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Structural Instruments
2007 - 2013

Romania

Improving the National Framework for Preparing and Implementing Public Investment Projects

Final Report – Volume 2

Annexes on Sectors, Permitting Procedures, and Country Cases

May 13, 2013

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List of Abbreviations

AA	Appropriate Assessment
ANKO	Austrian Register of Tenders
ANRE	National Regulatory Authority in Energy
ANRMAP	National Authority for Monitoring Public Procurement
ARACO	Romanian Association of Construction Entrepreneurs
ATR	Technical Connection Avis
BP	Building Permit
CBA	Cost Benefit Analysis
CCS	Carbone Capture and Storage
CF	Cohesion Fund
CfD	Contract for Difference
CNSC	Council for Solving Complaints
DC	Communal Roads (Drumuri Comunale)
DJ	County Roads (Drumuri Județene)
DOD	Department of Public Domain
DPFC	Delegated Preventive Financial Control
DS	Municipal Roads (Drumuri Sectorale)
DTD	Detailed Technical Design
EA	Environmental Authorization
EIA	Environmental Impact Assessment
EMP	Environmental Management and Monitoring Plan
EP	Environmental Permit
E-RES	Electricity from Renewable Energy Sources
EU	European Union
FBRL	Fiscal and Budgetary Responsibility
FBS	Fiscal and Budgetary Strategy
FIDIC	International Federation of Consulting Engineers
FiT	Feed in Tariff
FMA	Financial Management Agent
FS	Feasibility Study
GC	Green Certificate
GD	Government Decision
GEO	Government Emergency Ordinance
GO	Government Ordinance
IDAs	Inter-Communitarian Development Associations
IFI	International Financial Institutions
IMC	Inter-Ministerial Council
IPPC	Integrated Pollution Prevention and Control
JASPERS	Joint Assistance to Support Projects in European Regions
LEPA	Local Environmental Protection Agency
MA	Management Authority
MBT	Mechanical Biological Treatment
MC	Ministry of Culture
MECC	Ministry of Environment and Climate Change
MO	Monitor Official (The Official Gazette)
MOPF	Ministry of Public Finance

MOTI	Ministry of Transport and Infrastructure
MRDT	Ministry of Regional Development and Tourism
NEPA	National Environmental Protection Agency
NES	National Energy System
NGO	Non-Governmental Organization
NREP	National Renewable Energy Plan
NRF	National Road Fund
NSRF	National Strategic Reference Framework (in Slovenia)
OP	Operating Program
OP - ETID	Operational Program of Environment and Transport Infrastructure Development
OPFC	Own Preventive Financial Control
PA	Procurement Agent
PFiT	Premium in Feed Tariff
PFL	Law 500/2002 on Public Finance
PFS	Pre-Feasibility Study
PIFC	Public Internal Financial Control
PIM	Public investment Management
PIUs	Project Implementation Units
PPA	Purchasing Power Arrangements
PPA	Purchasing Power Agreements
PSA	Primary Spending Authorities
RAS	Reimbursable Advisory Service
RC	Road Company
RDA	Regional Development Agency
REPA	Regional Environmental Protection Agency
RES	Renewable Energy Sector
RNCMNR	Romania National Company for Motorways and National Roads
RO	Renewable Obligation
ROCs	Regional Operating Companies
SEA	Strategic Environmental Assessment
SOP	Sector Operational Program
SOP - T	Sector Operational Program - Transport
TEC	Technical and Economic Committee
TOC	Total Organic Components
TORs	Terms Of Reference
TSO	National Transmission and System Operation
UC	Urbanism Certificate
UCVAP	Central Unit for Public Procurement Verification

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I. BACKGROUND ON THE ENVIRONMENT SECTOR IN ROMANIA

A. Programs that finance environmental sector projects

- **The multi-annual priority environment and water management Programs** (GO no. 40/2006 and GD no. 1267/2006) providing the general framework for financing of the following type of investments:
  - cleaning of mine dumps;
  - rehabilitation of highly-polluted areas;
  - rehabilitation and upgrade of water and waste water infrastructure;
  - solid waste management systems;
  - dams and flood prevention works;
  - seashore rehabilitation;
  - climate change mitigation measures;

- **The National Program for Infrastructure Development** (GEO no. 105/2010) – currently suspended, probably to be soon cancelled – ensuring state budget and private financing for:
  - water and waste water infrastructure;
  - infrastructure for natural risk prevention.
  -
- **Rehabilitation of water supply, sewerage networks, DWTPs and WWTPs in municipalities with less than 50,000 inhabitants**, ensuring IFI loan and state budget financing for the aforementioned type of works;
- **The Program regarding modernization of local roads and drinking water supply in rural areas** (GD no. 577/1997), ensuring state budget, external loan and local financing for the aforementioned type of works;
- **The governmental Program regarding drinking water supply in rural areas** (GD no. 687/1997), ensuring state budget, external loan and local financing for the aforementioned type of works;
- **The infrastructure development Program in rural area** (GO no. 7/2006), ensuring state budget financing for:
  - drinking and waste water networks;
  - solid waste collection points.

B. Stages of Project Preparation

1. While the main stages of project preparation and the associated legal requirements are cross-cutting among all sectors, administrative procedures in respect of project approval and selection might differ significantly depending on the promoter's legal status and type of financing. Compared with best practice, the process and procedures in the environment sector can be categorized as follows:

- **Pre-feasibility Study (PFS)**
  - rarely (if ever) undertaken;
  - priority investments selected under SOP Environment are based on detailed master planning exercises at local level

- **Feasibility Study (FS)**
  - detailed requirements/guidelines in respect of the Feasibility Study's content for various sub-sectors in the case of projects targeting financing under SOP Environment;
  - no specific requirements (other than those imposed through GD no. 28/2008) for the other projects

- **Financing stage**

2. Procedures might differ from case to case, depending on the project's promoter legal status and financing sought. Some details in respect of the procedural steps to be performed are being provided below:

- Projects financed through the state budget:

  - Approval of the Feasibility Study and associated technical and economic indicators by the Technical-Economic Committee of the project promoter/Beneficiary (if any)

  - Approval of the FS and associated indicators by the deliberative structure of the relevant local authority (local council, county council)

  - Approval of the FS and associated technical and economic indicators by the Inter-ministerial Council for Approving Public Works and Dwellings (for projects larger than 28 million RON) or by the relevant credit release authority/line ministry (for values less than 28 million RON) as per the relevant provisions of Law no. 500/2002 and GD no. 335/2011

  - Drafting, promotion and approval of the Government Decision for the approval of the technical and economic indicators of the project (for projects larger than 28 million RON);

- Projects promoted by local authorities / institutions under their authority / intra-community development associations / regional operators under the SOP Environment:

  - Approval of the Feasibility Study and associated technical and economic indicators by the Technical-Economic Committee of the project promoter/Beneficiary (if any)

  - Approval of the Feasibility Study and associated technical and economic indicators by the deliberative structure of the local authorities involved (if more than one)

- Approval of the FS and associated technical and economic indicators by the Intra-community Development Association / Regional operator

- Approval of the project by the relevant Managing Authority and signing of the Financing Contract

- Approval of co-financing from the Cohesion and Structural Funds through Decision of the European Commission (for major projects)

Detailed Design and Construction Stages

3. This sector has no particular requirements or particulars as compared with the other sectors

Relevant stages and process mapping

4. Due to the significance in scale of the water and waste water sector, the project cycle mapping exercise will use as its reference projects financed under SOP Environment Priority Axis I *'Extension and modernization of water and wastewater systems'.*

Relevant actors and their main roles and responsibilities

5. **The local authorities**:

- owner of the assets resulted from the project
- approve the technical and economic indicators for those pieces of investment falling under their territorial competency
- approve and ensure co-financing
- issue various permits/authorizations, as the case might be

The Inter-Communitarian Development Association

- carries out on behalf of its members part of their competences, prerogatives, rights and obligations in respect of the water and waste water services especially with regard to general strategy, investments and tariff policy
- approves the feasibility study and the associated technical and economic indicators based on prior approval from the competent local authorities
- The Final Beneficiary (the water and waste water operator)
- responsible with the project preparation (though such responsibility was shared with the Ministry of Environment at the time the current investment package was prepared)
- ensures financing and contracting/implementation of specialized services for project preparation
- approves the FS within its internal Technical and Economic Committee and further promotes the documentation for financing approval
- responsible with project implementation
- awards and manages the services, works and supply contracts within the project

6. **Various public or private bodies** (competent environmental authority, Romanian Waters, State Inspectorate in Constructions, Ministry of Culture, various utilities owners, etc.).

7. Issue various permits/authorizations at Feasibility Study, Detailed Design, works implementation and taking over stages, as the case might be.

The National Authority for Monitoring Public Procurement (ANRMAP)

- ex-ante approval of tender documents;
- ex-post control of the tender procedure

The Central Unit for Public Procurement Verification (UCVAP)

- verification of the tender procedure
- the National Council for Solving Complaints (CNSC)
- solves the complaints raised at tender stage

The Competent Court of Appeal

- Resolves complaints against CNDC decisions;
- The Intermediate Body
- regional directorate within the Managing Authority;
- carry out specific duties delegated by the MA in respect of projects' selection and approval, monitoring, certification of expenditure and financial control;

The Managing Authority

- final approval of projects at national level;
- ensures financing, monitoring, certification of expenditure and financial control of projects' implementation;

The Certifying Authority

- certifies expenditure to the EC and transfer reimbursements to the MA
- might perform on-the-spot controls;

The Audit Authority

- performs audits of the projects

The European Commission

- final approval of major project (decision to grant assistance);
- might performs audits (both systemic and on project basis);
- Supply, Services and Works Contractors
- Carry out implementation of the contracts awarded by the Final Beneficiary.

II. BACKGROUND ON THE TRANSPORT SECTOR IN ROMANIA

1. Romania's national road network is relatively small (16,690km) and in a reasonably good condition according to recent statistics[1]. The fact that most of the network is rated in good or very good condition in government statistics may have to do with the low age of the national roads rather than because of timely operation and maintenance[2]. The national roads are classified as motorways[3], main roads and secondary roads, and are owned by the state and are administered and managed by the national road company[4] under a concession agreement with MOTI. Other road networks have a total length of approximately 67,013 km and are owned by the counties and communes and, in most cases both are managed by the equivalent of a technical office under the County Councils. These roads are in worse conditions, only 11,412 km are modernized and 20,914 are with light asphalt pavement. Finally, there are about 961 km of urban and municipal roads which are considered national roads but are managed by urban municipalities (Annex 3).

2. The **national Road Company (RC) is overstaffed but nonetheless in need of capacity building and operational assistance** according to a recent study covering a World Bank study called "Functional Review of the Transport Sector**"** (FR). The RC employs over 6,500 people, of whom about 550 are at the Headquarters in Bucharest and the remaining 6,000 in seven Regional Offices. Employees are not subject to civil service laws and salaries. However, recruitments of senior staff and promotions are not always based on merit but on longevity of service and sometimes possibly political connections influence appointments.

3. **The quality of public expenditure programs for the road sector is poor.** During a period of severe fiscal stress, Romania's road investment budget is many times greater than what is actually possible to disburse within a reasonable time frame. The Functional Review (FR) pointed out that (among others) the road budget mostly contains projects that are 'not funded, not started or uncompleted'. The FR highlighted shortcomings in management of national roads and identified remedial actions for better management of public funding.

4. The FR focused mainly on institutional and corporate governance issues and the priorities for capacity development of the road company, implementation of which normally takes a long time. Attention was also given to operation and maintenance of national roads: (i) with a proposed future delegation to the seven regional offices of the day-to-day management of the highway network; and, (ii) a proposal to use longer term maintenance contracting with the private sector as key recommendations.

5. **The use of European Cohesion and Structural Funds available to the Romania's road sector could have significantly boosted the funding** of highway investments to obtain maximum leverage from scarce domestic funds. However, the road company has been unable to give immediate priority to such investments and to utilize EU grants effectively and there is likelihood that a large fraction of EU funds would not be disbursed before the end of the implementation grace period (end Dec 2015) after which the funds could be lost to Romania.

6. This chapter will look at road sector issues and various options for increasing absorption of EU funds for roads in the short term under the SOP-T and the ROP (Axis 2) including increasing

[1] 17.18 Table - Public roads, at territorial level on December 31, 2011 - Transport, post and telecommunication - Statistical Yearbook 2012 –.

[2] Ref. Functional Review of the Transport Sector.

[3] Incl. Expressways and E-classified highways

[4] National Company for Motorways and National Roads (RNCMNR)

management capacity significantly in the short term to strengthen implementation of and disbursement on approved and ongoing projects.

Box 2.1: The road network in Romania

Romania is the second largest country in Central and Eastern Europe, having a total land area of 238,391km2 and a population of about 21,431 million. Administratively, Romania is divided into 41 counties + Bucharest, 2861 communes and 320 towns and municipalities. The total length of the public road network is about 82,000 km (excluding urban and municipal streets), consisting of:

15,877 km of national roads including
- 467 km of motorways

67,013 km of county and communal roads (less that 1650 km per county on average)

The number of cars in Romania is approximately 300 per 1000 inhabitants against 170 in 2000. In 2000, the average annual daily traffic on the national road network was 4,540 vehicles per day, out of which 1,038 were heavy vehicles.

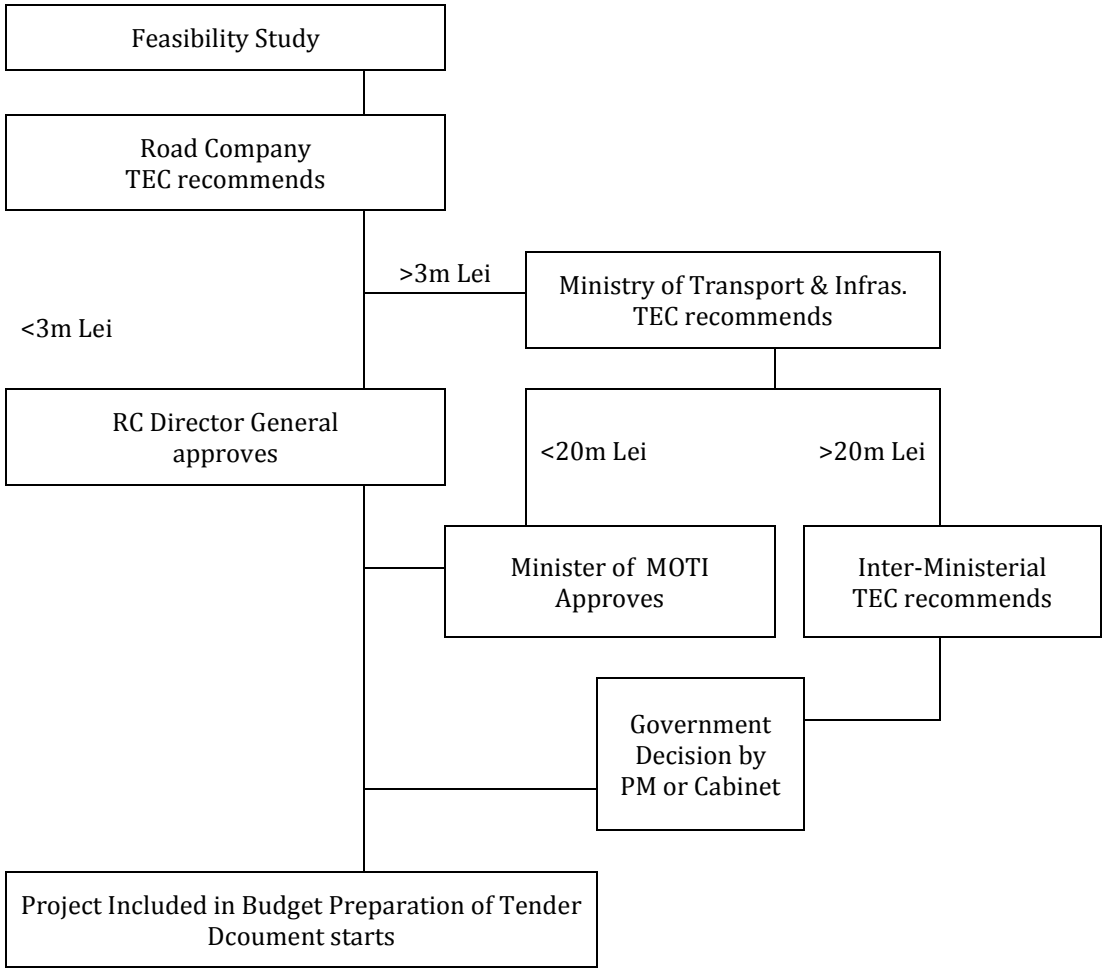
The total expenditures (in mil. lei) on motorways, streets and roads over the last three years were:

	Streets and roads	Motorways
2009:	12,137.1	1028
2010:	11323.2	682.2
2011:	13137.9	780

The national road budget for 2012 was about EUR 1.7 b including foreign funding. What the counties, communes and municipalities are spending annually on roads is not easily available. But the Ministry of Regional Development and Tourism (MRDT) is budgeting annually about EUR 80 m for county roads over the state budget. In addition, MRDT has been allocating about EUR 1.06 billion from the ROP over the last 6 years for county and local roads with EUR 750 m being provided by the EU as grant funding.

7. The below flowchart shows the steps an EU funded project goes through from an approved (by a government decision) FS to the preparation of the tender documents. Also in this case, the FS is often the only project preparation study carried out before tendering and also in many cases starts with an update of an old study. But the consultant and the Beneficiary (contracting authority) are often provided with support from JASPERS[5] and this helps in improving the quality of preparation work. However, JASPERS only support the preparation and application process for projects estimated to cost more than 50m € and its support ends when approval by EC is given.

State Budget-Funded Highway Investments



PM - Prime Minister
TEC - Technical-Economic Committee

5

EU-Funded Highway Projects

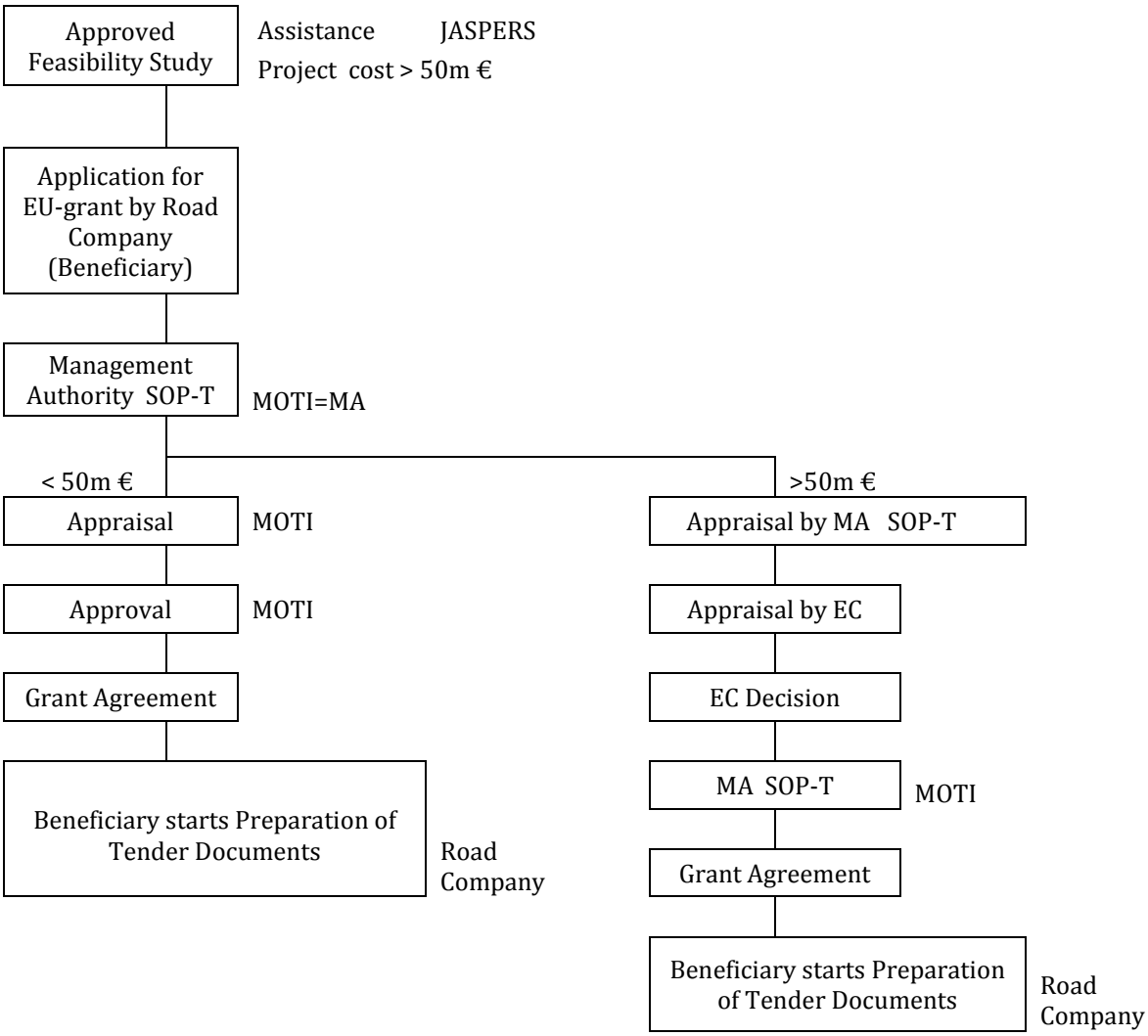
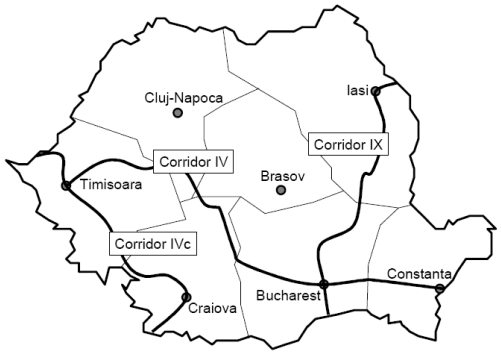


Figure 2.1: Regional Road Projects (county or others) funded through ROP - MRDT:

Road Sector Structure in Romania: Owner, Administrator, Manager, Supplier

Road Network	Owner	Administrator	Manager	Suppliers
National roads	State	RNCMNR, HQ	RNCMNR, HQ and 7 Reg. offices	Consultants and contractors
County roads	County	County Councils	County Technical Dep.	Consultants and contractors
Communal roads	Communes	Mayor's Office	Commune/County Technical Dep.	Consultants and contractors
Urban streets	Municipality	Municipal Council	Municipal Public Works Dep.	Direct Labor/ Private sector

Administrative Regions and Motorway Corridors



Feasib. Study	Adm.units in Reg.1	Application for funding prepared		Appraisal/checking by MRDT - RDA1				
Feasib. Study	Adm.units in Reg.2	Application for funding prepared		Appraisal/checking by MRDT - RDA2				
Feasib. Study	Adm.units in Reg.3	Application for funding prepared		Appraisal/checking by MRDT - RDA3				
Feasib. Study	Adm.units in Reg.4	Application for funding prepared		Appraisal/checking by MRDT - RDA4			MRDT approves funding Reg. 1-8	
Feasib. Study	Adm.units in Reg.5	Application for funding prepared		Appraisal/checking by MRDT - RDA5				
Feasib. Study	Adm.units in Reg.6	Application for funding prepared		Appraisal/checking by MRDT - RDA6				
Feasib. Study	Adm.units in Reg.7	Application for funding prepared		Appraisal/checking by MRDT - RDA7			Project incl. Budget Prep. of Tender Documents starts	
Feasib. Study	Adm.units in Reg.8	Application for funding prepared		Appraisal/checking by MRDT - RDA8				

Local Authorities and Roads Management – Romania

8. Public roads are divided into the following categories:

a) National roads;

b) County roads;

c) Local roads and streets.

9. National roads are owned by the state and provide connections from the capital to county urban centres, connection between these urban centres and to neighbouring counties. They include:

a) motorways;

b) expressways;

c) European national roads (E roads);

d) main national roads;

e) secondary national roads.

10. County roads (DJ) are owned by the respective counties and provide links between counties, municipalities, and centres of towns and communes.

11. Local roads and streets belong to the communes and municipalities within which they are located and can be classified as Communal roads (DC) and Municipal streets (DS).

12. National, County and Commune roads keep their classification and ownership when crossing municipal boundaries. Reclassification of roads involving national roads is done through a Government decision based on proposal by the road authority taking administration. Reclassification of county roads into a local road or vice versa is done by the county council.

Road administrations

13. Ministry of Transport and Infrastructure is delegated the authority to administer state ownership of national roads. The National Company of Motorways and National Roads in Romania – SA delegated the managerial responsibilities for national roads through a concession contract with the MOTI. Sections of national roads located inside a municipality or county centres are administered by the county council or city council. Sections of county roads located in within urban centres will be administered by the respective city councils. To achieve priority projects of county and local interest, the Ministry of Regional Development and Tourism may be empowered to manage implementation of such works.

Organization of local authorities and road management

14. **County level:** Maintenance responsibilities cover routine and periodic maintenance (resurfacing), winter maintenance and emergency maintenance works. The County is in charge of Maintenance of the County Roads (DJ) and formally also for the Commune Roads (DC). Road management in the counties is different from one county to another. In some counties it is the Department of the Public Domain (DOD) who is in charge of county roads and bridges, in other counties it is a Technical Department for County Roads and Bridges who is in charge.

15. In some counties the Department has no equipment and therefore contract out the execution of maintenance to the private sector. In other counties the Department has equipment and carry out maintenance of its county roads using its own staff under a multiyear contract with the county council, although quality of works is variable. In some counties the works of the Departments also include maintenance of Commune Roads (DC). In some counties the Department provide technical assistance to the Communes related to maintenance of their road network (DC).

16. Commune level: The organization of maintenance at the commune level is simple. The Vice-Mayor is in charge of the maintenance of DC Roads. He is generally not assisted by staff for this task but can ask for assistance from persons receiving 'Social help' according to the provision of the law. The principle is that for the Commune's residents who are without resources the Commune has to provide them with monetary assistance against labour (for one month of assistance the beneficiary has to give 72 hours of unskilled labour for road maintenance). The work includes clearing of ditches, culverts and pipes; cutting vegetation, filling potholes, etc.

17. Several Communes own quarries or material sites. However, the quality of the aggregates is often below acceptable standards for use as material for the pavement structure. Communes some time sell construction material to the private sector against equipment being provided in return for the purpose of maintenance. The Communes also mobilize residents for their equipment or for manpower in case of emergencies, for winter maintenance after large snowfalls and to shape road formations on earth roads.

Organization at the county level

18. As an example, in the case of County of Salaj the County Council has a technical department in charge of the maintenance of the county road network. This department is also in responsible for:

1. Gathering information and prepare draft annual and monthly reports (investment, repairs, maintenance) according to a list of requirements prepared by the Ministry of Transport;
2. Preparing bidding documents for execution of road works included in the County Council budget and for consultancy contracts for design of such projects;
3. Providing site supervision and be responsible for all road and bridge works financed by the County Council, and support local (commune) councils in this respect;
4. Organizing and participating in final acceptance of road works, act as secretariat of the handing over committee and pursue any snag list;
5. Being a permanent liaison between the Employer (County Council), Designers, Contractors and the State Construction Inspectorate to facilitate normal contract implementation;
6. Working with local councils to help efficient administration of local roads;
7. Technical-economic documentation updates for projects;
8. Verifying construction methods, quality of materials used and work performed and make proposals to stop work when necessary, requesting, if necessary, quality assurance department collaboration;
9. Participating as member of the tender committee for evaluation of design proposals and tenders of roads and bridges;
10. Providing technical assistance and supervision of road infrastructure works and preparing and organizing the acceptance of such works executed through rural operational programs at the request of local commune councils;
11. Preparing and submitting to MOTI reports on the state of works of paving of roads;

Figure 2.2: Romania Motorways Construction Program

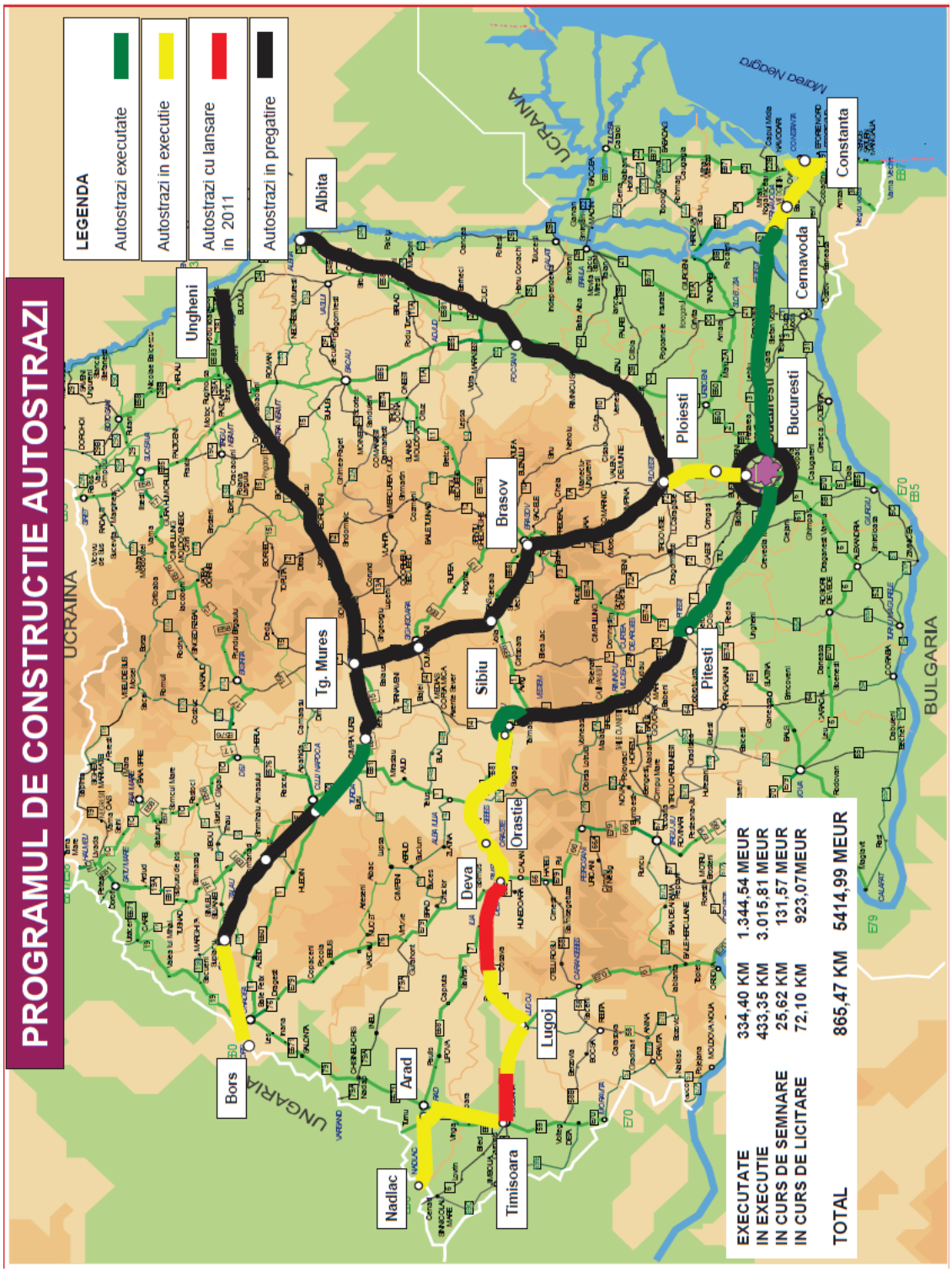


Table 2.1: National Road Network of Romania

	Road Network (NR+Motoways) from Romania 01.01.2013					
	DRDP (Regional Offices)	NR(km)	Motorways (Mw) (km)	NR+Mw (km)	Total NR+Mw (RNCMNR + Municipalities) (km)	Under admin of Municipalities (km)
1	Bucuresti	2,430.186	206.376	2,636.862	2,851.204	214.342
2	Craiova	1,969.442		1,969.442	2,051.702	82.260
3	Timisoara	1,957.875	21.750	1,979.625	2,085.847	106.222
4	Cluj	2,536.249	51.700	2,587.949	2,761.729	173.780
5	Brasov	1,710.080	16.650	1,726.658	1,857.637	130.979
6	Iasi	3,284.479		3,284.479	3,487.477	202.998
7	Constanta	1,522.086	170.850	1,692.936	1,743.373	50.437
	Total CNADNR	15,410.325	467.326	15,877.651	16,838.969	961.318

Table 2.2: Summary Table of Status for Roads under SOP-T 2007-2013

Summary Table Shouing Current Status for Motorways and National Roads in SOP-T 2007-2013 (1Euro = 4,4385 Lei)											
From SOP-T Priority Axis 1.1 and 2.1	EU ALLOCATION 2007 - 2013		PROJECTS APPROVED				PAYMENTS TO BENEFICIARIES				
	Euro	Lei	Number	EU contribution (Lei)	Total value of projects (lei)	% EU contr.	Pre fin	Reimbursments (Lei)		Total Payments (Lei)	% EU contribution
								EU contribution	Nat. Budget		
Column No.	*1*	*2*	*17*	*18*	*19*	*20*	*28*	*29*	*30*	*31 = 28+29+30*	*32*
TEN-T projects axis 7 DMI 1.1	1,670,793,634	7,415,817,545	7	5,812,725,658	11,115,167,594	78.38	0	1,376,266,978	0	1,376,266,978	18.76
Other National Roads DMI 2.1	710,054,016	3,151,574,750	14	1,664,675,817	3,221,268,509	52.82	0	234,131,344	0	234,131,344	7.43
Totals in Lei		10,567,392,295		7,477,401,475	14,336,436,103			1,610,398,322		1,610,398,322	
Totals in Euro	2,380,847,650	2,380,847,650		1,684,668,576	3,230,018,273			362,824,901		362,824,901	

III. BACKGROUND OF THE RENEWABLE ENERGY SECTOR

Renewable Energy Sector (RES)

1. The renewable energy sector, given the specific nature of electricity, cannot be taken out of the context of the overall operation of the electricity sector and the grid of the country. The renewable sources which are the second and third most abundant in the country – wind and solar - are characterised by their intermittency, which requires that they have to be complemented by equal conventional sources of electricity and the accompanying transmission grid in order to balance the system.[6]

2. The renewable energy market expanded in Romania due to the favourable legal framework. The national support scheme for RES was set up in 2005, at the same time when the first three producers of renewable energy were officially registered as such (one hydropower plant and two wind farms). This action was a direct result of EU Directive 2001/77/EC, which was transposed into national legislation through Government Decision no. 443/2003 and subsequently through Government Decision no. 1892/2004, amended by Government Decision no. 958/2005, which introduced the national scheme for promoting renewable energy. In order to make the energy sector even more attractive for potential investors, the national support scheme for renewable energy was amended in 2008 so that the period of time for which it was in force to be extended and the GC price to be increased. This amendment was done by Law no. 220/2008.

3. The current legal framework for Romania's renewable energy sector is driven by EU Directive 2009/28/EC, setting mandatory quotas of renewable energy in the final consumption of each member state. The Directive has been transposed into Romanian legislation through Law no. 139/2010, bringing thus amendments to Law no. 220/2008, subsequently improved by Government Ordinance no. 29/2010, Government Emergency Ordinance no. 88/2011 and Law no. 134/2012. While the EU Directive target for 2020 is 24% RES in gross final energy consumption, the nationally assumed target for 2020 is 38%. The energy regulator ANRE designs, establishes and monitors the methodologies regarding the functioning of the "green" energy market.

Box 3.1: The promotion mechanism for renewable energy in Romania:

- Annual quota of energy consumption supported
- Different number of Green Certificates for each mWh produced, depending on technology; 6 Green Certificates for photovoltaic energy, 2 Green Certificates for wind energy, until 2017[7][8]
- Values for Green Certificates: cap – €55; floor €27
- Starting 2011, Green Certificates value adjustable yearly with Euro-zone previous annual average inflation rate
- The support mechanism is granted for 15 years

[6] Hydro is the most abundant source of renewable energy in Romania.

[7] http://www.anre.ro/documente_tot.php?id=388

[8] http://www.opcom.ro/opcom/uploads/doc/PCCV/PCV_Descriere_EN.pdf

Compared to other EU countries where the feed-in tariff system is used, Romania has in place an annual quota mechanism for energy consumption supported and subsidies taking the form of green certificates[9].

Box 3.2: Mandatory Quota/Green Certificates and Feed-In Tariff systems

The *Mandatory Quota* regime is defined as that supporting scheme for production of renewable energy where energy suppliers are obliged to buy pre-defined mandatory quotas of renewable energy with the purpose of delivering it to their clients.

The G*reen Certificate* (GC) is the proving document that a quantity of 1 mWh of renewable energy was dispatched into the grid. Theoretically, GCs have unlimited validity and they could be freely traded separately from its related electricity in the market for bilateral contracts and/or the centralized market for GCs (on a monthly basis).

Electricity suppliers are obliged to prove that they reached the pre-defined mandatory quotas of renewable energy through the number of green certificates acquired annually, which must be equal to the product of the pre-defined yearly mandatory quota and the electricity supplied annually to their clients. Penalties apply in case the quota is not met.

The Feed-In Tariff system involves a policy mechanism to support investment in RES technologies by granting three key elements: guaranteed grid access, long-term contracts for the electricity produced and purchase prices based on the cost of generation.

Comparison between the Mandatory Quota/GC and Feed-In Tariff systems:

	Mandatory Quota + GC	Feed-In Tariff
Efficiency	Reaching RES targets is guaranteed through mandatory quotas. Penalties are applied in case quotas are not met. RES targets are transparent. Administrative rules for trading GCs are more complicated.	Tariff is regulated, costs could be distributed across all consumers so that financial effort is bearable in the long run. No guarantee RES targets are reached Transparent mechanism allowing identification of all beneficiaries. Easy to be applied. Allocation of costs and for distribution could be complicated.
Cost Efficiency	Can be cost efficient of there is excess of RES energy supplied. In case of deficit, because of penalties, prices increase. There are administration	Not cost efficient, but there are no administration costs. Producers are not directly interested to produce cheaply.

[9] In the EU, there are 6 countries having this mechanism in place: Romania, Italy, Poland, Sweden, Belgium and the UK (ROC for large and FIT for small renewable projects) according to COM(2011) 31 final "Renewable Energy: Progressing towards the 2020 target".

	costs.	
Security for Investors	Insecurity for investors comes from potential price fluctuations. Solution could be long term, forward or futures contracts.	Ensures absolute security for investors for recovering their investment through the tariff mechanism. Long term contracts (7-10 years) are essential.
Competition	Fully in line with free energy market. The parallel GC market does not allow impacts on the real energy market.	Does not allow competition.

4. As a consequence of the favourable legal system, Romania registered the second highest rate of increase in the share of electricity from renewable energy in gross final energy consumption in the EU (after Estonia) during 2006-2010. The percentage increased from 17.1% in 2006 to 23.4% in 2010, compared to an EU-27 average of 12.5% in 2010 (and against the EU Directive target of 24% by 2020). The installed capacity for electricity generation from RES (including hydropower) increased from 6.37 GW in 2000 to 6.88 GW in 2010 (with hydro counting for about 94% and wind for about 5.5% of total installed capacity), due to increases in wind farms and small hydropower plants.

5. According to ANRE, there were 90 licensed RES producers in Romania, out of which 42 in wind farms, 32 in hydropower plants, 4 in biomass projects and 4 in solar projects, in 2011. The cumulated installed capacity as of the end of 2011 for all 90 producers represented 1,236.65 MW, out of which 830.23 MW in wind farms, 380.33 MW in hydropower plants, 25.08 MW in biomass projects and 1.01 MW in solar projects.

6. Given that Romania has declared development of renewable energy a priority in the National Strategy for the Energy Sector and In order to meet its EU obligations, the renewable energy sector in Romania has been included in the framework of support by the European Structural Funds. These subsidies are compatible with the specific support regime for renewable incentives in Romania. The legal framework provides for a mechanism of dealing with cumulating state aids for public sector beneficiaries and allows a reduction in green certificates granted to state aid beneficiaries so that a constant internal rate of return according to EC rules is preserved. In case of overcompensation (an increase of internal rate of return by 10% compared to calculations authorized by the EC), the number of green certificates is meant to be reduced.

7. The generous national system of incentives has brought about an unsustainable boom in renewable energy projects. The initial EU Structural Fund amount allocated for renewable energy projects under the Operational Program "Increase of Competitiveness" was increased by 50%, since for the second financing call the value of applications had been almost three times more than the available initial funds.

Box 3.3:- Generous incentives for renewable energy – a cautionary tale – the examples of Bulgaria and Germany

Romania has adopted a slightly different regime for support of renewables – Green Certificates (GC) – in contrast to the most widespread support scheme in Europe – Feed-In-Tariffs (FIT). If the details differ, the fundamental principle is the same – the end users pay.

The arguments behind Romania's strategic choice with respect to the mechanism chosen to support RES have been price competition, production efficiency and technology innovation. However, overgenerous tariffs, or allocation of green certificates per mWh of renewable energy generated, lead to an over- exuberant market and applications to construct an unsustainably large renewable energy sector. In Romania, with (per kWh) 2 GCs for wind and 6 GCs for solar PV, the applications reached 40,000 MW (with a maximum demand of 9,000 MW).

A high tariff level will cause overheating in the sector. Such an incentive was justified in Germany in the early 2000s, in order to develop local solar and wind expertise and export it around the world. Indeed, Germany became a leader in solar PV technologies and exported its technology and equipment for several years, before the generous incentives attracted (and partially created) cheaper Chinese producers. In the end, it was estimated that the German electricity users were subsidising the Chinese export of solar panels in the tune of € 5 bn a year, before the German Government reduced solar PV tariffs from 59 c/kWh in 2001 to 17.8 – 13.5 c/kWh in 2012. Meanwhile, Germany installed more than 25,000 MWp of solar PV installations, which generated 18,000 gWh electricity with an average efficiency of 720 mWh/y per installed MWp. This has had a noticeable social impact - from Jan 2010 end-users pay 70% more for renewable energies through their electricity bills – from € 0.02 to € 0.035 per kWh. The average household has seen its *additional* electricity costs rise from € 84/y to € 144/y (before taxes). The total to-date additional cost of renewables in Germany is estimated at between € 10 and € 13 bn per year.

In another example, the relatively high tariffs for wind and solar in Bulgaria in 2008 – 2010 resulted in applications to build 14,000 MWe of wind parks and 4,500 MWp of solar PV installations. At the same time, the installed available power in the country was around 7,000 MW and the low and peak demand varied between 2,000 and 6,000 MW. As the implementation of such massive renewable projects would have had a very serious impact on the tariffs for electricity, the State Commission for Regulation of Water and Electricity Tariffs reduced the solar PV tariff by 40% in 2011 and by 54% in 2012 to approximately 11.5 c/kWh. Furthermore, a grid access charge was introduced, which requires the existing solar PV to pay between €70 – 100/mWh for access to the grid and the wind installations € 7 – 10/mWh.

By the admission of the Bulgarian PM "… if constructed these renewable projects would bankrupt the country". And indeed - one of the reasons for the recent (February 2013) resignation of the Bulgarian Prime Minister was the increased price for electricity, which led to widespread protests. As it has been seen in Europe – UK, Spain, Bulgaria, Czech Republic – long term tariffs and incentives create a very long commitment and financial liability to the country. Any change in economic situation and reduced growth pose restrictions to the budget, a reduction of public spending and worsening of the social conditions. Increased electricity payments to "pay for luxury" – i.e. renewables- is easy to exploit politically and present a temptation to the authorities to revise the promised long term tariffs, or incentives, with the associated adverse impact on investor confidence.

Box 3.4: Sustainability and affordability of accelerated deployment of renewable energy in Romania

ANRE confirmed that at the end of 2012 there are approximately 1905 MW wind and 1.2 MWP solar PV installations connected to the grid.

There is a concern that if all applications (for more than 40,000 MW, which would cost in excess of €40 bn) are connected, the cost of electricity will rise (it has risen by 8% in 2012, the contribution to the rise by renewables being 6.5 €/mWh) by 14 €/mWh in 2015 and 30€/mWh in 2017. Such increases may cause social problems in addition to harming economic growth.

The interviewed financial institutions and investors admit that the renewable sector shows signs of overinvestment. Many investors are attracted to Romania to benefit from the over-generous incentives regime. A simple calculation shows that at a 70:30 debt/equity leverage, an average wind project benefiting from 2 GCs with a median price of €40/GC will achieve an average IRR in excess of 30%. Solar Photo Voltaic (PV) projects, which benefit from 6 GCs per MW electricity generated, will achieve an IRR of 45% in some years. All these profits are ultimately paid for by the electricity users.

Unscrupulous developers, who do not contribute any significant equity, are developing and offering large projects – 200 MW solar in Giurgiu, 600 MW wind in Dobrogea (which requires the construction of a 250km transmission line financed by public funds), etc. An investor is suing ANRE to allow him to use 50% EU funding and benefit from 2 GCs, which will give him an IRR of 52%. Such speculative and highly debt leveraged projects deter serious long term investors.

Some financial institutions raised the question of the generosity of the current electricity support mechanism. In their opinion, this leads to a speculative bubble market and such incentives need a more balanced approach in order to avoid overheating the market.

Box 3.5: Energy Sector Key Study: Private company

Romelectro is a beneficiary of EU funds for a 1.5MW hydro power plant.

"Voineasa I, II and III MHPPs were built before 1987. In 2006, following an open tender initiated by Hidroelectrica, Romelectro became the owner of this hydropower capacity. Based on the original project, the energy to be produced for an average hydrological year should have been 5,600 mWh. However, between 1987 and 2003, the average energy generated was 1,939 mWh/year, representing less that 35% of the designed production.

For harvesting the renewable potential of Mănăileasa Creek, it was necessary to replace the old generation capacities with new turbines and electrical equipment, based on a project conceived in such a way as to capitalize – under maximal efficiency and performance conditions – the existing potential of renewable resources. In the new conditions, the total green energy produced would reach more than 5,000 mWh/year, Romelectro becoming a green certificates supplier.

The Project was co-financed with EU Structural Funds by the Ministry of Economy, through the Operational

Programme 'Increase of Economic Competitiveness'. The application for EU funding was made in 2008 for a total project cost of € 2.2m and the expected grant was estimated at € 1m. The final disbursed grant was € 0.58m and it took 18 months to do the required tendering, prepare documentation for the application, implement the project, disburse the grant, etc.

The beneficiary concedes that in fact they have lost money making a grant application – had they proceeded completing the plant with their own money, they would have completed it 18 months earlier and would have recovered the grant of €0.58m with 8 months production of the power plant. So their conclusion was that they would not apply again, as the "free" money they received in fact resulted in a net loss for the company.

Source: http://www.romelectro.ro/romelectro/ar2010-en/projects/investment-projects/voineasa-small-hydro-power-plant

Box 3.6: Permits, Agreements, Approvals for Wind Power Projects (WPP)

No	Permit/ Agreement/ Approval	Issuer	Required documentation (law)	Necessary fees and tariffs	Issuance period	Documentation Validity
A	**Stage I Investment Approval Phase (Feasibility Study)**					
1	Integrated Environmental Approval	Local Public Agency for Environment Protection	Documentation for obtaining Integrated Environmental Approval (Law no.645/2002 and Order MMGA 860/2002)		70 days	max.2 years
2	Waters Management Permit	Romanian Waters National Administration	Documentation regarding Waters Management Permit (Law 107/1996 modified and completed by GD 3/2010 and updated by GD 64/2011 and Order MMGA 1141/2002)	Authorisation tariffs are established by Romanian Waters National Administration	15 days	max. 2 years

3	Urbanism Certificate	Municipality	Documentation regarding Urban Certificate (Law no. 50/1991, modified and completed by Law no. 453/2001)	Computed based fees on beneficiary statement, compliant with technical project, depending on area, surface, final destination and construction annexes	30 days	max.12 months
	Permit for land use changing	OCPI, DADR, ANIF	Documentation for land use changing, including PUZ (Urban Area Planning)		30 days	
4	Civil Protection Permit	Local Public Administration - Agency for emergency situations	Documentation regarding Civil Protection Permit (Law no.106/1996 and Order MLPTL 1943/2001)	Set by local administration depending on the application	15 days	max.12 months
5	Permit for wind tower location	Romanian Civil Aviation Authority	Documentation for Permit regarding wind tower location (Law no.10/1995 modified by GD 498/2001, Law no.587/2002 and Law no.123/2007, GD 766/1997)	Computed based fees on beneficiary statement, compliant with technical project, depending on the area, surface, final destination and construction annexes	15 days	max.12 months
6	Health permit	Public Health Municipality Department	Documentation regarding Permit for Prevention and Firing Protection (GD 573/2002 regarding authorisation of economic agents		15 days	whole period for which beneficiary asked for authorisation

			activity)			
7	Site plan/connection Permit	Ministry of National Defence - General Staff	Documentation for Permit regarding location/connecting (Order Ministry of National Defence)	Are periodic indexed with the inflation rate	30 days	12 months
	Preliminary permit for building WPP	Transelectrica / Distribution company by case				
8	Technical permit for connection to the National Power Grid	Local distribution operator up to 110 kV SC TRANSELECTRICA SA higher than 110 kV	Documentation regarding technical permit for connection to the National Power Grid (GD 90/2008)	Permits issuing tariffs and connecting tariffs are approved by the National Authority for Energy Regulation (ANRE) and depends on type of request, network voltage, connection solution, operation period	30-90 days depending on the activity	min.25 years
	Permit from Transgaz (If there are gas network in the area)					
	Setting up authorization for the WPP	ANRE	Documentation according to GD 540/2004 modified by GD 553/2007	Established by ANRE	15 days	
B	**Stage II Implementation phase**					
1	Construction	Local Public	Project	Fees are 1%	30 days	12 months

	authorisation	Authority	regarding the authorisation for the construction works implementation (Law no. 50/1991, modified and completed by Law no. 453/2001)	from works authorised value, including installations		
2	Fire Protection Permit	MAN - Military Firemen Crew Agency	Documentation regarding Permit for Prevention and Firing Protection (GD 573/2002 regarding the authorisation of economic agents activity)	50 ROL (13.7 €o)	15 days	whole period for which beneficiary asked for authorisation provided beneficiary maintains all initial conditions and supporting documents unaltered
3	Authorisations for utilities, required by the Urban Certificate (special requirements for each case)					
C	**Stage III Commissioning and Commercial Operation**					
1	Set-up authorization of a new unit implementation	National Authority for Energy Regulation – ANRE	Documentation regarding set-up authorisation of a new unit implementation (GD 540/2004 modified and completed by GD 553/2007)	Tariffs for issuing set-up authorization are set regularly by ANRE. Latest tariffs issued by Order 1/07.01.2005 and presented in Annex 4.6.	30 - 60 days depending on the request/activity	Usually awarded before getting financial support. If the project is financed from public money, ANRE agreement is necessary.

2	Integrated Environmental Authorisation	Local public Authority for environmental protection	Documentation regarding Integrated Environmental Authorisation (Order MMGA no. 876/2004)	1 000 ROL + 150 ROL annual permit	30 days	max.5 years
3	Waters Management Authorisation	The Romanian Waters National Administration	Documentation regarding Waters Management Authorisation (Law no. 107/1996 modified and completed by GD 3/2010 and updated by GD 64/2011 and Order MMGA 1141/2002)	Authorisation issuing tariffs are established by Romanian Waters National Administration	60 days	10 years
4	Health Authorisation	Public Health Department	Documentation for Health Authorisation (Law no.100/1998 and GD 625/2001)	3 - 200 ROL (0.82-54.8 €o)	15 days	whole period for which beneficiary asked for authorisation
5	Generation license	ANRE	Documentation to obtain generation licence (GD 540/2004 modified and completed by GD 553/2007)			

Box 3.7:– Bank financing of renewable energy projects

Loans are provided on the following average parameters:

- Tenor – up to 12 years
- Interest rate – Libor + 5-8%
- Fees – average 1.5%+
- Banks usually finance 60% of project costs, and in the absence of long term PPA, the project sponsor contributes 40% - cash up-front.

- Collateral and securities include a prime mortgage over the assets, all contracts, a corporate guarantee (100% loan value during construction) and share retention.
- Banks can also provide refinancing of already executed contracts.
- The EU grant is usually used for reimbursement of the loan. The residual value of the loan (usually 10 -20%) is serviced further from the proceeds of the project (sale of energy and GCs).

1. ENVIRONMENTAL PERMITTING IN THE EU

A. Examples of environmental permitting systems and good practices in Greece and Italy

Box. 4.1 Greece, Region of Crete

As a member of the European Union, Greek environmental regulations follow the European Directives on Environmental Impact Assessment and Integrated Pollution Control. However, Greece started revising its environmental permits regulation in 2011 in response to a general administrative reform and regulation review. It simplified procedures and **established a system of online tracking of important environmental assessment decisions**.

Greek legislation **distinguishes** between **projects with severe adverse environmental impacts (category A1), those with less severe impacts (category A2) and projects with no adverse environmental impacts (category B)**. The Ministry of Environment, Energy and Climate Change is in charge of the permits process in category A1. Category A2 is managed by the respective Decentralized Administration. Projects in category B do not require an environmental impact assessment; instead, the investor needs to declare their environmental protection commitment as part of the operating permit application granted by the respective relevant authority of the Region of Crete.

According to the requirements, **engineers and scientists need to complete an additional diploma before they can prepare environmental impact studies for categories A1 and A2**. The application for a permit should be submitted in person to the responsible environmental permitting authority according to the project's classification (A1, A2 or B category), together with relevant designs and maps, both on paper and in electronic version. For A1 and A2 categories, the process consists of two steps: before proceeding to environmental permitting, the responsible authority asks other competent authorities and citizens to express their opinion on the environmental impact study; the authority then carries out the assessment of the environmental impact study, taking into account the opinions expressed. **Greece defines a strict time schedule for the permits process (maximum 82 days for category A1 and maximum 62 days for category A2 projects)**.

In 2011, the Ministry of Environment, Energy and Climate Change approved 14 applications for projects in category A1 for Crete (the local authority involved in the project) and the Decentralized Administration of Crete approved 125 in category A2.

Box 4.2 Italy, Apulia Region

As a member of the European Union, Italian environmental regulations have adopted the European Directives on Environmental Impact Assessment and Integrated Pollution Control. In addition, environmental permits are a requirement of the Italian decree on the control of accidents involving dangerous substances. **Standard environmental permits are a regional responsibility, usually delegated to regional authorities**. In the case of Integrated Pollution Prevention and Contract (IPPC) permits, the responsibility however remains at the national level, with the Ministero dell'Ambiente e della Tutela del Territorio e del Mare (MATTM).

Information on national and regional permit requests can be submitted at the AIA website found at http://aia.minambiente.it. The authority then consults with all regions, provinces and municipalities concerned. ARPA has a technical advisory capacity in the permits process related to IPPC. If an application concerns a protected area, its management body also needs to be consulted.

The environmental impact assessment is prepared at the expense of the investor. The investor also needs to inform the public through an advertisement, and file copies of relevant documents at state, region and province level. Stakeholders then have 45 days to comment. **The assessment must be completed within 90 days of the notification to the public.**

In Puglia, there were approximately 150 applications in the pipeline at the end of 2012; 53 were finalized during 2011. The average time from application to decision is **six months**.

(*source: on-going EU Project "Environmental Permits and EnviPer Pilot Projects", September 2012)*

B. Examples of EIA good practices in other EU Member States (Austria, Hungary, Estonia, Czech Republic), by theme/problem identified

1. The examples of good practices presented below illustrate solutions identified by various EU member states for common problems identified in the implementation of the EIA Directive, e.g. related to EIA and development-consent procedures, screening decisions, assessment of alternatives, public participation and informing the public on the outcomes of consultations and accessibility of documents.

Consolidation of EIA and development-consent procedures

Box 4.3: AUSTRIA

Law and practice: Consolidated development consent procedure

The Austrian EIA Act is at the same time both the environmental and construction permitting procedure. The Austrian EIA Act determines in its Article 3 that all acts that contain conditions for the permitting of a project have to be applied and decided on during the respective EIA proceeding (consolidated development consent procedure). The outcome is thus one single permit decision covering all relevant permitting issues for a specific project, including the construction permit. Construction activities may therefore begin immediately after it has been issued.

This construction permitting procedure has, as a consolidated development consent procedure, proven very successful in Austria and is very well accepted by all stakeholders. The major advantage is through the consolidation of permit proceedings where, as the EIA permit composes all relevant project permits, the applicant does not have to go through several different sector proceedings in order to obtain an overall permit. This shortens the duration of the proceedings and thus saves time for the applicant.

All relevant Austrian and European legislation have to be applied in the Austrian EIA proceedings. Thus the concentrated permit proceedings as envisaged by the UVP-G can be seen as a very positive example. Nevertheless an important exception exists for (federal) transport infrastructure (roads, railways) projects which are subject to different legislation.

Opportunities to challenge screening decisions

Box 4.4: HUNGARY

Law and practice: Judicial review of screening decisions is guaranteed

The competent authority (the decision-making authority in EIA cases is the regional environmental inspectorate) issues a formal resolution at the end of the screening process which can then be appealed at the superior national environmental authority by those having standing, including environmental NGOs working in the impact area. Then the final administrative resolution can be taken to court for a judicial review process by the same group of parties.

Box 4.5: ESTONIA

Practice: Access to Justice on procedural issues in environmental matters

In case no 3-3-1-86-06 (Maidla municipality vs Ministry of Environment -MoE) the Estonian Supreme Court established that in environmental matters legal standing for procedural issues must be broader than usual.

The case itself concerned plans for mining oil-shale in the Maidla municipality. The local government disputed the EIA screening decision of MoE (which in this case was actually positive and the EIA was initiated, but the local government claimed that MoE should have turned the permit applications down and not proceed with the screening at all).

In Estonia procedural decisions (like a screening decision in EIA proceedings) are as a rule are not disputable separately from the final administrative act. However, the Supreme Court has stated in earlier practice that legal review is possible, in the case where the procedural rules may have been violated to the extent that makes it already clear that the violation would inevitably bring illegality to the final act.

In this case the Supreme Court went even further and stated that environmental field is so specific that a person who has standing should have larger opportunities to dispute the procedural acts separately from the final administrative act. When deciding about possibility of legal review, the court must take into account the significance of the procedural act and also the significance of the alleged violation in fulfilment of the principal procedural requirements. The Supreme Court stated that for correct decision-making in environmental matters, the administrative procedure has a decisive value in itself: "In most of such cases it is not possible to decide convincingly that despite of the deficiencies in administrative procedure, the final administrative act is lawful. It is only possible to presume lawfulness of the final adopted act, if the decision has been made in result of an administrative procedure that has been carried out according to law and principles of administrative procedure."

Therefore on the basis of this judgment it can be said that EIA screening decisions definitely are such decisions that would be subject to the judicial review and any person having connection to the decision has standing in these cases.

Assessment of real alternatives

Box 4.6: CZECH REPUBLIC

Practice: Real alternatives considered

The case of Prague orbital R1 (Prague by-pass road) – the Ministry of Environment accepted an alternative variant proposed by a determined local public, represented both by NGOs and the municipal representatives of the affected Prague districts, and assessed this variant together with the "only" official variant proposed by the developer (state-owned organization Road and Motorway Directorate). In its final EIA statement the Ministry of Environment recommended the alternative variant (and thus accepted the public comments that the official variant was - by far - less environmentally friendly) and explicitly stated that the "official" variant should be pursued only if the alternative one proved to be non-viable.

Unfortunately, the subsequently accepted land-use plan ignored this EIA statement and set-out in the

"official" variant. The land use permit for the "official" variant followed and NGOs appealed against this permit.

The case of D5-0510 Motorway (Plzen orbital). In 1998, the second EIA process took place in this case after the administrative court annulled previous the EIA statement, together with the associated land-use permit. Through this process a new variant must have been assessed (so called SUK2) along with the original "official" and zero variants. The author of the environmental information prepared for the developer therefore decided to assess up to five alternatives and carried-out a multi-criteria analysis; the SUK2 variant proved to be the most favourable.

However, a thorough review of the adequacy of the environmental information used disclosed several methodical and technical mistakes. As a result many of the crucial problems of the project were further discussed with relevant experts on the topics concerned. Eventually the reviewer recommended a combined variant (solving the central part of the Plzen orbital road via an underground tunnel). The Ministry of Environment (the competent authority in this case) then accepted this solution, thereby accepting a variant different to the one proposed under the developer's own environmental information.

Guarantees for effective and timely public participation

Box 4.7: HUNGARY

Law: Sufficient time limits are laid down in the EIA Decree

Both the procedure of screening and of the actual impact assessment has components of public participation, where the public has sufficient time to comment on documentation submitted by the project developer. In the actual impact assessment phase, there is also an obligation to hold at least one public hearing upon the project.

The rules of the EIA Decree 2005 apply the following timeframes for public information: the communication of the competent environmental authority published in the office and on the website of the authority must contain a warning that within 21 days the public may make comments on the screening documentation (The timing of the communication is not expressly specified in the EIA Decree, it simply says "following the receipt of the request from the project developer");the clerks at the project location and of the potentially affected municipalities, must publish the screening documentation received from the competent environmental authority within five days by posting in it public places and in ways according to local custom; access to the entire screening documentation is ensured by the competent environmental authority within five working days of its availability (e.g. the minutes of the mandatory screening meeting is available within five days of the meeting); the clerks at the project location and of the potentially affected municipalities, must publish the screening decision within five days by posting in public places and in ways according to local custom; the clerks at the project location and of the neighbouring municipalities who receive the EIA documentation must publish it by posting in public places and in ways according to local custom; the public has at least 30 days for access to information and commenting; publication of the data of the public hearing in a local or national daily newspaper and by posting in public places by the clerks of the participating municipalities must precede the hearing at least with 30 days; access to the entire EIA documentation is ensured by the competent environmental authority within five working days of its availability (e.g. the consulted authority statements are available within five days of their submission); and the clerks of the location of the project and of the potentially affected municipalities must publish the EIA decision within five days by posting in public places

and in in ways according to local custom.

In most of the cases these rules were observed in practice and the environmental NGO community has not reported any significant number of cases where the rules for public information with the EIA Decree were neglected. In those cases where such rules of public information might have been breached, this alone is a sufficient legal basis for contesting the procedural legality of the EIA decision, according to accepted judicial practice.

Accessibility of documents

Box 4.8: ESTONIA

Law and practice: Legal obligation to publish documents in the Internet

In Estonia, the documentation in EIA proceedings is easily accessible because there is legal obligation to publish the EIA program (results of the scoping phase) and EIA report in the Internet. In practice, the documents are published on the webpage of relevant authorities and/or on the webpage of the EIA expert companies.

Information about opportunities for public participation, effective public notifications

Box 4.9: ESTONIA

Law and practice: Legal obligation to inform environmental NGOs

In Estonia, the EIA Act from 2005 sets the rule that at least the umbrella organization of environmental NGOs have to be informed about procedural steps in EIA proceedings (public display of scoping results and EIA report). In practice, the relevant authorities or developer or EIA expert send e-mails or letters with the official announcement to Estonian Council of Environmental NGOs (EKO) which coordinates work of 9 environmental NGOs. This way, the most active and organized environmental NGOs are informed about the EIA proceedings.

Informing the public on the outcomes of consultations

Box 4.10: HUNGARY

Law: Legal evaluation of comments and observations into the reasoning of the decision in merit

According to Article 10 of the EIA Decree 2005, the regional environmental inspectorates shall substantively examine the comments and observations received from the public concerned and from other participants in the procedure. Furthermore – and it seems to be the essence of this law – this EIA

Decree obliges the regional environmental inspectorates to include the factual, professional and legal evaluations of comments and observations into the reasoning of their decisions in merit.

Thereby the Hungarian legislator has made a considerable effort to ensure that the respective EIA decisions contain specific references to public comments. In addition the public is made aware of the regional environmental inspectorates' position, with regard to the factual, professional and legal evaluation of their comments. In case the inspectorate makes a decision contrary to the interests of the participants and fails to give reasonable arguments why it disagrees with certain elements of such comments, the individual member or the association of the public can formulate specific counterarguments and submit them in a request for legal remedy.

Therefore, the proper and detailed manifestation of the regional environmental inspectorate's standpoint on the comments of the public is a key issue. Thus it is highly relevant not only in the field of participation in decision-making, but also in the area of access to justice.

(Source: EC, "Good Examples of EIA and SEA Regulations and Practice in Five EU Countries")

C. Inventory of EU and Romanian legislation for environmental permitting

Strategic environmental assessment - sea (for plans and programs)

European legislation

- Directive 2001/42/EC of the European Parlament and Council, regarding the assessment of the effects of certain plans and programs on the environment („SEA Directive") was enforced on July 21st, 2001

Romanian legislation

- G.D 1076/2004 – regarding the establishment of the environmental assesment procedure of certain plans and programmes (romanian legislation Directive 2001/42/EC)

- M.O 995/2006 - on approval of the list consisting of plans and programs falling under G.D No 1076/2004 on establishing the procedure for plans and programs environmental assessment

- M.O 117/2006 - **on approval of the Manual concerning the implementation of environmental impact assessment for plans and programs**;

- G.D 564/2006 - on the framework of public participation to elaboration of environmental plans and programs.

Environmental impact assessment (eia)

European legislation Directive 85/337/EEC from June 25th 1985 on the assessment of the effects of certain public and private projects on the environment, amended by Directives 97/11/EC and 2003/35/EC

Romanian Legislation

- G.E.O. 195/2005 on environmental protection, approved by Law 265/2006, with subsequent amendments and completions;
- G.D. No. 445/2009 regarding the environmental impact assessment of certain public and private projects;
- M.O. 135/2010 on approving the Methodology for the implementation of environmental impact assessment for public and private projects;
- M.O. No 863/2002 for the approval of methodological guidelines to be applied to the framework procedure for environmental impact assessment;
- M.O. No 864/2002 for the approval of the impact assessment procedure and public participation to the decision-making process for the projects with trans-boundary impact;
- G.E.O. 57/2007 on the regime of natural protected areas, conservation of natural habitats, wild flora and fauna, with further modifications and completions;
- M.O. 19/2010 for the approval of the methodological Guide regarding appropriate assessment of potential effects of the plans and projects on natural protected areas of community interest

Appropriate assessment (for Natura 2000 approval)

European legislation

- European Council Directive 85/337/CEE from June 27th 1985 on environmental impact assessment of some public or private projects, amended by Committee Directive 97/11/CE and 2003/35/CE;
- European Council Directive 92/43/EEC of 21 may 1992 on the conservation of natural habitats and of wild fauna and flora;
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (this is the codified version of Directive 79/409/EEC as amended);
- Directive 2001/42/EC of the European Parliament and Council, regarding the assessment of the effects of certain plans and programs on the environment ("SEA Directive") was enforced on July 21st, 2001.

Romanian legislation:

- G.E.O. 57/2007 on the regime of natural protected areas, conservation of natural habitats, wild flora and fauna, with further modifications and completions;
- G.E.O. 195/2005 on environmental protection, amended by Law 265/2006, with further modifications and completions;
- M.O. 135/2010 on approving Methodology for implementing the environmental impact for public and private projects;
- M.O. 19/2010 for the approval of the methodological Guide regarding appropriate assessment of potential effects of the plans and projects on natural protected areas of community interest;
- G.D. No. 445/2009 regarding the environmental impact assessment of certain public;
- M.O. No. 863/2002 regarding the approval of methodological guidelines to be applied to the framework procedure for environmental impact assessment;
- M.O. 864/2002 for the approval of the impact assessment procedure and public participation to the decision-making process for the projects with trans-boundary impact;
- G.D. 1076/2004 – regarding the establishment of the environmental assessment procedure of certain plans and programs (Romanian legislation – Directive 2001/42/EC);
- M.O. 995/2006 – on approval of the list consisting of plans and programs falling under G.D. No. 1076/2004 on establishing the procedure for plans and programs environmental assessment;
- M.O. 117/2006 – on approval of the Manual concerning the implementation of environmental impact assessment for plans and programs;
- G.D. 564/2006 – on the framework of public participation to elaboration of environmental plans and programs.

Environmental authorization

Romanian legislation

- G.E.O. 195/2005 on Environmental Protection, with further modifications and completions;
- M.O. MMDD 1798/2007 for the approval of the Procedure of issuance of the environmental authorization;
- M.O. 184/1997 for approval of the procedure for conducting environmental balances.

Integrated pollution prevention and control (ippc)

European legislation

- Directive 2008/1/CE on integrated pollution prevention and control.

Romanian legislation

- G.E.O. 40/2010 on integrated pollution prevention, reduction and control, approved by Law 84/2006;
- MAFWE Ordinance 818/2003 on approval of issuing procedure of the integrated; environmental authorization, amended and completed by MEWM Ordinance 1158/2005;
- MAFWE Ordinance 36/2004 on approval of technical General Guide for the application of the granting procedure for environmental integrated authorization.

PROJECT CLASSIFICATION UNDER EU EIA DIRECTIVE The EU EIA Directive (85/337/EEC) is in force since 1985 and has been amended three times, in 1997, in 2003 and in 2009. It applies to public and private projects, which are defined in Annexes I and II: **Mandatory EIA**: all projects listed in Annex I are considered as having significant effects on the environment and require an EIA (e.g. long-distance railway lines, motorways and express roads, airports with a basic runway length ≥ 2100 m, installations for the disposal of hazardous waste, installations for the disposal of non-hazardous waste > 100 tons/day, waste water treatment plants > 150.000 p.e.). **Discretion of Member States (screening)**: for projects listed in Annex II, the national authorities have to decide whether an EIA is needed. This is done by the "screening procedure", which determines the effects of projects on the basis of thresholds/criteria or a case by case examination. However, the national authorities must take into account the criteria laid down in Annex III. The projects listed in Annex II are in general those not included in Annex I (railways, roads waste disposal installations, waste water treatment plants), but also other types such as urban development projects, flood-relief works, changes of Annex I and II existing projects).	Environmental assessment and permitting (EIA and SEA) are undertaken in accord with two key EU Directives: (i) Environmental Impact Assessment (EIA) Directive 85/337/EEC, which sets the rules for assessments for individual projects (e.g., power plant, dam, highway, airport, industrial production), and (ii) the Strategic Environmental Assessment (SEA) Directive, which applies to public plans or programs. The SEA can improve the content of EIAs by providing a broader analysis than the one carried out at the project level. In particular, the SEA helps to identify and select alternatives at the strategic level. These procedures are subject to extensive public consultations. The inventory of Romanian and EU legislation per each type of procedure is presented in Annex 1. Consistent with EU regulations, in Romania the SEA and EA procedures are part of the development approval process, and permits are issued by local authorities as part of permitting obligations listed in the urban planning certificate. *Source: http://ec.europa.eu/environment/eia/eia-legalcontext.htm*

2. ARCHAEOLOGICAL PERMITTING AND PROCEDURES

A. Relevant Romanian legislation

1. Law no. 150/1997 for ratifying the European Convention on the Protection of the Archaeological Heritage, as revised and completed (La Valetta / 16.01.1992) ;

2. Ministry of Culture Order no. 2103/2007 for the approval of the Methodology for the coordination of the research activity within the archaeological sites that are classified as areas of national interest;

3. **GO no. 43/2000 on the protection of the archaeological patrimony and the on the classifying of archaeological sites of national interest, with further modifications and completions;**

4. Law no. 422 / 2001 on the protection of historical monuments, with further completions and amendments;

5. Ministry of Culture Order no. 2071/2000, for establishing the rules for the organisation of the archaeological digging in Romania;

6. The Deontological Code of the Romanians Archaeologists, as approved by the National Commission of Archaeology on 24.05.2000;

7. Ministry of Culture Order no. 2458/2004 for the approval of the rules for the administration of the National Repertoire of Archaeology;

8. **Ministry of Culture Order no. 2392/2004 regarding the approval of Archaeological procedures and standards;**

9. Ministry of Culture Order no. 2127/2005 on the approval of the organizational chart and functioning regulation of the National Commission for Archaeology;

10. Ministry of Culture Order no. 2483/2006 for the approval of the List of the areas of priority national interest;

11. Ministry of Culture Order no. 2222/2006 for the approval of the methodology for the registration within the *Register of Archaeologists*;

12. **Ministry of Culture Order no. 2518/2007 for the approval of the Methodology for the archaeological discharge procedure;**

13. **Ministry of Culture Order no. 2562/4.10.2010 on the approval of the procedure for the obtaining of the permit for archaeological research, with further amendments and completions;**

14. The joint Order of the Ministry of Culture and of the Ministry of Transport and Infrastructure no. 653/2.497 of 2010 for the setup of the National Project of archaeological research "the Motorway";

15. **Joint Order of the Ministry of Culture and Ministry of Transport and Infrastructure no. 1038/2011 on the approval of the procedure for issuing of the archaeological discharge certificate for the transport infrastructure projects of national interest;**

The list above is not exhaustive, but is deemed comprising, however, the most relevant norms in respect of archaeological heritage protection, institutional framework and procedures.

The embolden text refers to legal acts describing in more or less details the specific archaeological related specific procedures to be followed (both by the applicant/project promoter and the involved institutions), as part of the project preparation stage.

B. The procedure

The main stakeholders and their related legal responsibilities

- **The Ministry of Culture (MC)**

The MC is the specialized central public institution that is responsible with the drafting and ensures the implementation of the specific legislation for the research and protection of the archaeological heritage in line with the international committing and internal politics and strategies.

The MC issues all the research related authorizations and approves by ministerial order the declassification of the protected archaeological sites (the archaeological discharge certificates).

- **The decentralized (local) units of the MC**

The MC's decentralized units ensure the observance of the authorizations issued by the MC, issue permits for the research of the accidentally identified patrimony and ensure the supervision of the same as well as start the administrative procedures for the declassification of the legally protected sites.

The MC's decentralized bodies issue the Archaeological Discharge Certificate on basis of the National Commission for Archaeology recommendation and dully inform the MC of the same.

- **The National Commissions for Archaeology**

The National Commissions for Archaeology is a specialised scientific body without legal personality that is functioning under the authority of the MC.

The National Commissions for Archaeology analyzes the scientific documentation and make recommendations to the MC / MC's decentralized bodies in respect of administrative decisions to be taken the archaeological patrimony/ declassification of the archaeological sites.

- **The habilitated institutions (the Museums)**

As per the provisions of MOs no. 2518/2007 and 2562/2010, the archaeological research may only be performed by an authorized institution. In addition, GEO no. 34/2006 narrows the list of authorized institutions to the specialized history museums.

- **The Archaeologists**

As per the provisions of MO no. 2562/2010 the archaeological research shall be only performed by specialized and certified personnel included within the Archaeologists Register.

Therefore, in the scope of the permitting procedures hereby analyzed, the *Archaeologist* is a regulated profession one could accede through specialized studies and compliance with the accreditation conditions.

- **The Local Authorities**

The local authorities are bound to consider protection of the archaeological heritage within their own socio-economic and urban development programmes and to collaborate with the MC's decentralised units in view of applying archaeological patrimony protection legislation.

The local authorities approves the zoning plans and issue construction authorizations only based on the MC's related consent, to the extent that the foreseen developments are deemed affecting archaeological heritage.

- **The competent environment authorities**

The competent environment authorities are bound to apply the integrated conservation principle by conditioning the issuance of the Environmental Permit by the prior approval of the MC, to the extent archaeological patrimony is likely to be affected.

- **The National Agency for Cadastre and Land Registration (NACLR)**

The NACLR has to include within the cadastral maps all identified archaeological patrimony as provided in the National Archaeological Repertoire.

- **The project promoter**

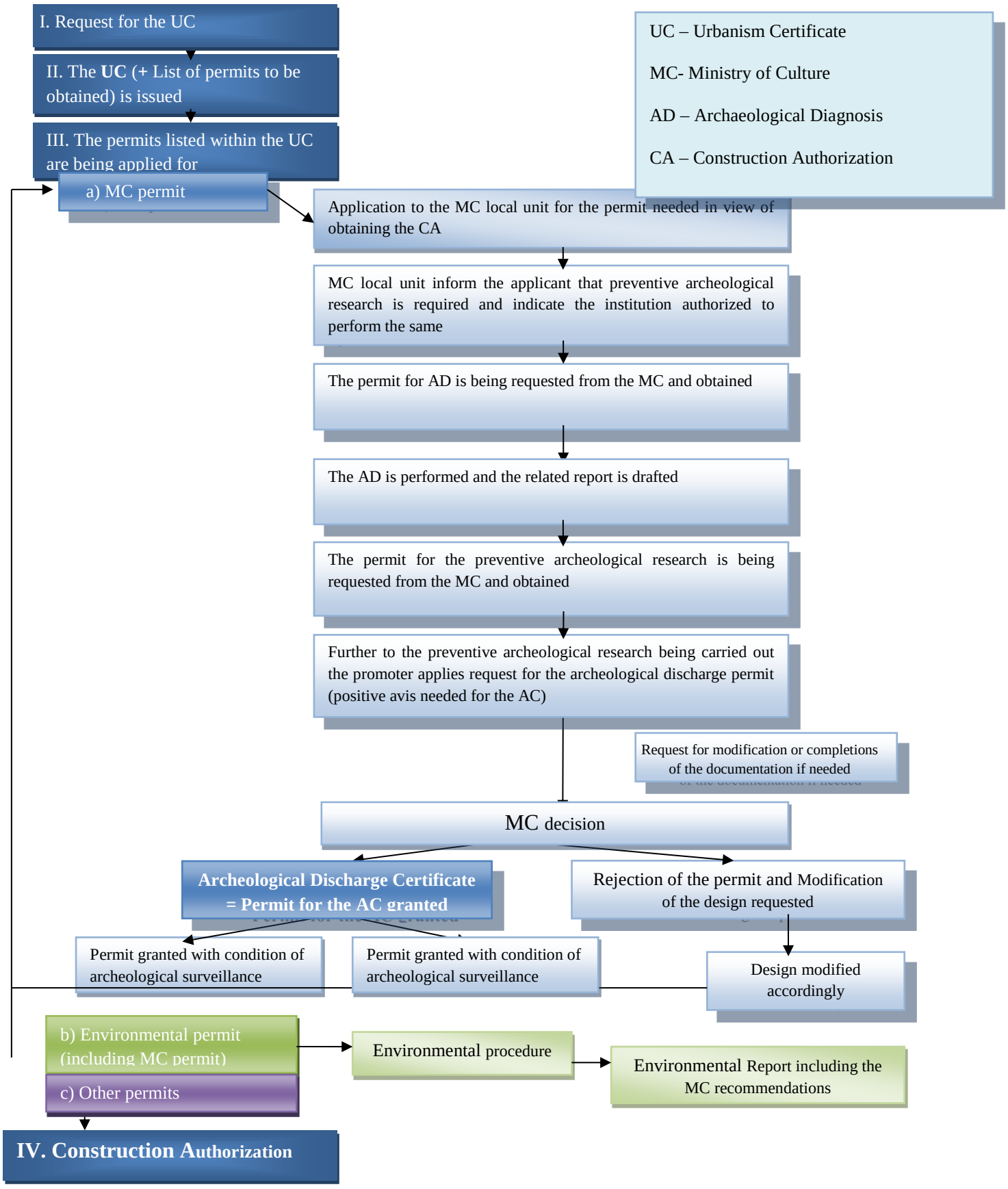
The promoter has to comply with the request of obtaining all the permits listed by the Local Authorities within the Urbanism Certificate, including the MC's permit, in order to obtain the Construction Authorization.

The promoter has to comply with all legal conditions in order to be granted with the MC's permit and to pay for all the related research and other administrative procedures, in accordance with the "developer pays" principle.

Details of the procedure

a) The outline of the procedure to be followed by a project promoter for obtaining the permit for construction projects:

Figure 5.1: THE GENERAL FLOWCHART OF THE ARCHAEOLOGICAL PERMITTING PROCESS



The main stages of the procedure presented above are hereby presented in more details, as following:

I. The Promoter applies for the Urbanism Certificate as per the provisions of Law no. 50/1991;

II. The Promoter is granted with the Urbanism Certificate for the proposed project, including the list of all the permits needed for applying for the Construction Authorization;

III. The promoter applies for all permits listed within the Urbanism Certificate and obtain the same in accordance with the specific legislation:

a) The promoter applies for the MC permit;

b) The promoter applies for the Environment permit.

c) The promoter applies for the other permits, as indicated within the UC.

a) the MC permit procedural steps:

Step 1 – the Promoter applies for the MC permit, as provided for by art 6 within **MO no. 2518/2007** *for the approval of the Methodology for the archaeological discharge procedure*;

Step 2 – the MC (through its decentralised units) indicates the Promoter the necessity of performing an archaeological research, the habilitated institution in this respect (the local Museum) and the juridical code of the said research (as per art. 8 of the MO referred to above).

Step 3 – the Promoter concludes an agreement with the authorized institution and empowered the same to perform the research and to elaborate the related Report and all the other needed documents.

As provided by the Annex of **MO no. 2562/4.10.2010** *on the approval of the procedure for the obtaining of the permit for archaeological research*, art 11, letter e), in order to apply for the permit for the preventive archaeological research the diagnostic research is compulsory.

Step 4 – The authorized institution applies for the MC approval for initiating *the archaeological diagnose procedure* (the extensive conditions for obtaining the same are provided by art. 13 and the relevant annexes of the MO referred to above);

Step 5 – The MC verifies the compliance of the application and grants the approval for the performance of the *archaeological diagnosis*.

Step 6 – The *archaeological diagnosis* is being performed, the related Report is drafted and the permit for the preventive archaeological research is requested from the MC.

The full documentation needed in this respect is provided in the above mentioned Order and includes:

- ✓ A specific template;

- ✓ The signed contract between the project promoter and the appointed museum;
- ✓ The general layout of the project provided in .dwg or .shp format and the list of STEREO 70 topographical coordinates;
- ✓ The Orthophotoplan (1:5.000) in electronic format (if the affected area is wider than 1000 sq.m);
- ✓ The archaeological diagnose report.

Step 7 – the MC verifies the compliance of the documentation with the provisions of **MO no. 2562/2010** and **MO no. 2392/2007** *regarding the approval of Archaeological procedures and Standards* and grants the approval for the performance of the archaeological research.

Step 8 – The archaeological research is being performed and the related report is being delivered to the Project Promoter.

Step 9 – The Promoter submits the documentation to the MCs' decentralised unit in order to obtain the permit needed for the Construction Authorization, as provided for by **art. 6 of MO no. 2518/2007**;

Step 10 – MCs' decentralised unit:

- Verifies the compliance of the documentation with the provisions of **MO no. 2562/2010** and **MO no. 2392/2007** *regarding the approval of Archaeological procedures and Standards,*
- Summon the National Archaeological Commission for analysing the documentation and granting its specific approval. After analyzing the Report, the National Commission for Archaeology may recommend:
    i. the rejection of the request for permit;
    ii. the request of modification of the project's technical characteristics;
    iii. **the granting of the permit without conditions** (to the extent that the presumptions in respect of the possible alteration of archaeological patrimony are not confirmed or the protected site shall be declassified through the administrative archaeological discharge procedure);
    iv. **the granting of the permit under the condition of archaeological surveillance of the works execution phase;**
- decides to declassify the protected sites (if case) and grant the permit with or without supplementary conditions; and
- informs the MC in respect of the decision taken for the ministerial order approving the Discharge Certificate to be issued, as provided by art. 20 **within MO no. 2518/2007** *for the approval of the Methodology for the archaeological discharge procedure*;

The **Archaeological Discharge Certificate** is the administrative decision removing the legally protected status of the affected area and allowing works execution to commence.

Step 11 – The Promoter delivers the MC permit to the environment competent authority in view of obtaining the Environmental Permit.

Step 12 – The Promoter applies for the Construction Authorization, after obtaining all the other permits listed within the Urbanism Certificate.

Completing the Archaeological Discharge Procedure is condition precedent for the issuance of the Environment Permit and, consequently, for the Construction Authorization.

There are no clear legal provisions in respect of the possibility of obtaining the Construction Authorization for a land surface comprising archaeological protected sites. On the contrary, the **GO no. 43/2000** clearly provides (art. 5, par. 16) that in case archaeological patrimony is being revealed by chance during the execution of works, the Construction Authorization is being suspended and the archaeological procedures are being re-loaded.

Until the issuance of the Archaeological Discharge Certificate, no works can be legally performed within the protected archaeological sites.

b) The particular characteristics of the same procedure, as applied to the transport infrastructure projects of national interest

Details in respect of the particular rules to be followed by a project promoter within the transport sector for the obtaining of such approval are being hereunder provided.

At the moment there are two particular legal acts of limited applicability for the transport sector only, namely:

1. The joint Order of the Ministry of Culture and of the Ministry of Transport and Infrastructure **no. 653/2.497 of 2010** *for the set up of the National Project of archaeological research "the Motorway"*; and

2. Joint Order of the Ministry of Culture and Ministry of Transport and Infrastructure **no. 1038/2011** *on the approval of the procedure for issuing of the archaeological discharge certificate for the transport infrastructure projects of national interest*.

The above mentioned norms do not settle for a different procedure to be followed in case of transport projects, but only clarifies and details the existing norms, provide clear deadlines for some procedurals steps and set an administrative cooperation framework.

The most important aspects which are being regulated by these legal acts are further described below.

The joint MO no. 653/2.497 of 2010 *for the setup of the National Project of archaeological research "the Motorway"*

- set-up a joint coordination structure that is being placed under the coordination of the National Museum of Romanian History (art. 3, 4);

- Under the authority of the above structure a methodological coordination group is being established, comprising representatives from all the relevant structures (MC, the Archaeological Commissions, Local research institutions, MT, RNCMNR), (art. 5, 6 and 7).

The joint MO no. 1038/2011 on the approval of the procedure for issuing of the archaeological discharge certificate for the transport infrastructure projects of national interest:

- The Road Company appoints an archaeologist that agrees upon the research methodology as well as interim and final associated deadlines together with the archaeologist in charge with the research. The arbitrage of the National Commission of Archaeology is being provided in order to avoid abuses and conflicts. (art. 1)

- **There is a clear definition of the Preliminary Report** that is being issued based on the field investigations before the Final Report being elaborated. The Preliminary Report includes all the information needed for the MC structures to decide and grant the archaeological discharge certificate and associated ministerial order. (Art.2)

- **Clear deadlines** are being provided for various procedural steps, such as:

    - **5 days** after the completion of the field investigations the research responsible shall submit the Preliminary Report for the **areas without confirmed patrimony**;

    - **10 days** after the completion of the field investigations the research responsible shall submit the Preliminary Report for the **areas with confirmed patrimony**;

    - **6 months** after the completion of the field investigations the research responsible shall submit the Final Report for the **areas with confirmed patrimony**;

    - The MC decentralized body is deemed to check the conformity of the documentation and to inform the MC **in 2 days** from the receipt of the same;

    - The MC is required to **urgently** summon the National Commission of Archaeology for a decision to be taken (usually the NCA only gathers once per month).

- The structure of the Preliminary and Final Reports is clearly defined. (Annex 1 and Annex 2).

In addition to the above legal acts, MO no. 2562/4.10.2010 *on the approval of the procedure for the obtaining of the permit for archaeological research* provides also at article 11, par. 2 for an exception in respect of the documents to be submitted in case of transport projects for obtaining the approval for preventive archaeological research (the needed documents might be transmitted within 15 days from the filling-in of the application).

The same is provided at art.12 and 13 in order to obtain the permit for archaeological surveillance and for archaeological diagnose.

c) The outline of the procedure to be followed by a project promoter for obtaining the permit for archaeological surveillance.

In addition to the permitting procedure and mainly for reasons related to the administrative, financial and time impact **the archaeological surveillance of works** as described by MO 2518/2007 is being also presented.

The above mentioned procedure includes the following steps:

Step 1 – The promoter appoints an agreed institution to perform the needed archaeological surveillance (the local Museum);

Step 2 – The appointed Museum obtains the permit for the archaeological surveillance in accordance with the provisions of the MO no. 2562/4.10.2010 *on the approval of the procedure for the obtaining the permit for archaeological research*. The full documentation needed in this respect is provided in the above mentioned Order and includes:

- A specific template;
- The signed contract between the project promoter and the appointed museum;
- A copy of the permit stating that the archaeological surveillance is required;
- The general layout of the project provided in .dwg or .shp format and the list of STEREO 70 topographical coordinates;
- The Orthophotoplan (1:5.000) in electronic format (if the affected area is wider than 1000 sq.m);
- The preliminary archaeological report and the archeological research;

Step 3 – The project promoter informs the MCs' decentralised body in respect of the date when works are scheduled to commence.

Step 4 – The Museum performs the archaeological surveillance during the execution of all works that can affect the archaeological patrimony in accordance with the National Commission for Archaeology recommendations, with the permit for archaeological research and all the relevant norms in this respect including the Deontological Code of the Romanians Archaeologists.

Step 5 – The Museum drafts the Report in respect of the Archaeological surveillance and handles the same to the MCs' decentralised body.

The project promoter is being obliged to announce the discovery of any items of archaeological interest during the works execution. In such cases, the Building Permit is suspended and the execution of works stops.

MCs' decentralised body further decides upon the procedure to be followed (in such cases, usually the Archaeological Discharge procedure is being re-loaded).

Usually the archaeological surveillance procedure is being imposed for works that might affect or destroy the archaeological patrimony as follows:

- In areas where it is highly possible to identify items of archaeological interest, even though these are not being documented by the time;
- Within the protection areas of archaeological sites or historical monuments;
- In exceptional cases when the design of the project cannot be modified from objective reasons and preventive archaeological researches are not practicable.

C. Legal deadlines and durations related with the archaeological procedures

The deadlines within the table below are being provided either in the archaeological related procedures or by the general legal provisions in respect of permits and authorizations such as Law no. 50/1991 and Law no. 255/2010 (highlighted in italics).

In case of research related activities, average durations are difficult to estimate, whereas they fully depends on the specifics of each particular situation/investigated area.

No deadlines/average durations are being provided for milestones (such as *Step 1 - application by the Project Promoter*).

STAGE	Transport sector	Other projects
Step 1 – the Promoter applies for the MC permit		
Step 2 – the MC (through its decentralised units) provide the details of the procedure to be followed by the applicant	*15 days*	*15 days*
Step 3 – the Promoter concludes an agreement with the habilitated institution	*15 days*	*15 days*
Step 4 – request to the MC for the permit for initiating the archaeological diagnose procedure.	The applicant might provide the necessary documents in 15 days time from the filling of the application	
Step 5 – MC response (further to the verification of the application)	5 days	15 days

Submission of complementary documents (if needed)	10 days		10 days
MC's final response	5 days		15 days
Step 6 – Performance of the *archaeological diagnose*	*No average duration could be provided*		
Drafting of the related Report	30 days		30 days
Request for the permit for the preventive archaeological research	The applicant might provide the necessary documents in 15 days time from the filling of the application		
Step 7 – MC's response (further to the verification of the application)	5 days		10 days
Submission of complementary documents (if needed)	10 days		10 days
MC's final response	5 days		15 days
Step 8 – Performance of the *archaeological research*	*No average duration could be provided*		
Drafting of the related Preliminary Report	5 days	10 days	NA
Drafting of the related Final Report	NA	6 months	NA
Step 9 – Submission of the documentation to the MCs' decentralised unit in order to obtain the permit/ *Archaeological discharge certificate*.			
Step 10 – MCs' decentralised unit analyse the documentation and inform the MC accordingly	2 days		10 days
MC summon the Archaeological Commission	URGENTLY		No specific provisions (usually once/month)
Based on the Archaeological Commission recommendation, MCs' decentralised unit decides to issue the archaeological discharge certificate and inform the MC accordingly	No specific provisions		No specific provisions
MC issue the order for declassifying the legally protected site	No specific provisions		No specific provisions
Step 11 – the permit is being provided to the promoter	No specific provisions (although the 15 days period provided by Law 255 might theoretical		No specific provisions (although the 15 days period

	apply)	provided by Law 255 might theoretical apply)

VI. SLOVENIA'S EXPERIENCE IN THE ENVIRONMENT SECTOR

A. Overview

1. Slovenia benefits from Structural Funds in the same sectors as Romania. Indeed it benefits from a higher per capita allocation than Romania. Slovenia's program for the environment sector is combined with the transport sector making direct comparisons less easy. However what is clear is an absorption rate in Slovenia that is more than twice that of Romania and is above the EU average.

2. The question is how two new member states of the EU both with significant investment programs in the environment sector and operating within the same set of legal parameters through EU Directives, can perform so differently.

3. One of the most important reasons is the state of institutional readiness in the case of Slovenia and the lack of it in Romania. Slovenia was able to benefit not only from established institutions but also from relevant expertise in major project preparation and implementation. In contrast Romania lost two years of the program in setting up the necessary institutional framework. Perhaps the starkest contrast in capacity is represented in the municipal waste management sub sector where a skilled pre-existing public company took full responsibility for a major investment of over 100 million euros with a dedicated project team supported by international consultants. One of Romania's larger projects in the same sub sector sees a struggling team of inexperienced officials trying to manage a highly complex and specialized project whilst at the same time dealing with numerous other day to day duties and responsibilities.

4. Romania can learn lessons from the Slovenian experience by creating and supporting the necessary capacity to prepare and implement investment projects. Slovenia appears willing to take the necessary steps to ensure that appropriate skills and capacity are in place by hiring in expertise as necessary and furthermore by not insisting on the lowest price, ensuring that the right skills and experience are made available to project teams.

5. Furthermore whilst there is some unhappiness with procurement and audit controls in Slovenia these do not dominate the project landscape to the same extent as in Romania. Slovenian officials are more comfortable with the support of central institutions and are not paralysed with the fear of making a mistake as their Romanian counterparts appear to be. Decisions are more likely to be timely and in support of the project schedule in Slovenia as a result.

Introduction

6. A comparison of Romania's absorption rates in the Environment Sector with Slovenia, along with an analysis of the differences between the PIM system in Romania and Slovenia, was made.. Like Romania, Slovenia is a newer entrant to the EU and has a significant investment programme in the Environment Sector, much of it funded through Cohesion Funds.

7. This exercise required a brief examination of the overall system of PIM in Slovenia and comparing its strengths and weaknesses with those in Romania. The study examined each step of the PIM process in order to conduct a proper analysis, with its focus on the Environment sector and in particular those larger projects in the sector that were funded from Structural Funds.

It might be assumed that many of the issues identified have some resonance in sectors other than environment due to the use of a common PIM system.

B. The Structural Funds in Slovenia's Environment Sector

8. Infrastructure projects in the field of environment, transport and sustainable energy are co-financed with EU funds from the Cohesion Fund (CF)[10].

9. Within Slovenia's National Strategic Reference Framework are a number of Operational Programmes. In Slovenia's case the Environment and Transport sectors are combined in to a single Operational Programme. The 2007 –2013 Operational Programme of Environment and Transport Infrastructure Development (OP ETID) [11] is the key document which represents the strategy and plans of the government for making use of CF funds in the current financial period. Inter alia it also defines the financing arrangements for investments and includes descriptions of individual projects and the amount of funds envisaged. In this document the total value of all investments in the OP ETID in the environment sector is estimated to be 1.2 billion EUR and the national share of co-financing with the CF funds amounts to approximately 530 million EUR.

10. Projects which are included in the environment sector would normally fall within the following sub sectors:

- waste management,
- potable water sector,
- collection and treatment of urban waste water
- flood protection

11. In the case of the OP ETID, of the seven Priority Axis, only two of them relate uniquely and specifically to the environment sector, namely: Municipal Waste Management and Environment Protection, Water Sector but which together make up almost one third of the OP.

[10] Which collectively alongside ERDF and ESF are referred to as Structural Funds

[11] The other Structural Funds Operational Programmes are: OP for Strengthening Regional Development Potentials; OP for Human Resources Development; OP of Environmental and Transport Infrastructure Development; OP Cross-border and interregional operational programmes and Transnational operational programmes

Breakdown of finances by priority axis [12]

Priority Axis (figures in EUR)	EU Investment	National Public Contribution	Total Public Contribution
Railway infrastructure	449 567 581	79 335 456	528 903 037
Road and maritime infrastructure	241 370 738	42 594 837	283 965 575
Transport infrastructure	224 029 886	39 534 686	263 564 572
Municipal waste management	**205 568 426**	**36 276 782**	**241 845 208**
Environment protection-water sector	**325 483 339**	**57 438 237**	**382 921 576**
Sustainable use of energy	159 886 553	28 215 275	188 101 828
Technical assistance	29 693 221	5 239 981	34 933 202
Total	**1 635 599 744**	**288 635 254**	**1 924 234 998**

12. Amongst the aims of the environmental parts of the OP are targets to increase the share of population served by the water supply to 96%, to reduce flood endangered areas to 220,000 hectares and to reduce the amount of landfill of non-hazardous waste by 295,000 tonnes per year.

How Slovenia's absorption rate of EU Structural Funds compares with Romania

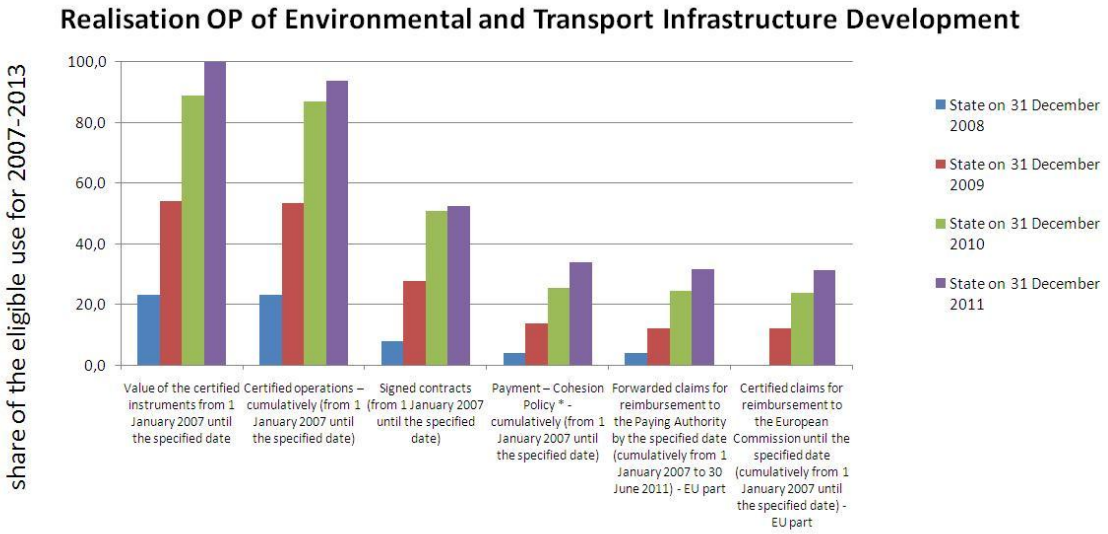
13. According to data released by the European Commission in November 2012, Slovenia had an overall Structural Funds absorption rate of 47.6% which is above the EU average of 45.15% and more than double that of Romania on 20.7%.

14. Slovenia was allocated 4.2bn EUR for the current funding period against 19.2bn EUR for Romania. Therefore Slovenia is allocated more funding per capita at 2,001.9 EUR per capita than Romania at 896.2 EUR per capita.

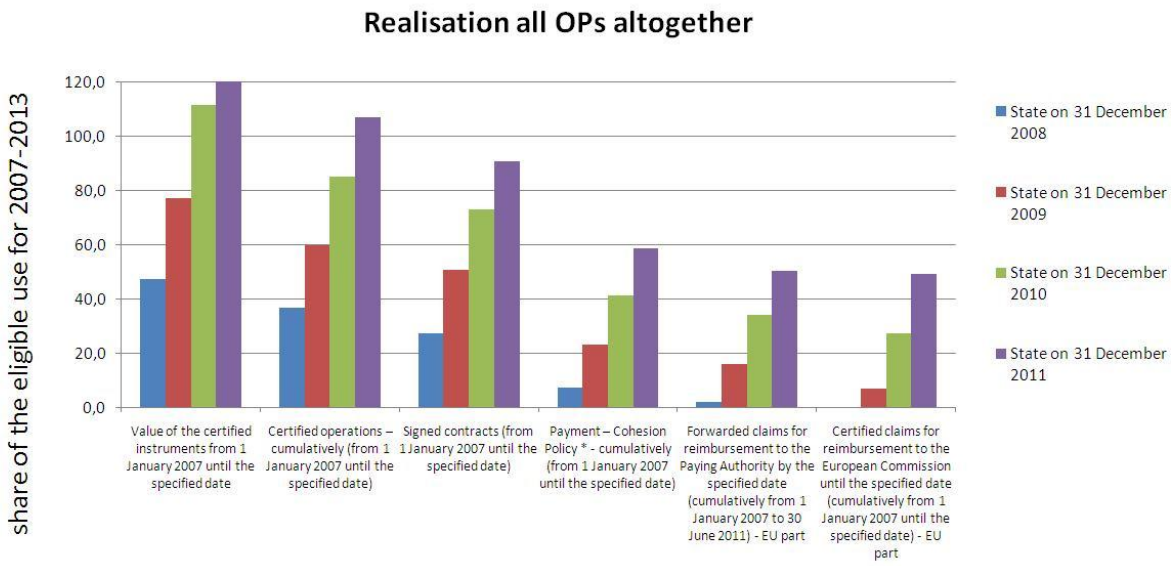
[12] Source: European Commission InfoRegio

15. The absorption rate in the environment sector in Romania was 15.44% which is below the average absorption rate for the country. In Slovenia due to the OP relating to the environment sector being merged with other sectors such as transport and renewable energy it is not possible to separate data, however the two graphs below[13] show the progress of the OP related to environment and for comparative purposes the progress of the overall use of Structural Funds.

16. The graphs, not surprisingly show that absorption in the OP ETID lags somewhat behind the overall rate of absorption in all Ops – the challenges in realising any environment, transport or energy project are greater than in most other areas of the economy.



[13] Source: Government of Slovenia via http://www.eu-skladi.si/



Institutional Framework for Structural Funds based Projects

17. The Managing Authority (MA) for EU Structural Funds in Slovenia is the Ministry of Economic Development and Technology.

18. The Ministry of Agriculture and the Environment[14] in its role as the intermediate body is responsible for relations with final beneficiaries and its fundamental tasks are:

- Participation in the preparation of projects of the Cohesion Fund for environment but only to the extent of verification and assessment of projects from the point of view of administrative, technical, financial and content adequacy of projects proposed by beneficiaries.

- Participation (passive) in the implementation of projects funded by the Cohesion Fund for environment related projects and other tasks which, within the framework of the implementation of Cohesion projects, are allocated to the Ministry as the intermediate body in accordance with the rules of implementing Cohesion projects

- Legal support in the process of public procurement and implementation of investment projects

- The Environment Agency is within the Ministry and is responsible for processing permitting applications and awarding the necessary permits where appropriate.

19. For the implementation of projects involving the Cohesion Fund, the following public bodies are also considered to be stakeholders:

[14] Until very recently The Ministry of the Environment and Spatial Planning

- Government Office for Local Self-Government and Regional Policy - as most final beneficiaries are municipalities

- Ministry of Finance – in relation to matching funding and oversight of public expenditure

- Court of Audit of the Republic of Slovenia – in relation to good practice and probity.

20. Final beneficiaries of funds or *the investors* are municipalities. Beneficiaries are responsible for the preparation of applications for allocation of funds from CF, implementation of a project on the basis of the Decree on the allocation of funds and for the preparation of public calls to tender for the project and for all preparatory and implementing measures.

21. One exception is the field of reduction of flood risk within the framework of the priority axis Environment Protection – water section, where the Ministry of Agriculture and the Environment is a direct beneficiary. Perhaps logically Flood Protection is dealt with on a national rather than local basis.

22. The institutional framework therefore appears to be complex and perhaps a little confusing to many, including bidders and potential bidders.

23. The environment sector in Slovenia is characterised by the presence of publicly owned service companies which have existing track records of delivering investment projects over a number of years. This means that the capacity and skills necessary to identify, prepare and implement public investment projects pre-dates the availability of Structural Funds. Technical skills related to the relevant sub-sector are strong; managers and technicians take particular professional pride in ensuring their skills are current and match the highest standards of other EU countries. There is also a ready recognition of the value of some of the basic concepts of good PIM such as the need for financial sustainability and economic value as well as the value of a good quality procurement process. The available capacity to prepare, appraise and implement good projects relates not only to public officials but also to a thriving private sector consultancy base which is able to provide support when it is needed. Slovenian public bodies are not afraid of hiring good quality advice externally when specific opportunities are identified nor are they too concerned about the need to hire on the basis of quality rather than on lowest price. Preparatory budgets almost always include enough funding to meet capacity gaps through consultancy support.

Capacity and capability are therefore particular strengths of the system in Slovenia.

24. The publicly owned bodies, referred to above, such as SNAGA d.o.o. (as highlighted in the Case Study below) are owned by the municipalities in which they are located. It is common for groups of municipalities to have shared ownership and it is also possible for municipalities which do not have an ownership stake to sign service agreements with these entities. The municipalities therefore remain the beneficiaries of the Structural Funding but the publicly owned bodies are the implementing and operating entities on behalf of the municipalities.

C. Synopsis of the Key Stages of the PIM Process in Slovenia

1. Strategy and Planning

25. It is not normally possible for an investment project to be approved unless it features in a national or sector strategy. In the case of Slovenia the National Strategic Reference Framework (NSRF) sets out the case for all proposed public investment projects and the proposed method of financing. Not surprisingly the availability of Structural Funds from the EU is the dominant form of funding.

26. Whilst the NSRF is a 'top-down' document, the contents are derived by adopting a 'bottom-up' approach with project proposals largely being driven by individual line ministries and municipalities (or groups of municipalities through public service companies).

2. Project identification

27. Sole responsibility for identifying suitable public investment projects lies with the responsible public body in charge of the relevant public service. However in the case of the environment sector in Slovenia, whereas this public body might be expected to be the Ministry of Agriculture and the Environment, the responsible public body is different for the different subsectors.

28. The Ministry itself only retains operational responsibility (and therefore project identification et al) for flood defences. Water and waste water projects along with municipal waste management projects are the responsibility of the relevant municipality although in the case of waste management this responsibility is delegated to wholly owned public service companies. In the case of Slovenia therefore the link between project identification and project implementation and operation is clear and firm. In summary beneficiaries identify, prepare, execute and operate their own projects and are responsible for the outcomes of the investment.

3. Project Appraisal and Selection

29. Slovenian public authorities must follow the requirements and the instructions laid out in the *'Regulation on a uniform methodology for the preparation and treatment of investment documents in the field of public finance'* (the Regulation). This sets out the rules by which all public investment project proposals are appraised and by which selection decisions are made.

30. It provides clear if somewhat detailed instruction to public officials about the required contents of appraisal documents.

31. Section 5: *Criteria for determining the efficiency of investment* describes the basis on which public investment projects are deemed acceptable for selection for funding. This would generally be considered to represent good international practice.

32. The scope of the regulation covers the following areas:

- Investments in the purchase, construction, modernisation, reconstruction and major maintenance of fixed assets (buildings, equipment, land, intangible assets, commodity reserves and strategic reserves)
- Other investments contributing to sustainable development of society, well-being and to the quality of life of the citizens of the Republic of Slovenia (e.g. education and training, research and development)
- Investments which require government guarantees
- Measures with a significant financial impact on the budget (regulations and other measures).

33. Article 4 of the Regulation stipulates the thresholds above which appraisal, or the preparation of 'investment documents' must take place as follows:

- investment projects whose value is estimated between EUR 300,000 and EUR 500,000 shall require at least the provision of the project identification fiche
- investment projects whose value exceeds EUR 500,000 shall require the provision of the project identification fiche and the feasibility study
- investment projects whose value exceeds EUR 2,500,000 shall require the provision of the project identification fiche, pre-feasibility study and feasibility study
- investment projects whose value is less than EUR 30,000 shall require the provision of the project identification fiche in the following cases:
- for technologically intensive investment projects
- for investments with a significant financial impact during the economic life of the project (e.g. high maintenance costs)
- for investment projects (co-)financed from the budget.

34. The regulation also makes provision for projects with an estimated value below EUR 100,000 to have the contents of the investment documents *'appropriately adjusted (simplified)'.* This is designed to reduce the administrative burden on public bodies proposing smaller investment (and where the necessary skills may be in short supply). Even so it requires the inclusion of all the key elements that are necessary for making investment decisions, although it doesn't stipulate what that might mean.

35. Additionally the regulation makes provisions for groups of similar investments or other reasonably related individual small value measures, so that they may be combined into a programme. Examples given are major maintenance and repair, education, etc. which are subject to the same procedures and criteria as individual investment projects.

36. If a pre-feasibility study is undertaken for a group of similar projects and the key objectives and the assumptions of a group of projects remain unchanged, there is no need to prepare a pre-feasibility study for individual investment projects even if their estimated combined value exceeds EUR 2,500,000.

37. In Slovenia the process of checking project proposals was said to have revealed a substantial numbers of mistakes, some of them intentional with the aim of extending the scope of the project to derive additional benefits. One example is where trenches have to be dug in urban streets to allow water or sewer pipes to be buried, the trenches were deliberately over-sized in order to obtain a completely rebuilt street out of the project.

4. Procurement

38. Like all other EU Member States, Slovenian public procurement legislation is transposed from the EU Directives 2004/17 and 2004/18. All public contracts are subject to the same rules above the thresholds stipulated in the Directives.

39. The Ministry of Finance is responsible for Public Procurement.

40. The competent review body for investigating allegations of infringement proceedings relating to a contracting authority's decision is the **National Review Commission for Reviewing Public Procurement Procedures**. This Commission is an independent State institution which guarantees the legal protection of bidders relating to the procedures for awarding contracts. Infringement proceedings can be instigated by the nominated member of the Commission, who is also eligible to publish a decision. This official person is appointed by the chairman of the National Review Commission in accordance with the law governing infringements.

41. Implementing authorities rely heavily on external expert advice during larger or more complex procurement procedures, mainly due to the fear of being subject to 'claims' ie allegations of infringements of the procedure. Such claims are often vexatious, sometimes frivolous and always delay the normal passage of the procurement process.
Procurement practice is often cited by Slovenian officials as the single most delaying element of the entire PIM process.

5. Implementation

42. The FIDIC suite of contracts is in common use in Slovenia and appears to meet the requirements of implementing bodies.

43. The early stages of implementing projects from Structural Funds were characterized by problems which officials now believe were a result of low bidding during the tender stage. Many bids were as much as 30% below expected tender prices as private companies aimed to secure firm credentials for other future projects to be funded through EU funding. Some of these firms bid so low that the projects caused them financial difficulties. There were even bankruptcies. Since then the market appears to have matured with bidders pricing in an appropriate amount of risk in to their pricing and low bids are now considered a rarity.

44. In addition to normal building permitting, environmental regulations require:

a) An environmental consent to be obtained by the project owner – normally the municipality in the case of environmental projects and

b) An environmental licence to be obtained by the operator. When the permit has been approved, this forms the basis for handover of the physical asset to the owner. The operator could be the public service company or in larger projects (such as the one described in the case study, where a substantial commissioning and handover period is involved) it is the contractor. This practice ensures that the contractor is sufficiently motivated to fulfil all commissioning works. After the commissioning period, which can be up to 12 months, the licence is then transferred to the public service company with the approval of the Environment Agency.

45. The law provides for environmental permits to be resolved within 6 months however this is entirely dependent on the required data being available and being submitted in the requested format. Some environmental permits have taken up to 2 years to obtain.

46. The Operational Programmes are subject to mid-term evaluation during the course of implementation. The assessors are independent of the outcome of the project. The assessors' task is to answer whether the funds are being used reasonably and gives recommendations for improvement. This evaluation is more concerned with procedural and financial matters rather than the likely outcomes from the project, but nonetheless provides useful discipline in to the implementation stage.

47. Payments to contractors for Structural Funds projects in the Environment Sector are co-ordinated through the Ministry of Agriculture and Environment.

48. It is widely believed that funding from Structural Funds makes projects entirely inflexible and therefore makes adjustments to projects under implementation almost impossible 'due to rules'. This however is contrary to the evidence shown in the case study.

Ex-post Evaluation

49. Ex-post evaluation in Slovenia is still understood to be more of a financial audit or control function rather than as an investigation of how projects perform compared to plan. That is not to say that the concepts are not unheard of. Some early attempts at performance based evaluation have been attempted but it is widely stated that the skills to do this are yet to be developed. Developing a consistent system of performance based ex-post evaluation does not appear yet to be a high priority of the Slovene government.

50. Studies and evaluations such as they exist are available only in the Slovene language.

51. In the case of projects funded by EU Funds, ex-post evaluation is implemented by the European Commission – it gives a strategic view of whether the objectives of the project have been achieved at the highest level.

D. Case Study: SNAGA d.o.o. Ljubljana Municipal Waste Management Facility

52. The publicly owned waste management company SNAGA d.o.o. is by some distance the largest of Slovenia's solid waste management service providers[15]. It is owned by Holding Mesta Ljubljana, (a publicly owned company that manages all municipal statutory services in the city) and is responsible for residential and commercial waste collection, recycling and final disposal in Ljubljana, the national capital, and the wider city region.

[15] It also provides a number of other municipal services such as street cleaning.

53. In 2005 it identified an opportunity to create a regional waste management centre in Ljubljana, the motivation for the project was national legislation driven through EU Directives on solid waste management that aim to reduce significantly the amount of waste going to landfill and thereby increase recycling rates.

Box 6.1: Municipal Co-operation

Initially seven municipalities signed an agreement to allow SNAGA to manage their solid waste and to co-operate in the realization of the project. This number increased to the present day where there are 26 municipalities signed up to the project. The reason for this adjustment is due to better source separated waste (greater accessibility to re-cycling opportunities and better behaviour on the part of citizens) which ultimately reduced the anticipated volume of waste from the original seven municipalities. Active sourcing of waste streams from other neighbouring municipalities sought to redress the balance and ensure that the basic economic model for the project was not undermined by events and the passage of time.

This is an excellent example of pragmatic project adjustment to reflect changing circumstances from the originally envisaged project. These adjustments ensure that the economic and financial business case for the project remains viable and healthy.

54. Clear, measurable objectives were set for the project and a range of technical options that could fulfil the objectives were assessed economically.

55. After a feasibility study and appraisal process a preferred solution of a Mechanical Biological Treatment (MBT) facility was chosen along with a site for the facility that was already in SNAGA's ownership. This was a deliberate policy in order to overcome any issues of cadastre because a basic concept of the land use had already been established in spatial planning terms.

56. The estimated capital cost of the preferred solution was 102mln EUR at 2007 prices and an application for supporting EU funding was made and subsequently approved. The agreed financing arrangements were as follows:

- 65.88% from EU Structural Funds
- 14.12% from the Slovenian national budget
- 10% from a local Environmental Tax (property based)
- 10% from the participating municipalities' budgets

Procurement Strategy and Process

57. The procurement process proper started with the publication of the contract notice in the Official Journal of the European Union (OJEU)[16] on 9 July 2009.

[16] No. 2009/S 129-188136

58. Since the basic type of facility had been identified, great care was taken not to identify with any proprietary manufacture of equipment for fear of destroying the necessary competitive tension. There were also many unknowns about the final design that required an on-going dialogue with a number of potential bidders. Therefore (within the context of the European Directives on Public Procurement transposed into Slovenian legislation) a Competitive Dialogue Procedure was initiated which allowed for dialogue to take place whilst competition and confidentiality were maintained throughout. Since this Procedure had never been used before in Slovenia, SNAGA employed the services of foreign experts with previous experience of the subject.

59. Three consortia were shortlisted and the structured Competitive Dialogue was managed prior to the final tenders being requested. The results of the tender process meant the winning tender had a contract value of 112.6mln EUR, an increase in the originally envisaged estimate of 102mln EUR. The contract[17] was awarded on 23 May 2012. The increased cost was largely due to inflation over a period of almost 5 years between initial estimate and final contract award. The financing arrangements in place meant that the participating municipalities had to fund the difference themselves. The figure may have been more alarming if it had not been for the global economic downturn that constrained cost inflation in the waste management sector. The procurement process, despite international expert oversight, took around 34 months and was characterized by persistent challenges to the process, many of them vexatious.

60. It is to be noted that had the same situation presented itself in Romania, with a higher than estimated tender price, the whole competition would have needed to be re-run. Even so, the SNAGA project manager asserts that the procurement process has caused more problems on the project to date than anything else.

Status of Implementation

61. Although SNAGA took great care to manage the process of permitting with a good level of pre-consultation, post contract delays have ensued due to permitting problems. From the perspective of SNAGA (and their consultants) an assessment remarkably similar to the one identified in Romania appears to have been realised. Many laws, regulations and standards adopted from EU Directives appear to have been done so with an un-necessarily extreme interpretation. For example, in the case of SNAGA a certain permitted environmental atmospheric emission standard is currently delaying the implementation of the project. It relates to the limits on Total Organic Compounds (TOC) which Slovenian law currently states should not exceed 20mg/l air. There is no absolute legal requirement in any EU Directive to achieve this standard, it merely considered best practice. This limit is extremely difficult to achieve and can only be done so with Business Case destroying extra hi-tech and high cost equipment and high on-going operational expenses.

62. The project team took the decision – a high risk strategy – to conclude the contract anticipating an amendment to this legislation in the Slovenian parliament. Whilst confidence is high that such amendment will be achieved, the delay is already significant and is causing the contractor some distress, as further inflation starts to eat into its margins.

Conclusions

[17] FIDIC Yellow Book (1999) Design & Build Contract

63. Whilst there are some striking similarities between the concerns of Slovenian and Romanian implementing authorities, nevertheless the absorption rates between the two countries remain notably different.

64. The transposition of EU Directives into national legislation in the areas of public procurement and environmental standards remain common concerns, albeit perhaps more vocal in the case of Romania.

65. The key difference between the two systems can be identified in the maturity of the respective institutional structures and their disparate capacities to identify prepare and implement good projects. Whilst there are clearly ways in which the Slovenian system might be improved, it is also clear that it is significantly ahead of the Romanian capacity – a fact that is demonstrated by the widely different absorption rates in the same sector in two different countries, both EU Member States and both operating within the same framework of EU Directives. Despite the strengths that already exist, the Slovenes are concerned to further develop their skill base and capacity.

VII. POLAND'S EXPERIENCE IN THE ROAD SECTOR [18]

A. Administrative aspects and financing arrangements

1. **As is the case in Romania, most of the road network consists of regional and local roads managed by subnational governments.** The total interurban road network comprises 224,400 km of roads, including 14,530 km of national roads of which about 580 km are motorways, 24,000 km of regional roads and 186,000 km of tertiary or local roads.

2. **The General Directorate for National Roads and Motorways (GDDKiA under the Ministry of Transport) and the National Road Fund (NRF) are responsible for national roads management and state roads budget execution.** Since 2006, GDDKiA has had a new internal institutional structure, separating preparation and implementation functions. In recent years, it has also improved the quality of its staff and technical and analytical capabilities. The basic incomes of NRF are: (a) part of fuel taxes, (b) motorway concessionaires payments under their obligations, (c) toll revenues at nationally managed toll motorways, (d) ViaToll payments for the use of major roads by trucks & buses over 3,5 tons, (e) other miscellaneous sources including borrowing.

3. **National roads development in Poland is mainly financed from borrowing with increasing support from EU funds.** Over the period 2007-2009, the government provided 43 percent of financing, borrowing 35 percent, 20 percent from EU programs and the remaining from road user charges. The trend, however, is towards a greater share of financing coming from the EU and loans. This funding structure differs from regions, districts and municipalities where road spending is mainly financed by the relevant subnational governments' budgets. National roads, including motorways, have so far (2010) received 80 percent of all EU grants disbursed for the road sector under the 2007-2013 program.

4. **The NRF has become a mechanism to raise increasing amounts of off-budget debt just like the RC in Romania.** However, there has been no corresponding rise in user revenues, as is the case in Romania as well. Unless revenues are increased, debt reimbursement will become NRF's largest expenditure this year because its financing inflows are already overextended when road user charges and fuel taxes are used to fund a wide range of road sector activities—new investment, payments to concessionaires, and rehabilitation. Financing system for roads at sub-national levels is based in principle of regular budgets at appropriate levels.

5. **Poland also has had difficulties in quick absorption of EU funds in previous years.** Even though Poland is increasing its absorption capacity, especially in the road sector, issues related to excessive centralization of the funding system, lack of capacity in the public administration, as well as limited knowledge and experience related to EU requirements and regulations are still present.

[18] Some of the information presented in this report is extracted from Polish Governmental National Roads Development Programme, two issues for periods: 2007 – 2012 and 20011 – 2015 and advancement of the works as recoded by General Directorate of National Roads and Motorways [GDDKiA] at the end of 2012.

6. **GDDKiA and regional/municipal road authorities may need to increase coordination.** Poland's existing institutional arrangements lack the same systematic coordination among government levels during planning and implementation as in Romania. As a result, investment projects across the country are not ranked in a uniform manner, which leads to overinvestment in some areas and underinvestment in others.

7. **Poland has a typical decentralised political / administration system with a three-tier system of subnational government (self-government):** region (voivodship), districts (powiat), and municipalities (gmina). The system is based on subsidiarity principle with legislature councils and executive boards at each level. These organisations with appropriate properties are generally capable of serving the society with all necessary public utilities including public roads. While on average self-governments are relatively efficient in using EU funds some of them, particularly at the regional and municipal levels, lack institutional capacity for efficient roads management and implementation of EU financed projects. The Regions are responsible for management of the regional/voivodship road network. The Districts are responsible for district level roads. Some of the larger municipalities are responsible for maintenance of all roads within their boundaries, while other smaller municipalities are only responsible for municipal roads. Some self-governments have problems with efficient absorption of all allocated EU funds. Main bottlenecks can be identified in several areas of project preparation and procurement, including incomplete feasibility studies and inadequate technical or environmental assessments. This has resulted in delayed or partial implementation of investment plans by some self-government.

8. **The road networks at all levels have a managing authority.** The executive bodies are empowered and obligated (the mayor of districts and municipalities - he/she is directly elected, the executive boards at county and regional levels (elected by county or regional legislature councils) and the General Director of GDDKiA (nominated by the Minister of Transport).

Table 1: Public roads general data[19]

Category	Responsibility	Total length [km]		Interurban roads length [km]	
National roads	Ministry of Transport	18 813	7%	14 530	6%
Regional roads (voivodship)	Regional Government	28 399	10%	24 050	11%
County Road	County Governm't	116 364	41%	102 187	46%
Local (communal, municipal) roads	Mayor's Office	116 825	42%	83 647	37%

[19] *Source: General Directorate for National Roads and Motorways; and Central Statistical Office: "Transport – Activity Results in 2011" www.stat.gov.pl/*

Totals		**280 401**	100%	**224 414**	100%

data at end of 2011 (non paved roads excluded)

TABLE 2: National Roads Functional Classes

Road Class	Total length [km]	One carriageway [km]	Dual carriageways [km]
National Roads, incl.:	**18,813.5**	**15,647.3**	**3,166.2**
motorways	1,069.6	----------	1,069.7
expressways	737.9	197.5	540.3
other	17,006.0	15,449.8	1,556.2

9. During the year 2012 some new motorways and expressways had been opened for traffic. Unofficial sources say the current length of motorways is 1,360 km and expressways 1,107 km (20%) The map below shows the progress of implementation of the Programme (green – 2008, red – 2012).

Figure 1: Motorways and major highways projects (Source: GDDKiA, 2012)

10. The General Directorate for National Roads and Motorways (Polish abr. GDDKiA) is a national government agency and the central body for all public roads in Poland, besides also being the managerial agency for the national road network.

11. The organization works under a centralized unit, with 16 territorial offices operating as representatives of the General Director and under his supervision.

12. Total employment in this institution is 4 750 positions, with the following split into main divisions:

- Central unit (General Director's Office) –
- Other units to serve the whole institution –
- 16 branches / regional offices, acting within boards of each voivodship-

13. Road construction and maintenance works on national roads are financed from several sources: the road budget, the National Roads Fund, loans, EU Funds and other sources.

14. The regional branches of GDDKiA are delegated wide responsibilities for project preparation and implementation under supervision from central branch. No use of consultants is necessary to strengthen the capacity of regional branches in this (it was during the first years of EU membership). Consulting firms are only contracted prepare FS, technical detailed designs and to undertake construction supervision.

15. The role of central GDDKiA unit is to:

- Overall Management of all national roads and related facilities and prepare operational programmes and co-ordination and supervise implementation,
- Legislation and regulations related to public roads
- Provide templates of documents (including contracts) to branch offices,
- Preparation of studies, plans and programs to be implemented after approval by appropriate bodies
- Manage available funds between branches (spending on projects is managed in branch offices),
- Provide training and information on budgeting and other topics, such as projects preparation and implementation.

16. The role of GDDKiA Branch (regional) Offices is to:

- Prepare necessary background material for programming,
- Prepare pre-feasibility studies and other analyses (when necessary),
- Providing technical support at regional and local administrative levels,
- Maintenance/operation of the roads,
- Manage individual projects, which consist of :
    - Contract management of consultants for FS, technical design and construction supervision,
    - Preparation of draft plans, design works and other documents to be approved by appropriate institutions,
    - Acquisition of land for the road right-of-way,
    - Prepare tender documents and organise tendering for civil works,
    - Sign and follow up all contracts (as Client and Employer) in co-operation with supervision engineers (if contracted)
    - All financial management of contracts,
    - Project complete arrangements

17. The 2012 road budget (national roads) was about EUR 7 bln of which 90 percent was for capital expenditures. There are currently 295 major investment projects under The Development Plan for National Roads. EU funds for the 2007 – 2013 financial period cover EUR 10,3 bln for this plan.

At the end of 2012 between 66 – 70% has been used and almost 100% allocated.

B. Management issues

18. Polish road administrations at all levels are now limited to work on road management tasks and to contract out all maintenance services. Only in some small districts and municipalities are in-house implementing units still used.

19. The short term (annual+3 years) budgeting system allows for multi-year term maintenance contracting of works (in special cases it is possible to contract works for more than 4 year terms, what is especially applicable for routine and periodic maintenance works including winter maintenance).

20. At each level of management the appropriate legislative body can establish a professional road maintenance unit of any type (in-house labour organisation, establish a commercial company or outsourcing to the private sector).

21. The market of consultants is open and many international and local companies are active. They offer different levels of services with a strong tendency to improve qualification and professionalism. Some of the companies are mixed Int'l/Polish entities as a result of former privatization of state owned design bureaus.

22. The competitive selection process is open. Public Private Partnership is rarely used except for four concession projects launched in the late 90s. New sections of motorways are managed by GDDKiA and this agency steps into the role of operator in case of toll financed highways.

23. The main problem in Poland is the competition (mostly) on lowest price - very rarely is it based on other factors such as technical and financial factors and competencies of staff. **To avoid awarding the contract to irresponsible bidders and weak consultants, the pre-qualification procedure is used practically all the time.** But experience has shown that a public agency often have limited knowledge and experience in reviewing contractors' and consultants' qualifications and capabilities.

24. A problem has been inconsistencies between the TOR requirements in these respects and the evaluation procedures and scorings as laid out in the Request for Proposals. Polish law requires that one can only make requirements to technical proposals and qualifications of staff if such scoring is allowed for in the evaluation procedure presented in the RFP. So even when some quality requirements are placed in the TOR they do not play any role in evaluation when not included in the way the proposals will be scored.

25. There is a **single system for project management irrespective of financing source**. EU and other foreign funded projects are managed in the same way as locally funded projects by regular departments in close co-operation between the central GDDKiA Office and the appropriate Branch Offices. Nevertheless there is an EU Funds Department in GDDKiA. This department is responsible for co-ordination and follow-up only.

26. There are **no independent technical audits** taking place or other forms of independent feedback for quality enhancement of project preparation and implementation. Exceptions are where there is a dispute or conflict, mostly involving complex projects.

Project preparation issues

27. Over the last 10 years significant improvements were made in Poland in all aspects of project preparation and implementation. An important role is played by JASPERS handbooks and personal support for road administration to improve quality of project preparation.

28. **Comparison between EU Operational Program projects and locally financed projects** in Poland**:** Initially there were quite significant differences between the way foreign and locally funded projects were managed. Today these differences have practically disappeared, with a few exceptions:

- Feasibility studies: the projects financed only by the Polish budget are sometimes prepared with **simplified studies, limited technical and economic analysis (CBA) or without careful evaluation of alternatives**. EIA's are carried out for the selected alternative only.

- Other project preparation procedures, including land acquisition is the same when the Specific Road Act is used (mostly the case).
- The EU funded projects have **a greater degree of urgency** compared to locally funded projects.

C. Other Project cycle issues

Land Acquisition

29. **Special legislation enacted to facilitate faster location of road alignment and implementation of works.** In Poland the land acquisition procedure for an investment project (new road construction or rebuilding existing road) is based on:

- Approval of the investment project in multiyear plan and first year budget available,
- The investment project is in line with the land use plans or similar official document at local level.

30. To speed up the preparation of projects a "**Specific Road Act**[20]" was enacted in 2003 to deal with planning and land acquisition of all classes of public roads (an earlier version for motorways only was enacted in 1994). The main substance of the act relates to: (a) location of a road, (b) land acquisition for road projects, and (c) faster realization of the works.

(a) Decision on overall location or the alignment of a new road is issued by the Governor ("voivod") who acts as regional representative of the National Government. As opposed to "regular" procedure through the Building Act, this law defines the road alignment plan as a land use plan, but without requiring typical formal procedures for such a plan and with simpler scope of work and preparation requirements. The accelerated decision making limits some rights of land owners, district administrations and regional governments related to land use planning.

(b) Expropriation procedure is limited to one administrative step allowing almost immediate possession of the property by the road administration, even before compensation is paid;

(c) The final decisions are not according to land use planning law which has a more time consuming process, but facilities an earlier issuance of the *Building Permit.*

31. The environmental and social impacts assessment procedures are not affected by the Special Road Act, although there are cases of conflicts between the road administration and land owners or local / regional NGOs due to layout, technology, environmental or other aspects.

Procurement

32. All types of contracting are possible for road works. In practise the GDDKiA uses almost exclusively separate detailed design by consultants and normal construction contracts (traditional "Red Book" FIDIC

[20] The Act on special riles on preparation and implementation according to public roads, first version 2003,

approach) but with significant deviations from international best practice in the tender documents used. Design-Build (Yellow FIDIC) type of contracting is used very rarely at for national roads – however, they are quite popular at regional / local levels. The current highway administration has no experience in this respect and is reluctant to try relatively new more risky contract forms. There were attempts in this field (including for the S19 national road with support of EBRD) with no success.

33. Also in the 1990s, for 4 new toll motorways concessions were awarded under Private Public Partnerships arrangements. Currently, no concession contract is under preparation (the last opened in early 2000). A concession for a large section of A1 (180 km in the middle of Poland, a key link in the motorway network) was attempted in 2010 but terminated due to lack of financial closure.

34. Pre-qualification is the basic method for potential contractor selection used by GDDKiA in Poland. Lowest price is the principle used in final selection and contract award. Careful evaluation of contractors' ability to implement the works is required, using financial statements, equipment/plant ownership and qualification of key staff. Not many contract awards are challenged in court, but motorways and important major national roads are among the one percent of contract awards that are challenges annually.

35. The tendering and award process varies significantly. If the process runs smoothly the minimum time period for big projects is altogether some 100 days from announcement to award (excluding time for addressing disputes). There are cases where contract award took over one year (not including court proceedings).

Implementation

36. Depending on each project external experts are used in particular fields (examples are environment specialists, archaeologists, traffic safety specialist and ITS engineers).

37. **The main issues** the Polish GDDKiA faces are:

- at the **preparation phase** of projects:
  - poor quality of some preparatory works, and defective public consultations to avoids difficulties and extra work/topics,
  - lack of will to address and solve issues causing public protests,
  - inconsistencies in data bases obtained from official institutions,
  - pressure from utility companies to include upgrading of their installations into the construction costs of the project,
- at road **construction phase**:
  - poor quality of consultants design work and construction drawings,
  - poor communication between Employer and Contractor leading to delays in timely resolving of implementation issues (some contractors complain about a passive position or lack of will of the Employer to intervene at all in case of a claim, additional work or requests for extension of time for completion),
  - problems with timely control of the works (laboratories are kept by administration, there are cases of suspected corruption and conflicts with contractors),

- poor financial strength and technical capabilities of some contractors leads to implementation problems and in some cases to termination of the contract with retendering, and even in some cases bankruptcy of contractor.

Variation orders are rare but **claims by contractors are frequent** and mostly solved by the courts.

38. The **main causes for delays** are:

1) Revisions to local land use plans (when the Specific Road Act is not used) are sometimes unrealistic causing delays in obtaining acceptance and approval
2) Archaeological requirements can be time consuming in Poland as there are numerous locations of potential archeological values to be found. In cases there are valuable finds detected during construction, special chance find procedure will be used in each case by relevant authorities. This can stop civil works for long periods
3) Environment impact assessment (the procedure requires all-season inventories and often leads to protests and cause delays): In the past, there were attempts to minimize the preparation of EIA for projects, and there were cases where implementation of a project had to stop and a significant change to the project concept had to be introduced causing years of delays of a critical road corridor
4) Not undertaking appropriate public consultations has led to legal challenges. In general this has been a weak area for the Polish administration. But the Polish administration and judiciary are getting better in timely addressing environmental issues and court cases. Environmental protection and management is gradually getting proper attention.

Cost of new projects:

39. The practice is to contract out both FS and Detailed Design in one consultancy contract, and the evaluation of costs is made on the basis of the DD. There are therefore often common estimates of construction costs for the FS and DD stages. There are sometimes major differences between the estimated cost and the bid prices: lowest offer are usually between 20 – 40% lower than the estimate.

40. The FS cost estimates are in many cases far too high, which may indicate that the FS preparations should be improved before DD is started, or that there are significant changes in the standards adopted after preparation of the FS.

41. The difference between initial contractual price and final cost in most contracts (since a few years ago) cannot exceed a 7% contingency item in the contract. Before there were no contingences or variations allowed, and the contract price was final.

42. According to data from GDDKiA for all projects completed by the end of 2012 within the National Roads Development Plan [NRDP] for the period 2008 – 2015 (295 contracts) the average difference between initial contract price and final cost is only **0,72%,** and the differences are within the limits of +15% or -7%**.** Another source – the list of 16 projects, selected as representative for another WB analysis (as mentioned above) – the table below is giving the main characteristics of some of these projects.

TABLE 3: Selected Data for 8 Major Motorways Projects under Implementation

Road link	Length [km]	Costs [k PLN]						Implementation time [months]			
		FS estimate	DD estimate	Contract price	% of estimate	actual	% of Contract	Acc. to Contr.	Actual	% actual/ contr.	Open to traffic
1. A1- ID 42	6,00	500	801	900	112%	922	103%	27	30	111%	31
2. A1 - ID 39	14,10	n/a	312	234	75%	2 425*	1037%	27	33	122%	33
3. S3 - ID 165	4,80	85	79	41	52%	49	120%	30	30	100%	27
4. S6- ID 185	9,40	327	290	132	46%	139	105%	20	20	100%	20
5. S7- ID 84	13,72	2 041	492	543	110%	535	98%	31	35	113%	33
6. S7- ID 45	16,67	514	514	527	103%	516	98%	22	26	118%	27
7. S8- ID 143	10,38	1 461	1 461	1 762	121%	1 897	108%	32	32	100%	28
8. A1- ID 186	7,46	1 461	1 461	1 762	121%	1 897	108%	32	34	106%	25

Shaded/yellow fields - assumption, no precise data

*Change of road class

Source – GDDKiA

43. **Consulting work in Poland as percentages of construction costs.** Based on cases investigated for NRDP the levels of consulting works can be estimated to: In average, on a basis of selected project data, the costs of the two stages – FS and DD – have been at the level of 2,5 – 4,0% (no valid data for FS or DD only) plus CS (Construction Supervision) 1,5% makes total preparation consulting works 4,0 – 5,5% (excluding land acquisition). In general the proportion between FS and DD level of efforts is at about 1:5 (although this varies widely).

Quality of consultancy works.

44. The Polish national road administration was in the past not accustomed to prepare or contract out consultancy works other than technical detailed design. Also local consultants were not experienced in the field of FS assignments, although the methodology of CBA was well known at technical and economic universities. It is important to note that during the communist period there were no clear requirements to work out cost/benefit analyses as there was no real currency and costs were not market based! Only technical and cost comparisons of alternatives were in use.

45. When meeting EU requirements became necessary (starting with PHARE transport, 1994) this is when international firms were employing local personnel and the experience among Polish experts developed. In addition, such initiatives as JASPERS have proven helpful with their guide books and direct assistance. Therefore new Polish firms are more and more active in this market and are successful mostly due to being able to offer lowest price.

46. At GDDKiA in the past (especially during 1990), the new approach was not popular; FS was initially treated as a "necessary pain" that had to be endured and prepared to receive EU subsidies. A factor is also that **the corridors for the main motorway network were identified during the 1970-s and 80-s. and most of the land for the network had been acquired.** So major changes to locations and layouts were not possible for many motorway projects during the 90-s and 2000-s and a core part of a normal FS scope of work was redundant.

47. Nevertheless, **the critical point was the familiarization with good operational manuals** (e.g. Professor Massimo Florio's guidebooks on preparation of FS for new member states[21,22] (and JASPERS in two versions – 2006 and 2008). Also strong leadership from the Ministry of Regional Development as the Central Administration for Implementation of Structural Fund and Regional Development Fund is worth to mention as a key element of improvement of FS preparations in the road sector in Poland after 2005.

Other Implementation Issues

48. **Price adjustment/escalation clauses in contracts:** In interviews with GDDKiA officers, price adjustment in civil works contracts was not seen as an issue. Any escalation of the contract price due to inflation seems to be a cause for suspicion of a state auditing agency and therefore avoided in civil works contracts.

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[21] TRT Trasporti e Territorio oraz CSIL Centre for Industrial Studies: *Guidelines for Cost Benefit Analysis for development Projects* (final report for Polish Ministry of Regional Development, June 2008)

[22] Massimo Florio: *Public Investment, growth and fiscal constraints: challenges for the EU new Member States,* Florio M. (ed), Edward Elgar Publishing Ltd, 2011

49. **Contract types and management:** Most of the contracts in GDDKiA are based on a traditional separation of detailed design and construction using the "red FIDIC" type as basis, although some of the key FIDIC conditions are excluded in road sector contracts, including a price adjustment clause, a contingency for unforeseen and advanced payments. Based on recent experiences, and after numerous contracts being terminated, there is a growing acceptance that contingencies are necessary but within strict limitations (a 15% limit has been accepted and recently 7% of civil works costs was introduced).

50. In most of the civil works contracts an (site) Engineer is engaged, a consultancy firm with experience and a license in **construction supervision**. The difference with common practice elsewhere is that the material controls are the responsibility of GDDKiA and carried out by GDDKiA's own laboratories. This is an area of concern as the responsibility for quality control is shared between the Contractor and the Employer.

51. The data on 295 projects from NRDP shows a relatively small difference between contractual time for completion and actual time. Altogether 195 months of delays were accepted for 161 projects with delays. 128 projects had no delays, and 6 completed early.

52. In addition it is interesting to observe some indicators related to the effectiveness of management:

- there are 295 projects listed
- 44 of them open to traffic
- 11 contracts terminated (3,7%) due to bankruptcies or other reasons
- total delays recorded 195 months

53. A concern is the large number of terminated contracts involving three bypasses of towns along national roads, one expressway and seven motorway sections. These terminations due to non-performance of the contractors affect five branches of GDDKiA, which indicate a general weakness of Polish road construction industry and possibly other systemic issues in road management.

54. **Co-ordination with regions / counties:** The indirect coordination works through the regional master planning (strategy and land use plan) and is based on the subsidiarity principle. Counties in Poland do not establish any physical plan. They manage without a specific planning system, except the for the specific road act which obligates each road administration to issue development plans, but doesn't regulate the form and scope of this. The result is that there are no new county roads under deliberations.

55. **Payments to contractors:** Payments are normally approved within 30 days of acceptance of the interim payment certificate; in many cases there are delays usually caused by disputes on completed of works. All payments to contractors are made by branch offices of GDDKiA. In cases of conflict between general contractor and a sub-contractor (that happens quite often!) there is special legislation which protects an approved sub-contractor from not being paid. It has proven quite effective, especially when the main contractor is unable to perform and his contract terminated.

56. **Utilities**: According to Polish legislation public utility companies (enterprises) are obligated to issue to investors or empowered contractors a formal document with a set of conditions and guidelines for connecting to or relocate its infrastructure and to eliminate disruptions during planned construction works. The information has to be limited to restoration works and it is illegal to require upgrading or enlargement of existing infrastructure. There is a possibility to upgrade

infrastructure as part of road works but under separate contract with appropriate payment from the utility to compensate for extra costs.

57. **Functional / operational program**: this document is required as part of the scope of work of the fs study consultants to determine (in a separate document and in a more detailed form) the expected results, works to be undertaken and other outcomes of the project. this specific document was introduced for design-build tendering but is now also used for other contracts in poland. the employer is using this document as he is obligated to prepare a special pre-design document called "functional and operational program", which determines major assumptions and defines acceptable "field of solutions" in many terms: spatial, technological, environmental and legal, together with a provisional (not binding) bill of quantities. the employer is also obligated to deliver opinions and requirements of all institutions and other entitled affected by the project, including utilities' conditions and options for accessing the network of public services, ground examinations, environmental conditions and requirements (among others nature objects inventory, natura 2000 sites, results of noise surveys, etc.), traffic counts and surveys, historical and cultural monuments preservations. this program is required under the public procurement act (2004) and a resolution issued by the minister of infrastructure (2004).

58. **Independent auditing:** All Polish public organizations are obligated to provide auditing services of two kinds: financial and professional/technical. The first is executed by an independent auditor chosen competitively from experienced firms, and the second is an internal unit in the organisation and the auditors are employees. Many administration institutions occasionally contract independent auditors for special tasks (e.g. in case of serious problems with project implementation). In case of GDDKiA the independent audit is engaged only for financial control. All professional aspects are audited by the internal audits department.

59. According to GDDKiA there were no special audits carried out by EC on EU financed projects under the NRDP as of the date this report is being prepared (February 2013). There were interventions from the EC in some cases with suspected corrupting or colluding practices. Such cases were noticed recently on three tenders. The Polish Government monitors the situation on a routine basis, and appropriate interventions are undertaken with information to the EC.

60. **Sub-contracting** is one of the weakest elements of road contracting in Poland. There are no official constraints, and the Employer (or Client in case of consultancies) can allow 100% subcontracting, if not limited in the contract. This is a weakness and **the cause of many of the problems in implementation of road projects in Poland.** One negative effect is also that the main contractor is sometime not able to control his subcontractors, or they are not being paid in time (usually subcontractors are SME's with little access to operating capital. The main contractor tries to save costs by delaying payments to subcontractors until receiving payments from the Employer, which again expects to have complete stages of work to pay for.

The Polish Planning System

61. The system can be considered split vertically in two types: master planning and sectoral (road or transport) planning. At the national level the strategic planning documents are prepared and cleared by executive bodies (Ministry of Transport and Council of Ministers). The Parliament provides opinions or remarks. At lower levels of government all strategic planning approval are made by legislative bodies.

62. At National level the main land use plan and overall strategy documents (called "Master Plan") are presented by the Government to the Parliament which takes a decision by approving the Master Plan. The decision binds all government units and in practice means that all other levels of the administration should take it into account in undertaking physical planning.

63. The Regions implement Regional Master Plan, which is a platform of coordination of central, regional and local plans. There are no other formal links and coordination takes place through this Regional Master Plan.

64. Districts do not establish any physical plan. They act without a specific planning system except for the Special Road Act which obligates each district road administration to issue development plans, but doesn't regulates the form and scope of this for district roads. The result is that practically there are few new district roads under development.

65. Municipalities and towns establish two types of plans: master-plan (general land use plan as mandatory with a strategy) and detailed land use plans. In the case of a lack of detailed land use plans the decision on the location of a new road must be based on a simplified "mini" land use plan for the road and vicinity, using similar procedures as for a full land use plan with approval at the level of the executive board and not the council.

66. All levels of public administrations are preparing and approving budgets (mandatory) on an annual basis, but with a multiyear budget plan (budget year + 3 years forecast). In many cases financial forecasts are made also for the longer term (up to 10 years and sometimes 20 years). These are important in case of long term financial obligations (loans, bonds and others) and are required by state financial auditing office in order to approve borrowing.

67. The described system works correctly when co-ordination between parties involved is efficient. This is not often the case in Poland and the Specific Road Act is a case in point, where a temporary legislation is allowing Building Permits for a road to be issued without formal agreement with sub-national administrations and also with extra short land acquisition procedures.

Other Lessons Learned with Relevance for Romania

68. Until about the year 2000 national road projects in Poland where often delayed and the road administration could only absorb 70 – 80% of the annual budgeted amount. This created political criticism and led to a new road law being enacted and several other steps to improve performance. In general **the Polish road administration now works reasonably well**. Improvements were a result of:

- **Strong political will** to improve the situation and provide better road services to the public;

- **Effective supervision** from the Ministry of Transport, directed at defining strategies and reaching goals;
- **Capacity building in GDDKiA.** Staff training and retaining of staff with growing experiences, as well as introduction of new information management instruments, such as good data bases to observe progress and identify bottlenecks;
- **Contractors' capabilities and financial strengths improved**;
- **Improvements in land ownership registries (counties) and cadastral map production** capabilities (involving private sector).
- **Improvements to the planning system** towards strengthening the authority of the national road administration, without violating basic rights of regional and local administrations.
- The **Specific Road Act in Poland can be a good example to consider, but needs adaptation to Romania to be applicable.** It has introduced specific procedures for location of and issuing permits for new roads. These procedures allow Poland to shorten the timeframe for some of the formal activities (including land acquisition or building permit).

69. Nevertheless **there are some negative aspects of the Polish experience that should be taken into account.** Among the most important ones are:

- The Employer should take into account that all costs of a project ultimately are included in the rates offered by the bidders and in the contract price. New requirements by the Employer, for example the possible removal of advance payments from the contracts, may look like a saving, but means additional costs to the contractor, to be reflected in his unit rates offered and ultimately means higher costs per km of a new road. **The costs of Polish new roads seem to be high** because of such approaches to contracting.
- **Many contracts are awarded to irresponsible bidders** offering the works at much too low price. Such award practices should be avoided and non-performing bidders blacklisted.
- The company awarded the contract is sometimes not as strong financially as could be expected and often equipment and professional staff are not readily available. **Better examination of bidders' financial situation and professional capabilities is desirable**.
- Another challenge is **colluding practices among contractors** (including international firms) to increase the contract price.
- The **environmental requirements seem to be unrealistically complicated in Poland** with frequently changing procedures that in practice can become bottlenecks.
- The quality of road sector planning and programming leaves a lot to be desired. Unlike in Romania, **Polish laws have no requirement and formal regulation on "feasibility studies"** or "cost-benefit analysis." Although these tools are well known because of EU sponsored projects, no obligation to use them is clearly stated in the law and there are no local informal guidelines. Therefore, one can meet many cases where planning is prepared with low quality or they present and recommend only "one correct" alternative. This situation improves when EU funding is involved due to JASPERS quality enhancement activities.

- Land acquisition processes **– the situation when it comes to ownership maps is good**, while often the ownership is not resolved on the owners' side; Some regulations on expropriation seem to be unconstitutional and has created conflicts (e.g. for some time the process for land to be acquired for road construction predicted much lower prices than the market value and the administration has to wait for a court sentence to disburse).
- **Public consultations** are required under environment and social impact assessment procedures, but not **for planning and design decisions under Special Road Act, and this do create problems sometimes.**
  - Regarding tendering of works **– the whole catalogue of well-known problems from Romania is valid also in Poland.** Poor quality of tender documents is frequent, especially on bidders' (post)qualifications (Polish law also allows the use of references "leased" by another company that is not bidding), unclear requirements on staffing of contractors, evaluation criteria and practices, etc., etc.
  - Conflict resolution – **contracts are pre-defined and non-negotiable**; many problems appear in unexpected situations and there are no contract conditions allowing appropriate reactions to such situations. Therefore, the contractors' claims cannot be negotiated in any cases except in court.

VIII. THE UK'S EXPERIENCE IN THE RENEWABLE ENERGY SECTOR

Current Situation in the UK

1. The UK Government's vision is for a competitive and efficient market that attracts a wide pool of investment. Independent development companies are likely to play a continuing and significant role in bringing forward further renewable generation.[23]

2. A PPA with a credit-worthy counterparty is usually required before lenders will provide finance for a project, as it provides comfort that revenues are reasonably secure and risks will be appropriately managed. Independent developers have said that they are finding it increasingly difficult to attract PPA offers on bankable terms i.e. that discounts are higher and fewer firms are submitting PPA tenders. Other issues have been raised including the higher discounts applied to PPAs in GB compared to other European markets.

3. The absence of "bankable" PPAs could mean that independents will struggle to raise finance for new projects. Ian Temperton (Climate Change Capital) tells that "people wanting third-party finance will need Power Purchase Agreements. They will need to give their financiers a surety that their product is going to get into the market"

Romanian Renewable Support Mechanism

4. To promote the production of electricity from renewable energy sources (E-RES), Romania adopted the system of mandatory quotas combined with the system of tradable green certificates (GCs), according to which electricity suppliers must acquire and hold a specific number of green certificates or, if they cannot comply with the quota obligation, they must pay penalties for the non-fulfilled quota.

5. The E-RES promotion system applies to the electricity supplied to the network, produced from: hydro energy used in power plants with installed capacities up to 10MW, wind energy, solar energy, geothermal energy, biomass, bio liquids, biogas, landfill gas and sewage treatment gas- for the power plants/generation units commissioned, or refurbished before the end of 2016.

6. Eligible E-RES generators benefit from the support scheme in the form of a number of GCs for the electricity produced and delivered to consumers (i.e. electricity produced in new wind power plants is granted2GC/mWh until 2017 and only 1GC/mWh thereafter). The price of a GC is restricted between a minimum value of € 27 for 1GC and a maximum value of € 55 for 1 GC, annually indexed with the EU inflation index. After 2025, the trading value of GCs will be freely established on the market for GCs but cannot be smaller than the minimum trading value applied for 2025.[24]

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[23] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66553/5684-call-evidence-barriers-ind-ren-gen-inv.pdf

[24] http://www.kpmg.com/RO/en/IssuesAndInsights/ArticlesPublications/Factsheets/Audit/Documents/Romanian_energy_market_factsheet_EN_.pdf

7. Similarly to the UK, Romania has a balanced portfolio of power station generation capacity comprising hydro (31.1%), nuclear (6.3%), coal and gas-fired power plants (62.5%), with renewables (other than hydropower) representing a small but rapidly growing subsector of the generation market.

Table 8.1: Comparison of UK and Romania Renewable Energy Sources

	Electricity - production:	Electricity - consumption:	Electricity - installed generating capacity:	Electricity - from fossil fuels:	Electricity - from nuclear fuels:	Electricity - from hydroelectric plants:	Electricity - from other renewable sources:
UNITED KINGDOM	352.7 bn kWh (2010 est.)	325.8 bn kWh (2009 est.)	88.02 mln kW (2009 est.)	75.4% of total installed capacity (2009 est.)	12.3% of total installed capacity (2009 est.)	1.9% of total installed capacity (2009 est.)	7.3% of total installed capacity (2009 est.)
ROMANIA	62.6 bn kWh (2011 est.)	45.61 bn kWh (2009 est.)	21.2 mln kW (2011 est.)	62.5% of total installed capacity (2009 est.)	6.3% of total installed capacity (2009 est.)	31.1% of total installed capacity (2009 est.)	0.1% of total installed capacity (2009 est.)

[25]

Transition of PPA contracts in the UK

8. Three designs of feed in tariff (FiT) were initially considered by the UK Government as a replacement for the Renewable Obligation (RO): a Fixed-FiT (which would pay a fixed payment that generators receive instead of revenues from selling electricity in the market); a Premium FiT (PFiT) (which would pay a fixed premium on top of the variable wholesale electricity price); and a FiT with Contract for Difference (CfD) (which would provide a long term contract set at a fixed level where variable payments are made to ensure the generator receives the agreed tariff and where the generator would return money to consumers if electricity prices are higher than the agreed tariff).

9. Independent generators are likely to make a valuable contribution to meeting our renewable energy and de-carbonisation goals. Independent generation developers typically rely on long-term offtake contracts

[25] https://www.cia.gov/library/publications/the-world-factbook/geos

(Power Purchase Agreements or PPAs) in order to secure the finance they need. Developers have reported that the PPA market has deteriorated and that there is a risk of an investment hiatus.[26]

10. The UK government anticipates that the Contract for Difference (CfD) will meet the requirements of a competitive long-term contract (PPA) market in ensuring independent renewable developers are able to play a continuing role and high-level options that may be necessary to remove barriers to achieving an efficient route to the market.

UK's Contract for Difference (CfD)

11. Contracts for Difference (CfD) is a new mechanism to support investment in low carbon electricity generation. The CfD works by stabilising revenues for generators at a fixed price level known as the 'strike price' (see below).

12. Although the government has set a full CfD operational framework, some elements of the design are still being developed, notably: the setting of initial strike prices, the development of the detailed allocation rules, the appropriate contract milestones for each technology type, and the drafting of the final CfD contract terms.

Price Setting and Allocation in CfD

13. Planning our electric future: a White Paper for secure, affordable and low-carbon electricity[27] set out the Government's intention to introduce a Feed-in Tariff with Contracts for Difference (CfD) as a new mechanism to support investment in low-carbon electricity generation. The CfD works by stabilising revenues for generators at a fixed price level known as the 'strike price'. Generators will receive revenue from selling their electricity into the market as usual. However, when the market reference price is below the strike price they will also receive a top-up payment from suppliers for the additional amount. Conversely if the reference price is above the strike price, the generator must pay back the difference.

14. These characteristics mean that the CfD provides additional benefits when compared with the current Renewable Obligation and alternative mechanisms considered. It gives greater certainty and stability of revenues by removing exposure to volatile wholesale prices, and protects consumers from paying for support when electricity prices are high. Consequently it makes the development of low-carbon generation cheaper for both investors and consumers.[28]

15. Renewable strike prices will be issued and consulted on in the draft delivery plan in July 2013 and finalised by end 2013.

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[26] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66553/5684-call-evidence-barriers-ind-ren-gen-inv.pdf

[27] http://www.official-documents.gov.uk/document/cm80/8099/8099.pdf

[28] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48373/5358-annex-b-feedin-tariff-with-contracts-for-differe.pdf

- The UK Government will introduce a flexible allocation process which delivers early contract allocation and price certainty for developers whilst ensuring consumers are protected, through:
- Eligible projects being able to secure a CfD on proof of planning permission and an accepted network connection offer (or equivalent);
- CfDs issued on a first come, first served basis where allocation is anticipated to remain comfortably within the available budget (say, 50% of the budget remains unallocated);
- Issued CfDs being subject to a substantive financial commitment milestone and a long stop date for delivery.[29]

The Contract

16. The CfD will be a private law, bilateral contract between the CfD counterparty and an individual low-carbon generator.

17. The contractual arrangements should be largely standardised across technologies, but variations will be needed in some cases;

- Projects that secure a CfD will gain access to long term, inflation linked payments, removing wholesale price volatility;
- Payments under the contract will be two way, and pay the difference between the CfD strike price and reference price, for the volume of electricity produced by the generator;
- The CfD will also provide investors with a degree of protection against certain changes in law and regulation. It will also set out a procedure for resolving disputes.

18. The level of support for low-carbon generation will be set according to a series of principles, foremost amongst which is the need to deliver decarbonisation whilst minimising costs to consumers. The Government's position remains that the best way to do this in the long term is through competitive price setting, but until market conditions can support such processes, prices for all low-carbon technologies will be set administratively or through negotiation.

19. During Stage 1 (to 2017) – for renewable technologies the initial process will be similar to that used for the most recent Renewable Obligation banding review, giving visibility of prices for a five-year period to enable planning. Strike prices for early stage CCS[30] projects (including those supported under the UK CCS Commercialisation Programme) and nuclear projects will be determined through cost, risk and price discovery processes and negotiation.

20. Stage 2 (2017-2020s) – as technologies and the market begin to mature, the Government intends to begin to move to a competitive price discovery for specific technologies. For renewable technologies deploying after 2020 it is expected this may begin as soon as 2017.

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[29]https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66554/7077-electricity-market-reform-annex-a.pdf

[30] Carbon Capture and Storage

21. Stage 3 (2020s) – technologies and the market have matured sufficiently for Government to move to technology-neutral competitive price setting.

22. Stage 4 (late 2020s and beyond) – CfDs no longer needed, as market sufficient to drive competition.[31]

General Response

23. Some independent developers have said that they are finding it harder to secure PPAs and are concerned that the transition to the CfD will further constrain their ability to secure PPAs on bankable terms.

24. Independent renewable developers have raised concerns about the current difficulties they face in securing bankable long-term contracts (Power Purchase Agreements or PPAs). PPAs are typically required to satisfy lenders that key risks are being managed, and therefore support the financing of projects at lower cost.

25. In response to these concerns the Government published a call for evidence on 5 July 2012, seeking to build the evidence base for policy development in this area. The call for evidence closed on 16 August 2012. The evidence received broadly supports the views of the independent generators that the market has shifted in recent years, and that generators are securing PPAs on terms that are not as beneficial as they used to be.

26. However there has been an overall positive response with major electricity supplier stating that:

"A Feed in Tariff (FIT) based on a Contract for Difference (CfD) is likely to be more effective than a premium FIT (PFIT) in reducing the market risks associated with new low carbon investment, particularly for new nuclear power or CCS-fitted plant, although the effect on renewable investments supported by the Renewables Obligation (RO) may be marginal. It will also help attract new sources of investment."[32]

[31] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48373/5358-annex-b-feedin-tariff-with-contracts-for-differe.pdf

[32] http://www.eon-uk.com/EMR_CONSULTATION_EON_RESPONSE.pdf