kyoto commitment period when Annex I countries will be able to exchange ERUs is between 2008 and 2012.

As one of its first JI projects in Romania, the Netherlands has agreed to support a cogeneration and district heating project for the municipality of Targoviste, for a total value of 13.8 MEUR. In exchange, it will receive 1,536,140 ERUs between the years 2008 and 2012, at a price of 9 EUR per ERU. The benefits to Romania will include a more efficient heating supply for the municipality, less fuel consumption and cheaper energy, better air quality for the municipality, a decrease in CO<sub>2</sub> emissions, and technologies to enable the plant to comply with EU standards for large combustion plants. The project will provide a positive example of foreign direct investment in municipal infrastructure, which it is hoped will encourage similar FDI investments. Similarly, Switzerland has agreed to provide JI funds for a project to reconstruct the district heating systems of Buzau and Pascani, and Norway has agreed to support refurbishing of the district heating system of Fagaras.

Romania hopes to follow up on these initial JI projects by bringing in other JI investments in energy efficiency and other measures. But to take full advantage of the JI opportunity, Romania will need to develop its institutional capacity and legal framework by 2007, including finalisation of a national system for assessment of greenhouse gas emissions. Hurdles include the need to set in place the legal, administrative and practical instruments for carrying out more accurate assessment of Romania's GHG emissions, assessing the "additionality" of proposed GHG reduction measures, and monitoring and verification of CO<sub>2</sub> reduction measures.

The commitment to prepare for EU accession brings an additional hurdle for Romania. In the first place, it must be able to meet the EU requirements for calculating and reporting GHG emissions,<sup>95</sup> which are largely in accordance with the UNFCCC requirements. Parties to the UNFCCC were expected to submit their third national communications to the UNFCCC by October 2001, but Romania has not yet submitted its third national communication.<sup>96</sup>

The National Institute for Environmental Protection under the MWEP has elaborated the National GHG Inventory for 2000 and for the years 1992 – 1999. Quality control checks are now being carried out before submitting the data to the UNFCCC Secretariat by the end of 2002. The Third National Communication to the UNFCCC is also in a final stage of development.

This delay in meeting the UNFCCC reporting requirements is an indication of the challenges that Romania will face in meeting the similar EU reporting requirements. These challenges will only increase if the EU decides to adopt a GHG emissions trading scheme, as currently proposed by the European Commission.<sup>97</sup>

<sup>95.</sup> Council Decision 93/389/EEC, as amended by Decision 99/296/EEC.

<sup>96.</sup> Romania submitted its Second National Communication to the UNFCCC in April 1998.

<sup>97.</sup> National Round Table on the Environment and the Economy.

The MWEP has recently taken steps to organise a special Climate Change Unit as an important capacity-building measure, building on a previous JI unit that was largely supported by Dutch technical assistance. It has just started work on a National Action Plan for GHG Emissions Reduction that will be issued in mid 2003. The MWEP is seeking assistance for this activity.

Romania's potential for achieving significant improvements in energy efficiency through JI investments is vast, but this will require development of the capacity to meet this challenge. It is likely to need significant technical assistance in this area for years to come.

#### Major challenges for climate change

- Strengthening of the administrative capacity for identifying, preparing and negotiating JI projects, including support for municipalities with potential JI projects.
- Development of technical and institutional capacity for assessing projects for additionality and for monitoring and verification of emission reduction measures.
- Building information and technical systems needed to assess GHG emissions and to meet the EU and UNFCCC reporting requirements effectively.

# 4. Sectoral Integration Issues and their Relevance to EU Accession

The integration of environmental considerations into other policy areas, especially economically important sectors such as energy, industry and agriculture, is a legal obligation under the Treaty of Amsterdam. The obligation stems from recognition of the inadequacy of environmental policy *per se* for tackling the underlying causes of environmental deterioration.

To date, there is little EU legislation setting specific measures with respect to sectoral integration. However, the EU's Sustainable Development Strategy adopted at the June 2001 European Council in Göteborg reaffirmed the importance of integrating environment into all relevant Community policy areas including via sector strategies. Member State efforts to integrate environmental concerns into other areas are also important guideposts for measures in the candidate countries.

Like many Member States, Romania's efforts to take environmental concerns into account in developing policies in the energy, transport and agricultural sectors are not very advanced. The 2002 Regular Report on Romania's Progress towards Accession concluded that integration of the environment into other policies was "hardly progressing". It noted, however, that the Inter-Ministerial Committee responsible for co-ordination to ensure that all concerned sectors were taking environment into account had met in February 2002 for the first time since 1999. The roadmap for Romania included as a short-term benchmark the need to reinforce structures and mechanisms to ensure integration of environmental protection requirements into the definition and implementation of all other sectoral policies with the ultimate aim of promoting sustainable development.

## 4.1 Energy

As the largest importer and the second largest consumer of energy in the world, the European Union is a key player on the international energy market. These trends are likely to be reinforced after enlargement, even though some candidate countries are energy producers, *e.g.*, Romania for oil and gas. But to ensure a secure and competitive energy market, sustainability is needed. Priorities for integration of environmental considerations into this sector are therefore the improvement of energy efficiency, promotion of the use of renewable energy, and internalisation of environmental and other external costs.

The energy sector is by far the largest contributor to air pollution in Romania. Power generation is based almost 50/50 on domestic coal (hard coal and lignite) and natural gas. The change to natural gas is going slower than first forecast in the early 1990s, due to social difficulties in the coal-mining regions and the failure to create alternative jobs to compensate for the loss of mining industry jobs.

Though energy consumption in Romania has decreased regularly since the early 1990s, energy is still subsidised at all levels from exploration to consumption.

Because of the very high energy intensity of the national economy – around 8 times that of the average Member State – there is great scope for energy efficiency improvement in Romania. In 1998, Romania's energy intensity level was 58,400 Btu per USD (1990). By comparison, Germany achieved energy intensity of 7,300 Btu per USD (1990). It is estimated that "no-cost" energy saving measures could cut present energy consumption by 15%.

The EU Directive on Renewable Energy sets an indicative target for the contribution of electricity produced from renewable energy sources to 12% of gross electricity consumption at Community level by 2010. Romania needs to begin taking active measures in order to contribute to meeting that target, since renewable energy sources play no role in current power generation.

The 2002 Regular Report notes Romania's lack of progress in taking environmental considerations into account in its energy policies. It specifically mentions that recent medium-term and long-term energy strategies focus on increasing energy production without considering the impact on the environment or the potential for improving energy efficiency.<sup>98</sup>

<sup>98.</sup> The national medium-term strategy for Romanian energy sector development 2001-2004, approved by a 2001 Government Decision, limits its discussion of policies for reducing environmental impact from the production, transmission, distribution and consumption of energy mainly to energy efficiency.

The Romanian Agency for Energy Conservation has only very limited financial and human resources for promoting energy efficiency, and this lack of resources is cited by the 2002 Regular Report as indicative of the low priority given by Romania to date to energy efficiency issues. Another major obstacle is lack of investment to boost efficiency of production and distribution networks. To address this need, in October 2002 Romania established the Fund for Romanian Energy Efficiency (FREE) with support from the Global Environmental Facility and the World Bank. FREE will be a revolving fund aimed at providing mediumterm financing (2-3 years initially) for projects between 98,765 EUR and 1,481,481 EUR. The overall expected program life is 8 years.

## 4.2 Industry

EU industrial policy seeks to enhance competitiveness, thus achieving rising living standards and high rates of employment. Its aim is to speed up adjustment to structural change and to encourage industrial innovation and the development of undertakings throughout the Community. In order to cope with the pressures within the internal market of the Union, candidate countries need to achieve a certain level of competitiveness by the time of accession, while respecting the standards of the EU regarding environment protection.

Romania lacks the resources to confront its industrial pollution problems and protect its environment adequately.<sup>99</sup> As a result, Romania continues to suffer from high levels of industrial air pollution, as well as water pollution by industrial and municipal wastewater discharges, agricultural runoff, and insufficient treatment of toxic pollutants discharged by industry into municipal sewers.

Romania's privatisation programme has included efforts to bring in strategic foreign investment and technology transfer for upgrading of Romanian industries, but continues to proceed at a slow pace.<sup>100</sup> Moreover, privatisation has not always succeeded in overcoming a facility's

<sup>99.</sup> See <http://www.eia.doe.gov/emeu/cabs/romaenv.html>.

<sup>100.</sup> Romania's chemical companies and thermal power plants have not yet been privatised (though some district heating plants have been transferred to municipalities). The furniture, textile, leather, cement, fertiliser and car manufacturing industries are completely privatised, while metallurgy, oil refineries, and non-ferrous metallurgical plants (Copsa Mica & Baia Mara) are mostly privatised.

legacy of under-investment and past pollution damage. The 1998 privatisation of Copsa Mica to a Greek corporation, for example, included strong commitments to invest in restructuring and environmental needs. But as of 2002, less than 10% of the amount proposed for environmental improvements had been spent,<sup>101</sup> even as greater industrial activity at the factory had brought polluting emissions back to 1980s levels, when the environmental plight of Copsa Mica first came to international attention.

The 2002 Regular Report recognises that Romania has made progress in developing a coherent industrial policy, but notes that progress with privatisation has been relatively slow. Moreover, Romania continues to lag behind other candidate countries in its ability to attract the foreign direct investment needed to modernise its industries and to tackle industrial pollution problems.

In November 2001, Romania split responsibility for privatisation between the Authority for Privatisation and Management of State Assets (APAPS) and a new Office of State Ownership and Privatisation in Industry (OPSI) within the Ministry of Industry. OPSI took over responsibility for privatisation of companies in strategic sectors (energy, oil and gas, mining, defense), representing 75% of total state assets.

In March 2002, new legislation was adopted with the aim of speeding up the privatisation process, but in the year since its creation, OPSI has not yet carried out a privatisation. Thus privatisation and restructuring remain areas where major additional efforts are still needed. At the same time, Romania needs to pay careful attention to how environmental pollution problems are handled in the privatisation process, so its efforts to restructure industry in the short term do not exacerbate long term pollution problems.

In the long term, Romania's commitment and ability to protect its environment from industrial pollution depends on how it addresses such interwoven problems as insufficient financing mechanisms, lack of ana-

<sup>101.</sup> The compliance programme specified in the privatisation contract bad specified modernisation of the existing installations for sulpburic acid at an expected cost of 3 MUSD. This was later revealed to be impossible, with the only other viable solution being to build an entirely new installation for 30 MUSD.

lytical capacity for development and implementation of sustainable environmental management, and inadequate resources for monitoring, enforcement, and information dissemination at local level.

## 4.3 Agriculture and forestry (including SAPARD)

The Common Agricultural Policy (CAP) of the EU, created at a time when Europe was in deficit for most food products, has come under fire in recent years for its emphasis on subsidies tied to agricultural productivity. The CAP is currently linked to problems ranging from environmental pollution stemming from overuse of chemical fertilisers and pesticides to subsidised agricultural surpluses sold on the world market at prices undercutting the products of other countries. Agri-environmental measures introduced in 1992 have aimed to encourage environmentally sound agricultural practices, but the financial support for such measures represents only a fraction of the overall CAP support.

Romania's challenge is to develop an effective capacity to elaborate and implement agricultural policies compatible with the CAP, and additionally to incorporate environmental protection within these policies.

Agriculture is important for the Romanian economy, accounting in 2001 for 14.6% of Romania's gross value. Approximately 62% of Romania's total land surface is agricultural, and from this, 63% is arable, 33% pastures and meadows, 2% orchards and 2% vineyards. Romania is the largest maize producer in Europe after France, and it has about 6,370 thousand hectares of forest.

During communism, 90% of agricultural land was owned by the State, with 55% farmed via collective farms. Following the collapse of communism, most collective farm land was privatised, creating 4 million private households farming newly privatised plots. Larger scale farming still exists, however, with 40% of land being used by family associations or by farms remaining under state ownership.

For most small farmers, the impacts of economic transition have rendered most agricultural inputs such as chemical fertilisers and pesticides unaffordable. The *de facto* situation today of widespread areas farmed without chemical inputs represents a unique opportunity for Romania to tap into the Western European market for organic foods, if it could set in place the structures needed to certify its agricultural products as organic and for timely distribution.

As in other countries, large-scale agricultural production poses particular environmental problems. Large pig farms generate large amounts of manure which have led to effluents as much as "100 times higher than the limits set in the water permit"<sup>102</sup> and are a major source of heavy continuous pollution of the waters in the region". These pig farms also cause local air pollution. Romania will need to ensure that the measures required under the Nitrates Directive to prevent this type of pollution are set in place.

The 2002 Regular Report recognizes Romania's progress in harmonizing its agricultural and agri-environmental policies with the EU requirements, and notes recent initiatives demonstrating that Romania is moving towards the development and implementation of a coherent rural development policy. For example, in 2000, Romania's Agency for Regional Development drew up a National Plan for Agriculture and Rural Development under the pre-accession EU programme SAPARD. The emphasis is on improving product processing, marketing and quality control, as well as veterinary and plant-health controls, while ensuring respect for the environment. In particular, 20% of the SAPARD funding will be allocated to rural communities in order to help fight against drought. Measure 3.5 of SAPARD concerns forestry specifically, and puts in place measures to support reforestation programmes.

On the other hand, changes to Romania's agricultural policy in 2002 replaced an earlier support scheme targeting small family farms with a direct payment system for several agricultural crops and a premium system for animal products. This has the effect of making commercial farms eligible for domestic support, while family farms can receive only free consultancy services and incentives for organic farming. The 2002 Regular Report notes that focusing domestic support on a small percentage of large-scale commercial farms could have negative social and economic implications for rural communities, and that Romania's support policy should give much more consideration to rural development.

<sup>102.</sup> UNECE Environmental Performance Review of Romania 2001, at page 161.

The Ministry of Agriculture, Food and Forests and the Ministry of Waters and Environmental Protection cooperate with a view to integrating ecological concerns into agriculture, but a recent UNECE report noted that this cooperative relationship did "not seem to be all that effective". The opportunities for developing an environmentally sound agricultural economy are strong in Romania, if the right policies and support programmes are set in place.

## 4.4 Transport, including infrastructure (ISPA)

Transport is a crucial sector in order to ensure smooth movements of people and economic operators within the EU, and also with the outside world. But sustainable transport policies are needed to address rising volumes of motor vehicle traffic and increased levels of congestion, noise and pollution. The 2001 European Council in Göteborg noted the need for actions to encourage the use of environment-friendly modes of transport as well as full internalisation of social and environmental costs. It particularly noted the need to de-couple transport growth from growth in GDP, in particular by a shift from road to rail, water and public passenger transport.

Romania faces particular challenges in this sector. Since the transition to a market economy in the early 1990s, Romania has witnessed a tremendous increase in the number of passenger cars (more than 75% increase in motor vehicles between 1990 and 1997), and a decline in the development of public transport. The share of freight transported by rail started to decline some twenty years ago, with road transport taking a larger share.

In 1997, the transport sector contributed 50% of the total emissions of NOx and about 20% of other air pollutants. Assuming that no new measures are implemented,  $CO_2$  emissions from transport are expected to increase by about 50% between 1995 and 2010.<sup>103</sup> However, total emissions of lead have slightly decreased over the years, due to the step-by-step introduction of unleaded petrol and the gradual replacement of older cars by more modern vehicles.

<sup>103.</sup>National report to the Secretariat of the United Nations Framework Convention on Climate Change.

Romania's ability to change these trends will depend on the policies and programmes set in place for rehabilitation and strengthening of its transportation infrastructure, and to link that infrastructure to the EU's transport network as an important element for economic growth and the internal market. The EU programme to develop a Trans-European Transport Network (TEN) linking the regions and national networks of the Member States is key here. In 1996, the EU initiated a process of Transport Infrastructure Needs Assessment (TINA) to coordinate the development of an integrated transport network in the CEE candidate countries, including Romania. The EU's Instrument for Structural Policies for pre-Accession (ISPA) has earmarked 50% of its funds for transport infrastructure, giving priority to investments related to integration of candidate country transport with that of the EU and the future TEN.

The construction of new transport infrastructure in Romania requires an environmental agreement with the Ministry of Waters and Environmental Protection and the local EPIs. Although applications for environmental agreements are subject to an environmental impact assessment (EIA), to date there has been no strategic assessment (SEA) of the overall environmental impact of the proposed infrastructure. Issues to consider should include, e.g., the affect of planned transport infrastructure projects on the future development of protected areas and corridors or whether the right balance between road and rail infrastructure is proposed. A first step would be for the MWEP to prepare a map of Romania's future network of protected areas, to guide decisions on transport infrastructure trajectories. It would also be useful to strengthen the EIA process in general, including structures for public participation, to ensure that environmental issues are fully taken into account in decisions concerning transport infrastructure.

# 5. Administrative Capacity for Environmental Management

In the negotiations between Romania and the European Union, administrative capacity has been one of the top items on the agenda. After the Commission called for a fundamental structural reform of the public administration, the Romanian Government adopted a "General Strategy Regarding the Acceleration of Public Administration Reform" in September 2001. The 2002 National Action Plan for Administrative Strengthening prepared jointly with the EU lays out an extensive list of measures to be taken as part of Romania's pre-accession preparations, including for the Environment Chapter.

This section looks more closely at Romania's capacity to manage the task of implementing the EU environmental requirements, including the challenge of financing the necessary investments in environmental protection infrastructure.

## 5.1 Romania's Environmental Management Structure

Romania's administrative challenge is generally acute, given the severe resources constraints under which all of its civil servants operate. Though all ministries were re-structured in 2001, including the Ministry of Water and Environmental Protection (MWEP), at the same time a 25% cut was made in the number of civil servants. This reduced the already low level of administrative capacity and left a number of ministries, such as the MWEP, severely understaffed. The restructuring itself may have been needed in some areas, but the associated staff changes can sometimes have a severe impact on efficiency. Moreover, the generally low salaries make it difficult to attract competent staff.

Romania's institutions for environmental protection have a relatively recent history. The 2001 Regular Report notes that the experience of most agencies with responsibilities for environmental management is rather limited, though the level of technical expertise is generally high.<sup>104</sup>

104.2001 Commission Regular Report on Progress of Romania Towards Accession.

#### 5.1.1 Ministry of Water and Environmental Protection (MWEP)

The central public authority for environmental protection is the Ministry of Water and Environment Protection (MWEP). It makes policies in the area of water and environmental protection at national level and has the main responsibility for implementing the environmental *acquis*. The MWEP draws up strategies and the specific regulations for developing and harmonizing environmental protection activities into the general framework of the Government policy, and co-ordinates the implementation of environment-related government strategies.

The MWEP has established a Department with specific responsibilities for European integration. This Department coordinates activities on legal transposition of the environmental *acquis communautaire* and on implementation of the new legislation. The Department also has a Unit for the Coordination of the Implementation of the Structural Pre-accession Instrument (ISPA).

In November 2001, a decision was made to establish an "Environmental Guard" using existing staff and budgetary resources from the national and local levels (see section below on enforcement). In 2001, the Ministry also established a Directorate with specific responsibilities for waste and hazardous substances management, in view of the complexity of the actions needed to comply with the EU requirements in these areas.

Another administrative reform may be pending. The Minister has announced his intention to establish a National Environmental Protection Agency (NEPA) by mid-2003. The NEPA would not be political; its main task would be to carry out implementation, including the monitoring and central database management now carried out by ICIM. The Ministry would remain a policy-setting body. The move to establish a NEPA as a permanent government authority could help bring more stability to some of the environmental management functions that need to be carried out at central level. However, it remains to be seen whether sufficient resources will be allocated from the national budget for the NEPA to discharge the role foreseen for it.

The following central-level institutions under the MWEP are also important:

- National Research-Development Institute for Environmental Management (ICIM)
- National Administration Romanian Waters ("Apele Romane") responsible for water management plans and programmes and, through its 11 branches corresponding to the 11 river basins, for enforcing water legislation and policy.
- National Institute for Meteorology, Hydrology and Water Management – provides technical support in air quality and emission control, water quality, radioactivity, data collection and emissions inventory
- Romanian Standards Institute responsible for EU norms
- Romanian Research Marine Institute and the R&D Institute of the Danube Delta
- National Commission for the Control of Nuclear Activities (CNCAN)

#### 5.1.2 The Environmental Protection Inspectorates

The 42 county-level Environment Protection Inspectorates (EPI) are responsible for the implementation, monitoring and enforcement of legislation. The EPIs were established in 2001, following the reorganisation of the former regional Environmental Protection Agencies. Each inspectorate has within its structure a Unit for development of capacity to elaborate and participate in the identification and implementation of Romania's approximation strategies and the Community and international programmes. Each EPI also has a Department for Nature Protection and Protected Areas, a Department for Waste and Hazardous Substances Management, a Department for Integrated Monitoring of Environment Media, and a Department of Ecological Control and Monitoring of Environment Investments.

A 2001 study on administrative capacity for environmental protection carried out for the European Commission<sup>105</sup> found co-ordination between the national (the MWEP) and county level (the EPIs) to be inadequate. In particular, it noted a lack of communication and a lack of training. The staff in Romania's EPIs often had a poor understanding

<sup>105. &</sup>quot;Administrative Capacity for Implementation and Enforcement of EU Environmental Policy in the 13 Candidate Countries", Service Contract B7-8110/2000/159960/MAR/H1, by ECOTEC Research and Consulting in association with the Institute of European Environmental Policy.
of the requirements of EU legislation, and in particular gave inadequate attention to the technical (and policy) implications surrounding permitting and inspection.

To help upgrade the EPIs and to provide better co-ordination, the MWEP plans to develop a regional-level administrative structure comprising 8 to 11 regional EPIs. A PHARE technical assistance project started up in September 2002 to assist the MWEP to decide on the best conformation of this regional structure, and to provide training and equipment to improve capacity of the EPIs. The PHARE project will decide whether to create a separate regional structure to group the EPIs, or to give certain EPIs a regional responsibility to co-ordinate adjacent EPIs. Another alternative under consideration is to group the EPIs according to the 8 regional development zones (see section 5.4), the 11 river basins, or the proposed "air quality basins" that are currently under discussion. The eventual configuration of these regional EPIs will be decided in the course of the current PHARE project.

These reorganisation measures are aimed at improving environmental management capacity in Romania, but it should be noted that there have been few improvements in the overall level of staffing. The Ministry of Water and Environmental Protection has only 170 persons, while the EPIs have a total of 1680 staff, an average of just 40 per EPI. By way of comparison, Denmark – a country with one-quarter the population of Romania – has some 2500 officials devoted to environmental protection, including 1000 officials working at county level, and another 1000 officials at municipal level.<sup>106</sup>

In 2000, a new self-financing system was set up to provide financial support for the EPIs. A ministerial order issued in 2000 established the register of works and services to be performed by the EPIs and the related tariffs for these activities. This partial self-financing of the EPIs has given them more resources, but there is some concern within the MWEP that the self-financing may also increase the autonomy of the EPIs in ways which may affect national co-ordination of policies and implementation.

<sup>106. &</sup>quot;Environmental Administration in Denmark", by Mogens Moe, Ministry of Environment and Energy, Denmark, Environment News No 17, 1995, at page 54.

#### 5.1.3 Environmental monitoring

Monitoring the ambient environment is a major responsibility of the EPIs. The monitoring effort is overseen by the MWEP, and supported by ICIM (the National Research-Development Institute for Environmental Protection). At the same time, the Ministry of Health and Family operates its own network of installations for ambient monitoring for those parameters that might affect human health. This duplication of effort can lead to confusion about which Ministry is responsible for enforcement actions when health concerns are at play.

In addition, the National Administration "Apele Romane" administers a National System of Water Quality Surveillance that *inter alia* monitors water pollution sources such as wastewater treatment facilities. It levies fees for wastewater discharged into waterways, as well as fines if emission limit values are exceeded.

EPI personnel responsible for monitoring have relatively good expertise, but operate within severe constraints, e.g., poor equipment and limited staff. Capacity and expertise is lacking for monitoring some of the additional pollutants introduced in the course of approximation with EU law. The EPIs also do not have sufficient monitoring capacity to assess compliance with permit conditions.

While enterprises are required to carry out self-monitoring according to parameters established in the operating permit, few enterprises have expertise or laboratory capacity to manage this accurately. Enterprises must alternatively conclude a contract with accredited laboratories for sampling and data analysis. Romania does not yet have a system for the accreditation of environmental protection and water management laboratories to meet this pending demand.

#### 5.1.4 Inspection and enforcement

Within the EPIs, around one-third of the staff are inspectors. They are responsible for covering all media and, in an inspection of an installation, address all aspects of the permit (i.e., integrated permitting). They plan inspections on a yearly basis, but carry out additional inspections on special request and before authorising start-ups of operations. As mentioned above, the recently organised Environmental Guard will be fully in place by November 2002 to assume duties in this area. In particular the Environmental Guard will:

- Control those installations with major impact on environment factors;
- b. Control economic operators carrying out activities subject to the EIA procedure;
- c. Follow environmental protection investments through all stages of execution;
- d. Participate in interventions aimed at elimination or decreasing of pollution effects as well as prevention of accidental pollution;
- e. Obtain information and data from economic agents (companies) to become acquainted with and to fight against environmental protection offences;
- f. Control and find violations of legal provisions in environmental protection field and apply sanctions.

The Environmental Guard will also (a) collaborate with the police and/or gendarmerie on fact-finding for legal infractions and bringing these facts to the knowledge of authorities for penal investigation; (b) control applications for waste management and recyclable materials recuperation; and (c) co-operate with other states or international institutions on prevention, reduction and elimination of transboundary effects of accidents or ecological catastrophes.

Though inspectors can levy administrative fines for failure to comply, fines are usually too low to act as an effective deterrent. The level of fines has not been revised for inflation since 1998.<sup>107</sup> Inspectors can also in theory close facilities, but economic pressures have limited the use of such penalties. However, recently a section of the Doljchim Craiova chemical plant was closed down after polluting the River Jiu with nitrates.

The inspection system benefits from the good professional expertise of most inspectors, and from its flexibility of response to complaints and accidental pollution. But staffing is limited, and laboratory equipment is poor. While the EPI inspectors can undertake basic inspection activities,

<sup>107. &</sup>quot;Administrative Capacity for Implementation and Enforcement of EU Environmental Policy in the 13 Candidate Countries", Service Contract B7-8110/2000/159960/MAR/H1, by ECOTEC Research and Consulting in association with the Institute of European Environmental Policy.

they lack adequate equipment for measuring emission levels and other parameters. This hampers their effectiveness. As more complex permit requirements are introduced in accordance with the IPPC and other Directives, the expertise of inspectors will need to be improved.

In addition, the National Administration "Apele Romane" (the national Romanian water company) carries out inspection and enforcement in the water sector, while the Health Inspectorates under the Ministry of Health and Family are responsible for inspection and enforcement for pollution affecting public health.

### 5.1.5 River basin management

As described more fully in section 3.3 on the water quality sector, Romania's waters have been managed on the basis of river basins for many years. This structure has recently been upgraded to prepare Romania for implementing the Water Framework Directive requirements. A basin department for water management is now in place for each hydrological basin, with responsibility for effective management of water resources according to basin planning programmes. Moreover, Basin Committees have been established comprising representatives of relevant national ministries, local public authorities and NGO representatives. The basin departments are responsible for advising on schemes for water management for each river basin, approving the classification by water quality of the surface waters within each basin, and analysing and recommending financing priorities to the central and local public administration.

The reorganisation of Apele Romane into a national administrative authority should help to improve co-ordination but as the following organigramme shows, the structure for overall management and coordination of water policy is complex.

The task ahead of co-ordinating among the many different ministries, agencies and local offices will require strong negotiating skills and a coherent set of policies. Technical assistance, especially from bi-lateral donors that have successfully dealt with similar challenges, would be useful. In any case, investment support will be necessary for years to come in order to implement the extensive EU requirements for water management.



### 5.2 Other Ministries

A number of other national administrative institutions share competence for implementing various environmental acquis. These include:

- Ministry of Industry and Resources (MIR) responsible for legislation and policies on fuel quality, car emissions, and noise. The National Institute for Industrial Ecology (NIIE) under the MIR was created 18 years ago for treatment of industrial wastewater, and remains involved in industrial pollution control.
- Ministry of Health and Family (MHF) shares responsibility for implementation of various requirements under the Urban Wastewater, Drinking Water, Bathing Water, Nitrates and Air Quality Directives. The Institute for Public Health, the MHF's expert agency, carries out research and collects monitoring data on environmental aspects that could impact human health, e.g., air pollution, radiation, noise
- Ministry of Agriculture and Forest (MAF) has an important role in implementing the Nitrates and Habitats Directives. In particular, the Local Agriculture Agencies at county level have responsibility for enforcing the Nitrates Directive requirements, while the forestry administration is closely involved in nature protection efforts.
- Ministry of Public Administration (MPA) works closely with Romanian municipalities, including on measures to support development of municipal infrastructure such as wastewater treatment facilities and solid waste management.
- Ministry of Public Works, Transport and Housing has major responsibility for ensuring that infrastructure required for the implementation of investment-heavy Directives
- Ministry of Public Finance (MPF) makes decisions on the budget allocated to environment protection, and therefore can veto MWEP initiatives (including requests for additional administrative staff for implementation measures)
- Ministry of Development and Prognosis (MDP) in charge of the regional development programmes, through the National Agency for Regional Development. Eight regional development zones (formed by bringing together a combination of poor and better-off counties) have been established to create capacity for management of economic development.

Coordinating mechanisms at national level include an Inter-Ministerial Committee created by Governmental Decision that coordinates drafting of legislation. A permanent Industrial Pollution Control Working Group has also been established with MWEP and MIR staff to coordinate implementation of the IPPC Directive and related *acquis*. As indicated in the new roadmap for Romania, coordination could still be improved between the various ministries involved at central level. Better definition of the responsibilities allocated to each ministry and better communications in general would help in this regard.

### 5.3 Local Governments

Another reform carried out in 2001 extended a process of decentralisation of government that had been started by the previous administration. A 2001 Law on Local Public Administration defined the relationship between central and local government, and prohibited central government from devolving additional responsibilities to the local level without also providing the necessary financial means. It also set forth the right of local authorities to levy local taxes and to elaborate and approve their own budgets.

Decentralisation can help free local authorities to raise additional funds for municipal investment needs, but their capacity to raise user chargers or to levy taxes to repay loans may be constrained by questions of affordability.

There are recent signs that administrative capacity is increasing at the local level, e.g., some local authorities have contracted for foreign loans to develop local infrastructure. In general, though, local governments have not yet developed sufficient financial or administrative capacity to deal with the decentralisation of competencies, and are not prepared for the burden of EU environmental infrastructure requirements.

It is the local authorities at county and municipal level, for example, that are responsible for providing environmental services to the population. This requires setting in place and managing the necessary environmental infrastructure, *e.g.*, drinking water supply systems, sewage collection networks, and wastewater treatment works. The local authorities will need to identify and prepare environmental projects for invest-

ment.<sup>108</sup> They also have responsibility for granting development permits, which in some cases will require environmental impact assessments.

The roadmap for Romania reflects on the urgent need to improve capacity at a local level, including measures to improve the status of existing staff, to recruit new inspectors, and to train them adequately.

Assistance is therefore particularly needed at the local level in Romania. A series of DANCEE projects that supported the municipality of Piatra Neamt to develop a Local Environmental Action Plan and priority environmental management infrastructure, including a modern sanitary landfill, may provide useful lessons in this regard.

<sup>108.</sup> From 2001 on, the local authorities have had responsibility for implementing a number of investment-beavy Directives, such as the Urban Wastewater Treatment Directive.

# 6. Financing Compliance with the EU Requirements, including Management of EU Funds

As this report has already emphasised, compliance with the EU investment-heavy requirements in the environment sector will pose an enormous financial burden for Romania, the poorest of the CEE candidate countries. The burden will fall on the private sector as well as on the public sector.

The best estimates to date for the public sector costs are those found in a 2001 study by the Ministry of Public Administration (MPA). The MPA – concerned about the demands on local governments to provide services in accordance with EU standards – undertook the development of a Strategy as to how municipalities might rise to the challenge. The Strategy<sup>109</sup> consists of a short-term strategy for 2001 – 2004, as well as a long term strategy until 2030. The year 2030 was selected as the date when Romania is likely to achieve the EU objectives set for drinking water and urban wastewater treatment;<sup>110</sup> however, Romania has requested transition periods of 2020 for these EU requirements. The Strategy reports that 2030 was dictated by the limited possibilities of investment in the sector, but this appears not to have been coordinated with Romania's team negotiating the Chapter 21 requirements. The longer period set forth in the Strategy suggests that Romania may well need transition periods longer than those requested.

The Strategy estimated that a total of 17.7 billion EUR would be required between 2002 and 2030 to rehabilitate the water and sewerage, urban heating and sanitation services. This figure is divided between the different services as follows:

Water and sewerage in urban areas	4.1 billion EUR
Water and sewerage in rural areas	5.4 billion EUR
Centralised heating services	6.8 billion EUR
Sanitation (municipal waste management)	1.3 billion EUR

109. "The Government's Strategy concerning the Development of Local Public Services of Communal Husbandry", Government of Romania, Ministry of Public Administration, Bucharest, 2001.

110. Ibid at page 4.

The following pie-chart shows the Strategy's structure of fund granting allocated to the various sectors:



The Structure of Fund Granting in Percentage

The strategy estimated that the yearly ratio of this investment would be spread as follows:

2002 - 2017	942.9 MEUR per year
2017 - 2022	403 MEUR per year
2022 - 2030	193.6 MEUR per year

The Strategy does not clarify whether these estimates of annual costs are only for investments in infrastructure or whether they also include operating and maintenance costs. If operating and maintenance costs are not included, the burden on Romania's public sector would be significantly higher.

The MPA's Strategy stresses that the already constrained state budget cannot be the primary provider of these investments, and suggests three ways of attracting additional financing: (1) grants from the EU or other countries; (2) involvement of private capital (i.e. public-private partner-ships), and (3) loans from international financial institutions (IFIs) or commercial bank credits for financing public services and investments in local infrastructure.

The MPA's short-term strategy for the period 2002 - 2004 is to obtain the 942.9 MEUR from a variety of sources, as follows:

State (national) budget	100.3 MEUR
Local budgets	90.3 MEUR
EU and other grants	551.7 MEUR
Credits from international banks	300.9 MEUR
Private investment	100.3 MEUR

As this indicates, EU and bilateral grants remain the most important source of financing (almost 50% of the total) for the public sector environmental infrastructure needed by Romania, and predominantly the financing available through the ISPA programme. The table on the next page shows the environmental infrastructure projects for which Romania will receive significant ISPA grants during the first two years of ISPA financing (2000 –2001).

During this initial ISPA period, Romania succeeded in putting enough viable projects forward to receive its full allotment of ISPA financing for environmental infrastructure projects. The first batch of projects put forward were already part of an EBRD effort to extend credit to the larger Romanian municipalities for environmental infrastructure, and considerable work on feasibility studies and financial analysis had already been done. But the ISPA application process is technically demanding and complicated, requiring the completion of full engineering feasibility studies and detailed financial analyses and it was a major additional effort for the MEW to prepare adequate documentation for each project to meet the EU requirements.

The DANCEE programme and other bilateral donors, including the US and Japan, were needed to provide additional technical assistance (TA) at very short notice, to take the existing information through the next stage of preparing the documentation for the ISPA application. Danish consultants helped prepare the paperwork for the projects at Craiova, Constanta, Arad and Piatra Neamt. Denmark also contributed co-financing for the Piatra Neamt facility.

Project Name	Total Cost of Project (EUR)	ISPA Grant (EUR)
Drinking Water pipes/plant		
Iasi: Upgrading of water & waste system	51,378,000	38,533,500
Drinking Supply and Sewerage		
Pascani: Upgrading of water & waste water system	16,262,000	12,196,500
Targu Mures: rehabilitation of drinking water supply	27,909,400	20,932,050
Sewage network/treatment plant		
Technical assistance for completion of documentation	1,810,000	1,357,500
Craiova: Rehabilitation of sewerage network & wastewater	70,378,000	52,783,500
Constanta: Sewerage & wastewater treatment rehabilitation	96,556,653	72,417,490
Timisoara: rehabilitation of wastewater treatment technology	48,080,000	34,136,800
Cluj: Rehabilitation & modernisation of water supply	46,755,800	35,066,850
Valea Jiului: Danutoni waste water treatment plant extension	9,680,000	7,260,000
Bralia: Integrated sewerage development & wastewater	59,877,400	44,908,050
Arad: Rehabilitation & modification of sewerage network	18,000,000	13,500,000
Foscani: Rehabilitation of the sewerage network	15,876,500	11,748,610
Oradea: Rehabilitation of the sewerage network	23,906,000	16,734,200
Waste management		
Piatra Neamt: waste management programme	13,846,000	10,384,500

### ISPA Grants for Environmental Infrastructure Projects in Romania (2000 – 2001)<sup>111</sup>

As of October 2002, projects sufficient to meet Romania's ISPA allotment for 2002 had not yet been agreed. Moreover, the process is not yet over even for the projects agreed in 2000-2001. Before the ISPA funds can actually be disbursed, the projects must be tendered and contracted, in accordance with EU public procurement procedures. Romania has not yet succeeded in getting any of its projects through this process, so that disbursement of ISPA funds and actual construction of the infrastructure can begin. These difficulties suggest a need for TA also in this area of project pipeline management.

Though the rules governing ISPA have recently been modified to allow smaller municipalities to be eligible for ISPA funding (from 300,000 to 150,000 inhabitants), it remains difficult for the smaller municipalities to apply for and successfully receive funding. To remedy this, the MPA is

<sup>111.</sup> European Commission, Summary Information on the Third ISPA Monitoring Committee Meetings, Romania, 23 – 24 April 2002, at page 74.

in the process of establishing a Small and Medium-sized Town Infrastructure Development Programme (SMTIDP), aimed at assisting 232 communities having populations of between 10 – 50,000, with a particular focus on providing clean drinking water to small communities. SMTIPD will be funded 50% by PHARE grant and from Romanian sources, and 50% from credit from the European Bank for Reconstruction and Development (EBRD) and EIB. The 50% from PHARE and Romanian sources will be split 75% PHARE, 25% Romania. The loans from EBRD & EIB will be paid back through increased user charges. SMTIPD is to be a multiannual financing arrangement operating from 2002 to 2010. In 2002, it will have 40 MEUR (15 MEUR from PHARE, 5 MEUR from the Romanian government and 20 MEUR from International Financing Institutions).

One of the SMTIPD eligibility criteria is that the community must work in association with other communities in the same river basin. There will be 60 EUR per person available, so a town with 5000 persons will be eligible for 30,000 EUR under SMTIPD, for new infrastructure or for refurbishment of old structures (e.g. replacement of delivery pipes and refurbishment of pumps). The SMTIPD is a promising financial mechanism to support Romanian municipalities in delivering safe drinking water, and may be a useful model for other infrastructure needs, if additional donor and IFI funding can be secured.

Very small communities are eligible for assistance from the Rural Development Programme. This is a five year programme which started in 2002 and with a total funding of 110 MEUR, largely financed by the World Bank (100 MEUR) and partly financed by Romania (10 MEUR) through in-kind contributions from municipalities.

To help Romania to meet its environmental investment challenge, an Environmental Fund was established in 2001. A Government Decision approved the organisation of the Environmental Fund, including 31 administrative positions. As of October 2002, three staff persons are in place, and over 1.2 MEUR already collected from various fees and charges.<sup>112</sup> Projects eligible for Environmental Fund financing will include those aimed at control and reduction of air, water and soil pollution, including the utilisation of clean technologies; natural resources protection; management or recycling of waste; treatment and/or elimination of dangerous waste; protection and conservation of biodiversity; education and awareness regarding the environmental protection. Again, the funding that will be available through this mechanism will be important, but not sufficient.

As section 2 has already described, according to the recent roadmap for Romania, EU resources available will expand significantly between 2004 and 2006, and the extent of such funding will be linked to absorptive capacity. But the significant assistance that Romania has already required to prepare sufficient projects for the first two years of ISPA indicates the difficulty that remains in meeting the technical requirements for qualifying for ISPA funding. Romania is currently ill-prepared to take advantage of this potential increase in funds.

Even if bilateral and other donors are prepared to support the additional technical assistance that may be needed, the capacity of the MEW, MPA and the municipalities themselves to absorb such assistance is still limited. Moreover, the EU Common Position on Chapter 21: Regional Policy and Coordination of Structural Instruments, flags some uncertainty on Romania's administrative capacity to implement Structural and Cohesion Funds in the future.<sup>113</sup> Romania's financing challenge therefore includes the need not only to bring in the additional funds from EU, bilateral, international and private sources, but to overcome the current limits on its capacity to absorb such assistance.

<sup>112.</sup> According to Law no. 293/2002 which finalised the legal framework for the Environmental Fund, financing will come from: (a) a quota of 3% from the incomes cashed by the economic operators which collect and capitalise ferrous and non-ferrous wastes; (b) the cashed sums for pollutant emissions in the atmosphere which affect the environmental factors; (c) the incomes cashed from the utilisation of new lands recycling waste landfills; (d) a quota of 3% from the value of packaging commercialised by the producers and the importers, except for those used for medicines; (e) a quota of 2% from the value of dangerous chemicals traded by the producers and importers, except for those used at medicine's production; (f) a quota of 0,5% from the value of hazardous chemicals traded by the producers and importers, utilised in agriculture; (g) a quota of 3% from the price of adjudgement of the wood bought from the National Wood's Regia and from other woods owners, legal or natural persons; (b) a quota of 1,5% from the cashed value for trading tobacco finite products; (i) allocations from the state budget, donations, grants, financial assistance from the part of natural and legal persons, Romanian or foreign; (j) the sums cashed from the restitution of credits, interests, other financial operations that use the financial sources of Environmental Fund; (k) financial assistance from international organisms; (I) sums cashed from manifestations organised in the benefit of Environmental Fund; (m) taxes cashed by the single bureaus when issuing the environmental agreement/ authorisation for activities with a reduced impact. 113. European Union Common Position CONF-RO 9/02.

### 7. Conclusions and Perspectives

The countdown towards accession started when the European Council in Copenhagen decided in December 2002 that ten new members should be granted EU membership in May 2004. The current Greek Presidency expects to host the signing of the Accession Treaties, on 16 April 2003 at the Acropolis in Athens.

For Romania and Bulgaria, the candidate countries pegged for the second wave of enlargement in 2007, the European Commission proposed in November 2002 a new roadmap for their progress towards achieving accession. The Copenhagen Council provided for new dynamism in the enlargement: it committed to continue the pace of accession negotiations on all remaining chapters, and allocated additional financial assistance with respect to enlargement, depending on absorption capacity. The European Commission is in the meantime drawing up additional plans for continuing pre- and post-accession support in the environment sector.

With the target date of accession in 2007, Romania has a few more years to meet the challenge of transforming its environmental management system to conform to the standards now prevalent in Western Europe. It is now well advanced in its process of adapting its legal system to transpose the EU obligations in the environment sector and is likely to meet its goal of full transposition of all EU requirements as of 2000, by the end of this coming year (2003).

But there is concern that the efforts of the Ministry of Waters and Environmental Protection (MWEP) to complete legal transposition are outpacing its capacity to set in place the necessary administrative structures and systems to achieve implementation. In certain sectors, it may be advisable to slow down the process of transposition, until enough practical experience is gained to determine the best regulatory approach for Romania and to ensure sufficient capacity especially among environmental officials at local level. For example, the challenge of introducing integrated permitting to almost 2000 facilities will require local permitting officials to develop new skills in evaluating whether a particular industrial facility has set in place the appropriate measures to comply with the EU standard of best available techniques (BAT) for that industrial sector.

The human and technical resources available at central and local levels for environmental management are severely constrained. The MWEP has requested additional budget for the staff it needs, but there are delays in getting approval for these additional resources. This will be a difficult issue to resolve, since the Romanian government is under great fiscal pressure. But if Romania is to move forward with EU accession, it will need to demonstrate compliance with the EU environmental requirements, including the capacity to administer these requirements, and the additional budgetary resources will need to be made available to the MWEP.

Another major challenge will be to support the many municipalities throughout Romania that will need to invest in construction and upgrading of infrastructure for drinking water supply, sewerage and waste water treatment, and solid waste management.

The MWEP has not yet been able to carry out the long-term financial planning necessary to show the EU how it will meet the EU investmentheavy requirements including for municipal infrastructure within the requested transition periods. There has been and continues to be significant technical assistance in this area, including Phare twinning, but the MWEP is finding it difficult to make some of the policy decisions needed to set investment priorities and the necessary financial planning is delayed. One of the immediate challenges will be to prepare adequate Directive-specific implementation plans and financing strategies for those EU requirements where transition periods have been requested, so that Romania can achieve provisional closure of the Environment Chapter.

In the absence of reliable cost estimate information, it is difficult to predict just how much additional funding Romanian municipalities will need to achieve EU compliance. But it is a matter of concern that Romania is already experiencing problems in being able to put forward sufficiently well-prepared projects to avail of the EU grant funding available. The amount of EU grant funding is expected to dramatically expand for both Romania and Bulgaria between 2004 and 2006, rising by an additional 20% in 2004, 30% in 2005 and 40% in 2006 compared to the average assistance received in the period 2001-2003. The actual amount of funding will however depend on the absorption capacity of each country, as well as the specific needs.

Romania expects to rely heavily on the EU grant funding in order to finance the environmental infrastructure it needs. But the experience of the first two years of the ISPA programme indicates that the Romanian institutions are not yet able to carry out the technical tasks of project preparation without additional support. Part of the problem rests with the technically demanding and rather rigid requirements of the EU for its grant funding. The assistance provided by Denmark and other bilateral donors has been very important in helping Romania to prepare its projects to qualify for the EU grant support. It is likely to need continued bilateral assistance – both technical assistance and co-financing support – for years to come to meet its investment challenge.

For Romania, the effort to comply with the EU environmental requirements will bring significant benefits including reduced mortality, lower incidents of diseases, and lower damages to buildings and crops. These benefits are estimated at between 1.27 and 9.8 billion EUR, the highest benefit amongst all the candidate countries expressed as a percentage of GDP (30.7%). FN Data extracted from the Benefits of Compliance with the Environmental Acquis for the Candidate Countries (ECOTEC, EFTEC, IEEP, Metroeconomica, THE and Candidate Country Experts, 2001).

Thus it will be important – not only for enlargement but for the humanitarian and environmental benefits that will come from compliance with the EU environmental standards – for Romania to continue its preaccession efforts in this area. The EU and other donors will need to plan for provision of long-term technical assistance and financial support, if the EU objective of a high level of environmental protection is to be achieved throughout Romania.

### 8. Summary in Danish

I december 2002 afsluttede Det Europæiske Råd på mødet i København forhandlingerne om den største udvidelse af Den Europæiske Union nogen sinde. Den 1. maj 2004 vil 10 af de 13 ansøgerlande blive en del af EU. På mødet i København bekræftede Rådet, at tiltrædelsesprocessen skal fortsætte for Rumænien og Bulgarien og satte som mål, at de to lande bliver medlemmer i 2007. Inden det kan ske for Rumænien, skal landet vise sin evne til at leve op kravene til medlemskab, herunder de miljømæssige krav.

Med 2007 som mål har Rumænien stadig nogle år til at møde den udfordring, der ligger i at få sin miljøforvaltning til at leve op til de nuværende krav i Vesteuropa. Denne temarapport behandler de administrative reformer og udfordringer på investeringsområdet, der ligger forude, hvis Rumænien skal opfylde EU's miljøkrav og gennemføre tiltrædelsesprocessen på tilfredsstillende måde. Rapporten drøfter også de prioriterede handlinger og den bistand, som er nødvendig i den nærmeste fremtid, for at Rumænien kan arbejde hen mod acquis communautaire på miljøområdet – ét af de fællesskabskrav, som er allermest vanskeligt at opfylde.

Rapportens indhold er blevet efterspurgt af de rumænske miljømyndigheder i et samarbejde med Miljøstyrelsen, som en form for afslutning på det dansk-rumænske arbejde. Formålet er at vise status og påpege muligheder for løsninger af opgaverne.

Landet gør gode fremskridt i bestræbelserne med at tilpasse sit retssystem, så EU's miljøkrav kan gennemføres i praksis, og landet vil sandsynligvis kunne nå sit mål om at gennemføre alle EU-krav, der var gældende i 2000, ved slutningen af 2003. Den hast, hvormed dette arbejde forløber, har faktisk rejst en vis bekymring for, om denne indsats vil overhale Rumæniens evne til at tilvejebringe de administrative strukturer og systemer, der er nødvendige, for at bestemmelserne kan gennemføres i praksis.

Den største udfordring for Rumænien på dette område ligger i de store krav til investeringer i forureningskontrol i industrien, i kommunal infrastruktur til drikkevandsforsyning, kloakker og spildevandsrensning, samt i håndtering af fast affald. På linie med de øvrige ansøgerlande vil Rumænien ikke være i stand til at imødekomme alle de investeringstunge krav inden tiltrædelsen. Landet har derfor bedt om at få overgangsperioder fra fem til 15 år efter 2007 for en række EU-krav, herunder i) drikkevandsforsyning, kloakering og kommunal spildevandsrensning; ii) lossepladser, emballageaffald og affaldsforbrænding; iii) industriel forureningskontrol, herunder store forbrændingsanlæg; og iv) kontrol af udledninger af VOC under oplagring.

På grund af de historisk betingede og meget omfattende industrianlæg i Rumænien, rejser EU's krav til kontrol med industriforurening særlige problemer. Størsteparten af de 2.900 anlæg, som er omfattet af EU's IPPC-krav (integreret forebyggelse og bekæmpelse af forurening), stammer fra før 1980, og der skal omfattende anlægskapital til, før de kan opgraderes til Best Available Techniques (BAT).

IPPC-kravene medfører også væsentlige nye krav til de embedsmænd, som på nationalt og regionalt plan er ansvarlige for godkendelser, påbud og forbud.

Blandt de vanskeligste og dyreste EU-krav, der skal gennemføres, er krav til drikkevand og byspildevand, som anslås at ville koste op mod 15 milliarder Euro. Størst byrde lægges på de lokale myndigheder, som skal bygge nye eller ombygge gamle kommunale anlæg. Tilsvarende vil Rumænien ikke kunne leve op til EU-kravene til miljømæssig forsvarlig affaldsforvaltning uden omfattende investeringer i moderne kontrollerede lossepladser og forbrændingsanlæg, samt systemer for indsamling og genanvendelse af emballageaffald. De samlede omkostninger i denne sektor anslås til næsten 676 millioner Euro.

Rumæniens problemer med luftkvalitet viser sig fortrinsvis i de højt industrialiserede områder. Med bistand fra Danmark og EU har Rumænien gennemført indledende vurderinger af luftkvaliteten, opbygget kapacitet til avanceret forureningsstyring, og påbegyndt udskiftningen af eksisterende automatiske målesystemer i overensstemmelse med EU's krav.

Med sin geografiske beliggenhed og biologiske mangfoldighed frembyder Rumænien meget værdifulde naturområder og arter af planter og dyr, herunder området i Donau-deltaet – Danube Delta Biosphere Reserve – som er det største og mindst ødelagte vådområde i Europa. Selv om EU's naturbeskyttelsesbestemmelser ikke medfører store investeringer, vil de pålægge landets myndigheder store administrative og økonomiske byrder.

Rumænien er kommet langt i reguleringen af genetisk modificerede organismer (GMO) og også i gennemførelsen af EU-kravene til begrænsning af ozonlagsnedbrydende stoffer. Men når det drejer sig om EU-krav til kemikalier, herunder farlige stoffer, er der stadig langt igen. Rumænien får måske behov for målrettet hjælp til at efterleve eventuelle fremtidige krav til afprøvning af kemikalier i henhold til EU-metoder og til vurdering af dertil hørende risici, inden det kan afgøres, om der er brug for yderligere kontrol.

I Rumænien er ét kernekraftanlæg i drift, og et andet er ved at blive bygget, begge af canadisk konstruktion, som anses for at opfylde vestlige sikkerhedskrav. Rumænien har allerede gjort meget for at omsætte og gennemføre EU's krav til strålingsbeskyttelse, herunder EU-direktivet om sikkerhedskrav, oplysning til befolkningen i tilfælde af hændelser med radioaktivitet, beskyttelse af eksterne arbejdstagere, og medicinsk strålebelastning.

På klimaområdet har Rumænien forpligtet sig til at begrænse udledningerne af drivhusgasser med 8 % mellem 2008 og 2012 i forhold til referenceåret 1989. I betragtning af de store muligheder for at øge energieffektiviteten og nedskæring af industriaktiviteter i forbindelse med den økonomiske overgang skulle det være muligt at nå dette mål, samtidigt med at den økonomiske vækst fremmes. Under Kyoto-protokollens Joint Implementation mekanisme (JI) har Rumænien underskrevet aftaler om at tiltrække investeringer, der skal skabe yderligere CO2-reduktioner, med Schweiz, Nederlandene, Norge, Østrig og Danmark. Teknisk bistand til Rumænien vil sandsynligvis være nødvendig i flere år fremover, hvis landet skal have den fulde fordel af JI-mulighederne.

Som mange medlemsstater skal Rumænien gøre en stor indsats for at tage passende miljøhensyn inden for energi-, transport- og landbrugspolitikken. Højt prioriterede spørgsmål i energisektoren er fremme af vedvarende energi og forbedringer af energieffektiviteten. På landbrugsområdet skal miljøhensynene integreres i en landbrugspolitik, som er forenelig med EU's fælles landbrugspolitik. Størsteparten af de rumænske landmænd har ikke råd til bekæmpelsesmidler og kunstgødning, og landet har derfor en enestående mulighed for at komme ind på markedet for økologiske produkter, forudsat det råder over systemer til certificering af sine økologiske produkter og kan distribuere produkterne effektivt. I transportsektoren er antallet af biler steget med 75 % fra 1990 til 1997, samtidigt med at den kollektive transport er faldet. Rumæniens evne til at ændre denne udvikling afhænger af landets politik og programmer for genopbygning af transportinfrastrukturen.

Et andet afgørende spørgsmål er opbygningen af institutionel kapacitet, som er tilstrækkelig til at administrere de store krav, EU stiller. Hele det rumænske embedsværk arbejder under alvorlig ressourcemangel. Selv om alle ministerier blev omstruktureret i 2001, blev antallet af ansatte samtidigt reduceret med 25 %, og derfor er en række ministerier, herunder miljøministeriet og dets 42 regionale inspektorater, alvorligt underbemandede. Ministeriet har ansøgt om flere midler til medarbejdere, men godkendelser gives altid med forsinkelse. Hvis Rumæniens indsats forud for tiltrædelse skal lykkes, skal der opbygges den nødvendige administrative kapacitet, og de nødvendige midler hertil må bevilges.

Miljøministeriet har endnu ikke færdiggjort den langsigtede økonomiske planlægning, som skal vise EU, hvorledes landet vil opfylde de store EU-investeringsbehov, herunder også til kommunal infrastruktur. Hvis det skal lykkes at lukke miljøkapitlet, skal Rumænien inden oktober 2003 udarbejde direktivspecifikke implementeringsplaner og finansieringsstrategier for de EU-krav, hvor man har bedt om overgangsperioder. Der skal i den forbindelse udarbejdes oversigter over investeringsprojekter og –omkostninger og realistiske planer for finansiering og opbygning af den nødvendige infrastruktur på miljøområdet.

EU hjælper de øst- og centraleuropæiske ansøgerlande med infrastruktur og kapacitetsopbygning gennem tre førtiltrædelsesinstrumenter. I perioden 2000-2002 har EU givet tilsagn om at stille et beløb på 260 millioner Euro til rådighed for landet fra PHARE (teknisk bistand og investeringer i fattige egne), 250 millioner Euro fra SAPARD (udvikling i landbruget), og mellem 208 og 270 millioner Euro fra ISPA (større miljøog transportinfrastrukturprojekter). Rumænien forventer i stort omfang at gøre brug af EU-støttemidler til finansiering af den nødvendige miljøinfrastruktur. Men der er problemer med at fremlægge tilstrækkeligt velforberedte projektansøgninger. Eftersom EU-støttemidlerne vil stige kraftigt mellem 2004 og 2007 og nå op på en 40 % forøgelse i 2006, er det et problem. Landet har været afhængigt af bilateral bistand for at kunne opfylde de forskellige betingelser for at kvalificere sig til EU-støtte, f.eks. forberedelse af teknisk krævende dokumentation forud for ansøgninger til ISPA om infrastrukturprojekter. Ydermere har Rumænien endnu ikke haft held til at få nogen af sine projekter gennem de udbuds- og kontraktprocedurer, som er fastlagt i henhold til EU's lovgivning om offentlige indkøb, og udbetaling af ISPA-midlerne og opbygning af infrastruktur er endnu ikke begyndt. Rumænien vil nok fortsat i de kommende år have brug for bilateral støtte – både som teknisk bistand og som samfinansiering – hvis landet skal leve op til investeringskravene.

Teknisk bistand og investeringsstøtte er især nødvendig på lokalt plan, fordi kun få kommuner har udviklet tilstrækkelig kapacitet til at imødekomme EU's infrastrukturkrav, f.eks. til drikkevandsforsyningssystemer, kloakering og spildevandsrensning. En række DANCEE-projekter til støtte for kommunen Piatr Neamts udvikling af lokale miljøhandlingsplaner og til højt prioriterede miljøforvaltningsstrukturer, bla. en moderne losseplads, kan give værdifulde erfaringer på dette område. I henhold til regeringens strategi for støtte til Østeuropa 2002 vil dansk bilateral støtte til Central- og Østeuropa ophøre, når EU udvides i 2004.

For Rumænien vil indsatsen for at opfylde EU's miljøkrav give store fordele, herunder mindsket dødelighed, færre sygdomstilfælde, mindre skader på bygninger og afgrøder. Disse fordele skønnes at beløbe sig til 1,27-9,8 milliarder Euro, det største i alle kandidatlandene udtrykt som procent af BNP (30,7 %).

Det er derfor meget vigtigt – ikke alene for udvidelsen af EU, men også for de menneskelige og miljømæssige fordele ved gennemførelsen af EU's miljøkrav – at Rumænien fortsætter bestræbelserne på miljøområdet for at kvalificere sig til EU-medlemskab. EU og andre donorer skal udarbejde planer for langsigtet teknisk bistand og økonomisk støtte, hvis EU's målsætning om et højt miljøbeskyttelsesniveau skal nås overalt i Rumænien.

# Abbreviations

AQ	Air Quality
BAT	Best available techniques
BATREF	BAT Reference Documents
CAP	Common Agricultural Policy
CEE	Central and Eastern European
DG	Directorate General of the European Commission
EBRD	European Bank for Reconstruction and Development
EDIS	Extended Decentralised Implementation System
EIA	Environmental impact assessment
EIB	European Investment Bank
EIONET	European Environment Information and Observation Net- work
ELV	Emission limit values
EOL	End of Life
EPI	Environmental Protection Inspectorate (regional-level)
EU	European Union
GD	Governmental Decision
EUR	Euro
GHG	Greenhouse gases
IAEA	International Atomic Energy Agency
ICIM	National Research-Development Institute for Environmental
	Protection
IGC	Intergovernmental Conference
IPPC	Integrated pollution prevention and control
ISO	International Standardisation Organisation
ISPA	Instrument for Structural Policies for Pre-Accession
LCP	Large Combustion Plants
LEAP	Local Environmental Action Plan
LIFE	The Financial Instrument for the Environment
MAFF	Ministry of Agriculture, Food and Forestry
MEUR	Million euros
MPA	Ministry of Public Administration
MUDP	Municipal Utilities Development Programme
MW	Mega watt
MWEP	Ministry of Water and Environmental Protection
NEAP	National Environmental Action Plan

NEPA	Proposed National Environmental Protection Agency
NGO	Non-governmental organisation
ODS	Ozone depleting substances
PHARE	Poland and Hungary Assistance to Restructure the Economy
SAPARD	Special Accession Programme for Agriculture and Rural
	Development
SMTIDP	Small & Medium Towns Infrastructure Development Pro-
	gramme
TAIEX	Technical Assistance Information Exchange Office
TAIEX TEMPUS	Technical Assistance Information Exchange Office Higher Education Co-operation Scheme between EU
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	Higher Education Co-operation Scheme between EU
TEMPUS	Higher Education Co-operation Scheme between EU Member States and Partner Countries
TEMPUS	Higher Education Co-operation Scheme between EU Member States and Partner Countries United Nations Framework Convention on Climate Change
TEMPUS UNFCCC UNECE	Higher Education Co-operation Scheme between EU Member States and Partner Countries United Nations Framework Convention on Climate Change UN Economic Commission for Europe

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