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Report No: 35843-RO

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN AN AMOUNT EQUAL TO EUR 106.2 MILLION
(US$131.7 MILLION EQUIVALENT)

TO

ROMANIA

FOR A

MUNICIPAL SERVICES PROJECT

May 25, 2006

Infrastructure Department
South Central Europe Country Unit
Europe and Central Asia Region

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CURRENCY EQUIVALENTS

Currency Unit	=	New Romanian Lei (RON)
€ 1	=	RON 3.48
US$ 1	=	RON 3.04
€ 1	=	US$ 1.24

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ANB	Apă Nova Bucureşti (Bucharest water supply private concessionaire)
ANRSC	Autoritatea Nationala de Reglementare pentru Servicii Publice de Gospodarie
ARBAC	Agency for Regulating Water Supply and Sewerage in Bucharest
BOD	Biological Oxygen Demand
CPS	Country Partnership Strategy
EIA	Environmental Impact Assessment
EIB	European Investment Bank
ERR	Economic rate of return
EU	European Union
GOR	Government of Romania
IBRD	International Bank for Reconstruction and Development (World Bank)
ICB	International Competitive bidding
ICPDR	International Commission for Protection of the Danube River
ICR	Implementation Completion Report
IFI	International Financial Institution
IFR	Interim Financial Report
ISPA	Instrument for Structural Policies for Pre-Accession
MoPF	Ministry of Public Finance
MoEWM	Ministry of Environment and Water Management
NBF	Not Bank Financed
NCB	National Competitive Bidding
PE	Population Equivalent
QCBS	Quality and Cost Based Selection
RAAC	Regional Autonomous Water and Sewerage Company
RED	Road Economic Decision Model
RGAB	*Regia Autonomă de Apă Bucureşti* – Bucharest Municipal Water Company (Bucharest Water and Sewerage Company)
SOP	Sector Operational Program
UNDB	United Nations Development Business
WWTP	Waste Water Treatment Plant

Vice President:	Shigeo Katsu
Country Director:	Anand K. Seth
Sector Manager:	Sumter Lee Travers
Task Team Leader:	Sudipto Sarkar

ROMANIA
MUNICIPAL SERVICES PROJECT

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IBRD 34517

ROMANIA

MUNICIPAL SERVICES PROJECT

PROJECT APPRAISAL DOCUMENT

EUROPE AND CENTRAL ASIA REGION

ECSIE

Date: May 25, 2006	Team Leader: Sudipto Sarkar
Country Director: Anand K. Seth	Sectors: General water, sanitation and flood protection sector (100%)
Sector Manager/Director: Sumter Lee Travers	Themes: Other urban development (P)
Project ID: P088252	Environmental screening category: B (Partial Assessment)
Lending Instrument: Specific Investment Loan	

Project Financing Data

[X] Loan [ ] Credit [ ] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Total Bank financing: Euro 106.2 million, denominated in Euro (US$ 131.7 million equivalent)
Proposed terms: Variable Spread Loan; 17 years maturity with 5 years grace period

Financing Plan (US$m)

Source	Local	Foreign	Total
BORROWER / MUNICIPALITIES	33.1	5.8	38.9
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	111.9	19.8	131.7
Total:	145.0	25.6	170.6

Borrower: Romania, represented by the Ministry of Public Finance (MoPF)
Responsible Agencies: Ministry of Environment and Water Management (MoEWM); Municipality of Bucharest; and Municipality of Arad.

Estimated disbursements (Bank FY/US$m)

FY	07	08	09	10	11				
Annual	9.8	26.3	32.9	39.6	23.1				
Cumulative	9.8	36.1	69.0	108.6	131.7				

P j t i t ti n Start - t l 2006 31, 2010
Expected effectiveness October 2006; Mid-Term Review: June
Expected : . g d June , (

Does the project depart from the CAS in content or other significant respects? ***Ref. PAD A.3***	[ ]Yes [x] No
Does the project require any exceptions from Bank policies? ***Ref. PAD D.7*** Have these been approved by Bank management? Is approval for any policy exception sought from the Board?	[ ]Yes [x] No [ ]Yes [] No [ ]Yes [ ] No
Does the project include any critical risks rated "substantial" or "high"? ***Ref. PAD C.5***	[x]Yes [ ] No
Does the project meet the Regional criteria for readiness for implementation? ***Ref. PAD D.7***	[x]Yes [ ] No

Project development objective ***Ref. PAD B.2, Technical Annex 3***

The objective of the project is to assist Romania to meet EU environmental directives in the water and wastewater sector, thereby improving the quality and coverage of water and wastewater services. This objective will be met through: a) the support of infrastructure development in the municipalities of Bucharest and Arad to provide better water and wastewater service and improve stormwater management; and b) preparation of priority water and wastewater projects in 11 counties.

Project description *[one-sentence summary of each component]* ***Ref. PAD B.3.a, Technical Annex 4***

The project will have three components:

a) Component 1: Urban services in Bucharest municipality which will include provision of urban services – water, sewerage, drainage, and road surfacing – in priority neighborhoods.
b) Component 2: Urban services in Arad municipality which will include provision of urban services – sewerage, drainage, and road surfacing – in priority neighborhoods.
c) Component 3: Consulting services to prepare for water and wastewater projects in 11 counties. Prepared projects will be submitted for funding to the EU Structural and Cohesion funds.

Which safeguard policies are triggered, if any? ***Ref. PAD D.6, Technical Annex 10***

- Project on International Waterways (OP 7.50)
- Piloting the use of Borrower Systems to Address Environmental and Social Safeguard Issues in Bank supported projects (OP 4.00)

Significant, non-standard conditions, **if any**, for:
Ref. PAD C.6

Board presentation: Not applicable

Loan effectiveness: Subsidiary Agreement and Subsidiary Loan Agreement, respectively, with the Municipalities of Bucharest and Arad are signed and in force.

Covenants applicable to project implementation: Details in C6.

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and sector issues

In 2007, Romania is expected to join the European Union (EU). As part of the negotiations to join the EU, the Romanian Government has agreed to follow the *acquis communautaire* which is the entire body of legislation of the European Communities and Union. All EU member states have to follow the *acquis* which is divided into various themes, one of which is environmental protection that provides specific directives on water and wastewater.

It is estimated that the investment costs alone to meet the EU directives on improving water services and wastewater services will be around € 5.6 billion and € 9.5 billion respectively (by end 2018). These costs mainly relate to increasing the coverage of piped water supply, developing sewerage networks, and constructing wastewater treatment plants. In addition to these investments, the economy will have to bear the operation and maintenance costs and the investment costs to rehabilitate the existing infrastructure.

As part of the National Development Plan (NDP), the Government has drafted a Sector Operational Program (SOP) for the environment sector which will be finalized by December 2006 (details in Annex 1). The SOP has been reviewed by the EU, reaffirms Romania's commitment to meet EU directives, and outlines the plans to use Structural and Cohesion funds, wherever possible. The SOP outlines six areas of priority actions: modernizing the water and wastewater systems, integrated waste management systems, improvement of municipal heating systems, nature protection, measures to protect against floods and coastal erosion, and technical assistance. Out of these six areas, two are directly relevant for the project:

- *Extension and modernization of water and wastewater systems.* This will be done through the formation of regional water and wastewater system operators. Through these operators, good quality service at affordable tariffs will be provided. The SOP outlines the following indicators to measure progress. By 2013:
  - 250 new localities will have new or rehabilitated water systems, operated by regional utilities;
  - 70% of the population will have access to piped water. Currently 52% of the population benefits from this service;
  - 250 new wastewater treatment plants will be operational in compliance with EU Directives; and
  - 60% of the wastewater collected will be adequately treated. Currently, 35% is treated;

- *Technical assistance.* To be able to implement the SOP and effectively absorb EU Cohesion and Structural funds, Technical Assistance (TA) is planned which will include: project preparation, strengthening the central and local government agencies responsible for programming and utilizing the EU grants, monitoring and evaluation of the progress made in implementing SOP, and public awareness campaigns. The indicators for the TA are being developed and will include: number of projects prepared, training provided, audits completed, and number of public awareness events completed.

To help the Government meet the EU directives, the EU has provided grants through its pre-accession instruments (EU Phare program and the Instrument for Structural Policies for Pre-Accession (ISPA) program) and will continue to do so in the future through the Structural and Cohesion Funds. However, the EU grant funds are expected to cover only around 31% of the total investment costs to meet EU directives and the rest of the financing will be raised from other sources. To this end, Romania will spend central and local government resources, either for the provision of co-financing for EU grants or for

stand-alone investments (without EU grants) that are necessary to meet EU directives. For the latter, expenditures would meet the EU's additionality principle where Romania is expected to undertake important and necessary investments to meet the EU directives. The Ministry of Public Finance (MoPF) intends to account the public expenditures incurred in this project as additional in nature and report them accordingly to the EU.

Investments proposed under this project – covering the municipalities of Bucharest and Arad – are fully in line with the strategic priorities of the Government (as documented in the SOP) and the two municipalities. The criteria used by the Government to define the investment priorities include the size of the affected population, improvement in the quality of surface or groundwater due to wastewater treatment, investment size, presence of an operator to provide water and wastewater services, per capita water consumption, and incidence of water borne diseases. High priority investments are expected to be completed between 2006 and 2009.

Bucharest, Romania's capital with a population of around 2.2 million, does not have full piped water coverage and part of the city is not served by any operator. About 20% of the population draws water from wells where the quality of the water is not ensured as per EU directives. In the project areas of the city, the population is also not connected with sewerage. This population uses septic tanks which are not of good quality increasing the risk of contamination of groundwater that is currently a source of drinking water. In Arad, a city with a population of 190,000 people, about 90% of the citizens in the project areas do not have access to sewerage networks. The project will also support the development of stormwater drainage to reduce flooding in the two cities. In both cities, the project will require the existing water and wastewater concessionaires to expand services to the project areas in line with the strategic action of the SOP to improve access of the population to utilities and piped water supply.

Among the many projects that will have to be completed in the country to meet EU directives, the projects in Bucharest and Arad municipalities are fully prepared. As preparation for the Municipal Services Project, the possibility of working with other municipalities was explored but project preparation in other municipalities is not as advanced as in Bucharest and Arad municipalities. The projects in Bucharest and Arad were prepared by the municipalities using their own resources, approved by the respective municipal councils, reviewed by an inter-ministerial commission, chaired by the Ministry of Public Finance (MoPF), and have support of the central Government and the municipalities for implementation.

As a SOP undertaking, the Government has also started to prepare water and wastewater projects across all counties in Romania. Prepared projects will be eligible for financing from the EU Structural and Cohesion grant funds. Thus, it is important to develop these projects so that Romania is able to fully utilize EU grant funds. The Government has already started project preparation in 30 of the 41 counties in the country. This project will support project preparation in the remaining 11 counties, representing a population of around 5 million. Projects will be prepared at the county level and thus will include multiple small and medium towns and settlements. Prepared projects will be submitted to the EU to seek EU Cohesion and Structural grant funds

2. Rationale for Bank involvement

Romania and the Bank have agreed that the Bank's strategy towards Romania will be to assist the country to accede to the EU. The proposed Country Partnership Strategy (scheduled to be reviewed by the Board on June 13, 2006) includes the Municipal Services Project which will help Romania to comply with the EU's environmental directives by supporting necessary investments in the water and wastewater sector. Further, the project will help Romania prepare projects which will be eligible to receive EU Structural and Cohesion grant funds.

The project builds on the successful Bank-financed Bucharest Water Supply Project (Loan No. IBRD-4079, 1996 to 2001) which supported the public water operator, Bucharest Water and Sewerage Company (RGAB). Under the Bucharest Water Supply Project, the Bank supported the rehabilitation of the existing water network and reduction in water losses and supported the involvement of the private sector. The experience gained by the Bank and the Bucharest municipality on the Bucharest Water Supply Project will be useful to implement this project.

3. Higher level objectives to which the project contributes

The project will assist Romania to meet its commitment to the EU as it will help the country to implement priority environmental investments and in meeting these investment needs, develop a pipeline of projects that can utilize EU Structural and Cohesion funds. The project will directly improve the quality of water and wastewater services and reduce flooding of low lying city areas where new drainage networks will be built. The project also supports urban services (water, sewerage, and stormwater) which will support urban development in Bucharest and Arad and allow water and wastewater services to be provided as per EU directives.

B. PROJECT DESCRIPTION

1. Lending instrument

This project will be processed as a Specific Investment Loan (SIL).

2. Project development objective and key indicators

The objective of the project is to assist Romania to meet EU environmental directives in the water and wastewater sector, thereby improving the quality and coverage of water and wastewater services. This objective will be met through: a) the support of infrastructure development in the municipalities of Bucharest and Arad to provide better water and wastewater service and improve stormwater management; and b) preparation of priority water and wastewater projects in 11 counties. Prepared projects will be submitted for financing by EU Structural and Cohesion grants along with other co-financing. The indicators to determine project progress are summarized below and details are presented in Annex 3.

- Improved access to water supply meeting EU standards;
- Improved access to sanitation meeting EU standards;
- Proportion of the project area protected from flooding;
- Improved road surfacing (in areas where water, sewerage, and stormwater networks will be laid); and
- Project applications prepared for EU funding.

3. Project components

The project will have three components, on which information is presented below and in Annex 4. A summary of the cost and financing plan for the project is shown in Table 1.

Table 1
(in Euro mln.)

Description	Cost	Financing	
		Bank	Counterpart
Component 1	73.9	48.0	25.9
Component 2	50.3	47.2	3.1
Component 3	13.1	11.0	2.1
Project	137.3	106.2	31.1
Front End Fee	0.3	0.0	0.3
Total	**137.6**	**106.2**	**31.4**

➢ **Component 1: Urban services in Bucharest Municipality.** Eligible expenditures under this component would be for: (a) Works for the provision of new urban services – water, sewerage, drainage and road surfacing – in priority neighborhoods; and (b) Technical Assistance to prepare bidding documents, for construction supervision, support to the municipality to implement the project, and complete financial audits.

About 20% of the population of the city does not have access to water supply and wastewater services that meet EU standards. Through this project, access to water and wastewater services will increase significantly in the project areas, in line with Romania's commitment to the EU (Details in Annexes 3 and 4).

The municipality has embarked on a 5-year program, consisting of four phases, to improve the urban infrastructure in the city to EU standards. The program comes out of the General Urban Plan, the Water Supply Master Plan and the Wastewater Master Plan which prioritize areas of greatest need and future growth within the city. This project covers Phase I of this program and foresees the extension of water supply, sewerage and stormwater services in two out of the six sectors in the city. Within these two sectors, the municipality has identified 7 priority locations – a combination of partly built-up area and new residential areas – based on the approved urban development plan. The project will include the following:

- Water supply: Households in built-up areas now relying on well water will be connected and water will be supplied to new development areas. In the new development areas, the project will extend the water and wastewater investments made under the EU PHARE project to provide services to priority new developments. The pipelines will improve the hydraulics of the city-wide water supply network and improve the reliability of water supply and pressure in the network which in turn will improve the functioning of the system. The existing water treatment plant and transmission lines have sufficient capacity for the proposed extension areas;
- Sewerage: Households will be connected to the sewer system, which will feed a wastewater treatment plant that has sufficient design capacity for the increased sewerage load. This treatment plant is currently being upgraded with assistance from the EU;

- Stormwater drainage: Stormwater drains will be laid to reduce flooding, especially in the low lying areas of the city. Lagoons will be used to retain stormwater to reduce the hydraulic load to the receiving water body; and
- Road paving: The water and wastewater services in Bucharest municipality are provided by Apa Nova, a private operator, through a concession contract with the Bucharest municipality. As per the concession contract, the concessionaire can take on the responsibility of providing water and wastewater services only once the streets are paved. By paving the roads, the municipality will be in a position to include the project areas in the concession contract. Paving has additional benefits for traffic and for reducing siltation in stormwater drains.

➢ **Component 2: Urban services in Arad Municipality.** Eligible expenditures under this component would be for: (a) Works for the provision of new urban services – sewerage, drainage and road surfacing – in priority neighborhoods; and (b) Technical Assistance to prepare bidding documents, for construction supervision, support to the municipality to implement the project, and complete financial audits.

Arad is experiencing rapid industrial growth stimulated by the industrial zones created within the city and the border trade with Hungary and other EU Member States. Meeting EU standards through improved urban services is a high priority for the municipality, including the construction of a sewerage and stormwater network to meet the growth needs. In Arad, the water and wastewater services are provided by Regional Autonomous Water and Sewerage Company (RAAC) Arad, a publicly-owned company that has a service contract with the County Council for the operation and maintenance of water and wastewater assets in five areas in the county, including the Arad municipality. RAAC is a public company and was not competitively selected. According to Romanian Law on State Aid, and in line with EU policy on State Aid, the operator that would operate the assets and benefit from the support provided by MoPF under this project should be selected on a competitive basis. To this end, Arad municipality will carry out a public tender to select and conclude a service or concession contract with an operator, by June 30, 2008, which will provide wastewater and drainage services through the assets created under the project. The national regulator for local services Autoritatea Nationala de Reglementare pentru Servicii Publice de Gospodarie (ANRSC) will regulate the selected operator.

The project will cover three districts (Bujac, Gai, and Sanicolaul Mic) in Arad municipality and benefit a current population of 22,000, representing about 90% of the population in these districts, which does not have access to public sewerage and uses septic tanks that leak into the groundwater. The project areas also need proper drainage facilities as they are prone to flooding. The project investments are:

- Sewerage: Households will be connected to the sewer system, which will feed a new wastewater treatment plant being built with EU financing. This plant will treat the collected wastewater to EU standards;
- Stormwater drainage: Stormwater drainage will be installed, especially in the low lying project areas; and
- Road paving: Roads in which sewerage pipes and stormwater drains are installed will be restored to at least their original quality. However, road paving has benefits for the traffic and the impact on vehicle maintenance and reduces siltation of the stormwater drains. The municipality will determine, prior to construction, whether or not roads in each district should be paved. This determination will be based on a satisfactory economic rate of return for the Bank to provide the no objection to road paving.

➢ **Component 3: Project Application for the EU.** Eligible expenditures under this component will be for consulting services to prepare the audits for the project and project applications for EU financing, including feasibility studies and preparation of complete tender dossiers. This component will be implemented by the Ministry of Environment and Water Management (MoEWM) which will ensure the following: (a) Romania complies with its commitments made to the EU on making improvements in the environmental sector; and (b) EU grant funds, as available, are effectively used.

The MoEWM has chosen 11 counties, covering about 5 million people, where priority water and wastewater projects will be prepared. These counties are: Arad, Sibiu, Galati, Dolj, Ilfov, Mehedinti, Vrancea, Bistrita – Nasaud, Braila, Constanta, and Ialomita. The MoEWM has already started preparing projects in 30 counties and with the additional 11 counties covered in the Municipal Services Project, project preparation will have started in all counties in the country.

Within the MoEWM, the General Directorate for Management of Structural Instruments will manage this component. As this directorate is responsible for the programming of EU Structural and Cohesion Funds for the environmental sector, it is fully aware of the EU procedures that will be followed under this project. There will be 2 consulting contracts that will be distributed over 11 counties, and work will start in all the counties at the same time. The Terms of Reference for the feasibility studies will be similar to the ones used for the other counties that have also started the process of preparing projects to secure EU grant funds (ISPA Measure No: 2003 RO 16 P PA 013; Technical Assistance for Project Preparation in the Environment Sector located in Romania; and ISPA Measure No: 2005 RO 16 P PA 001 Technical Assistance for Project Preparation in the Environmental Sector in Romania). The consulting assignment will be carried out in two phases:

Phase 1

(a) data collection and assessment of the water and wastewater infrastructure needs in each county;
(b) development of a Master Plan at the county level to identify priorities, taking into account the current situation. The Master Plan should consider all water and wastewater needs at the county level to enable Romania meet to the EU's environmental acquis. It should also be systemic in nature, taking into account the challenges faced by the small and medium sized municipalities to raise financing for the investments;
(c) completion of a detailed feasibility study that will include technical, financial and economic analysis, Environmental Impact Assessment, and institutional analysis;
(d) completion of an Application Form to seek EU Cohesion and Structural Funds;
(e) Institutional strengthening for efficient management of environmental investments. Training will be provided to: the MoEWM as the Managing Authority of the Environment Sector Operational Program; the Regional Environmental Protection Agencies as Intermediate Bodies to implement the SOP; and small towns and settlements in the above mentioned 11 counties as the final beneficiaries of the project.

Phase 2

Preparing complete tender dossiers for services and works, goods, and services contracts for the implementation of the feasibility studies carried out in Phase 1. These contracts will be financed through EU Cohesion and Structural funds

4. Lessons learned and reflected in the project design

The Bank has been involved in municipal projects over many years and across many countries, including those that are current EU member states and are in accession negotiations with the EU. The experience under the Bucharest Water Supply Project which closed in December 2001 is also well documented in the Bank's Project Performance Assessment Report (June 2003) and Implementation Completion Report (June 2002). Key relevant lessons are:

- *Sustained political support is critical for municipal investments:* Municipal projects often tend to be institutionally complex due to the involvement of two levels of government – central and local which often have different priorities. This leads to delays in project implementation, even in projects that are fully justifiable on economic grounds. In this project, the political support is strong in both levels of government as the investments will help Romania meet its commitment to the EU which is a common political and economic goal across the country. This political support to implement the project will remain given the aspiration in the country for Romania to be a fully integrated EU member state.

- *The scale and complexity of the project must reflect the capacity of the implementing agencies.* The Bucharest Water Supply Project did not engage in a large-scale and complex operation as the beneficiary at that time (in 1996) had limited experience in the implementation of externally financed projects. In the last decade, both the municipalities of Bucharest and Arad have strengthened their institutional capacity and implemented externally financed projects including those financed by the EU. Through the programming and use of ISPA funds and the programming of EU Structural and Cohesion funds, the MoEWM has gained sufficient program and project management experience. In this project, the implementation arrangements reflect the advanced institutional capacity of the two municipalities and the MoEWM.

- *Lack of prepared projects has been a bottleneck to successfully absorb EU funds.* The utilization rate of the EU ISPA grant funds was slow in the initial years, although progress has been made to virtually commit all the ISPA resources available to Romania. One of the reasons for the slow absorption of EU funds was that well prepared projects were not in place. Having learned from this lesson, the Government has taken a country-wide approach of preparing a project pipeline that can use EU Structural and Cohesion Funds. Component 3 is specifically designed to support this initiative of the Government and will help to prepare projects in multiple small towns and settlements.

5. Alternatives considered and reasons for rejection

The following options were considered but not pursued as explained below

- *Co-finance with the EU Cohesion and Structural grants.* The project is being implemented at a time when EU ISPA grants have been committed but the Cohesion and Structural funds are not yet programmed. Thus, co-financing with Cohesion and Structural funds was not possible at this stage. Even in the future, when Romania becomes part of EU, the Cohesion and Structural funds

will finance a portion of the total costs of the country to meet EU water and wastewater directives and there will be projects that will need financing from non-EU grant resources. The Government has identified this project as one where the Bank loan will finance investments that will help the country meet EU directives, but for which EU grant funds are not available. Thus, the project is not displacing any EU grants. For component 3, the project is helping to develop an investment pipeline for which EU grant funds for project preparation are not currently available. Thus, through this component, the Bank project allows earlier action than would have been possible otherwise. Further, by having a project pipeline ready, this component will facilitate the absorption of EU Cohesion and Structural funds, once they are available.

- *Lend directly to the local government (municipality) with a sovereign guarantee:* This option was considered and discussed during project preparation. However, the Government preferred to borrow the Bank loan proceeds and provide them to the municipalities of Bucharest and Arad and the MoEWM.

- *Lend directly to the utilities:* The option of making the Bank loan funds available to the water and wastewater utilities in Bucharest and Arad was considered. However, as explained above, due to the Romanian Law on State Aid, a new operator - competitively selected – will be introduced after the assets are created in Arad municipality. Thus, this option could not be pursued as the operator is not in place in Arad. In Bucharest, Apa Nova does not own the network assets but uses them through a concession contract to provide services. If Apa Nova used the Bank loan to create assets and then transfer them to the municipality, the existing concession contract in Bucharest would have to be significantly amended and that was not a preferred option for the municipality. It would be a fundamental change in the Bucharest concession contract which mentions that Apa Nova will take on services in streets after the municipality installs the network infrastructure and paves the street, which are activities to be carried out by the municipality under the project.

C. IMPLEMENTATION

1. Partnership arrangements (if applicable)

The Government and the Bank will fully co-ordinate the activities of this project with the EU, given the central theme of this project to help Romania meet its commitment to the EU. Both the Government and the Bank have had discussions with the EU on the project which is supportive of the proposed activities.

2. Institutional and implementation arrangements

The Borrower of the Bank loan will be Romania, represented by the MoPF, and the project will be implemented by the following three implementing entities: municipality of Bucharest, municipality of Arad, and the MoEWM. The municipality of Bucharest implemented the Bank-financed Bucharest Water Supply Project and the MoEWM is currently implementing the Bank-financed Hazard Risk Mitigation and Emergency Preparedness Project. This experience of working with the Bank on other projects was taken into account in developing the implementation arrangements for this project. Details are provided in Annex 6.

There will be a Loan Agreement between Romania and the Bank for all three components of the project. For components 1 and 2, Project Agreements will also be in place between the Bank and the two municipalities. In addition, there will also be Subsidiary Loan Agreement between the MoPF and Arad municipality. Further, there will be a Subsidiary Agreement between MoPF and Bucharest municipality.

Both municipalities have experience in handling internationally financed projects and have the capacity to implement the project.

For Component 3, the Borrower, through the MoPF will transfer a portion of the proceeds of the loan to the MoEWM pursuant to its internal procedures. In the MoEWM, the General Directorate for Management of Structural Instruments will be responsible for implementation of this project. This General Directorate is responsible for programming, monitoring, and authorizing payments for the EU Structural and Cohesion funds for the environmental sector. Thus, this General Directorate will be able to fully integrate the activities of the Bank with the other ongoing activities related to EU accession, including development of a project pipeline. A Director in this General Directorate has been assigned to implement the project and for financial management purposes, the accounting system of MoEWM will be used.

All three implementing entities have staff specialized in technical, financial, accounting, and procurement matters. These staff members will be responsible for implementing the project. Through the Loan Agreement and the Project Agreements, the MoEWM and the municipalities of Bucharest and Arad will provide assurances that they will provide adequate staffing to effectively implement the project.

3. Monitoring and evaluation of outcomes/results

The Project Progress Report will be used to monitor and evaluate project progress. The parameters to be monitored are outlined in the Results Framework and Monitoring (Annex 3). The Project Progress Report will be prepared semi-annually by the three implementing entities – the Bucharest municipality, Arad municipality, and the MoEWM – and submitted to the MoPF and the Bank.

4. Sustainability

The sustainability of the investments supported under the project is highly likely as the project supports basic services such as water supply, sewerage and stormwater drainage with the first two subject to specific EU performance standards and monitoring. The national regulatory system will also ensure the sustainability of services. ANRSC is the national regulator for local services for all cities in the country and it regulates the quality of service and ensures that a proper tariff methodology is followed. As per the tariff methodology, the utilities propose a tariff to ANRSC; and tariffs endorsed by ANRSC are approved by the municipalities and applied by the operators. ANRSC also monitors service performance standards of utilities.

In Bucharest the water and wastewater services are provided by Apa Nova, a utility that has majority private ownership, through a concession contract. In addition to ANRSC, the concession contract is regulated by Bucharest Regulatory Agency for Water Supply and Sewerage (ARBAC) which also has a mandate to ensure that service levels as agreed in the concession contract are being met. To ensure sustainability of services, the municipality will: (a) keep Apa Nova informed about the project during the design and construction phases and provide relevant information, as needed; (b) assign Apa Nova, under the concession contract, to take on the water, wastewater, and stormwater services in the areas covered under the project. The Bank will receive regular reports of ARBAC and annual reports of Apa Nova to see how Apa Nova is meeting national performance standards; (c) phase the implementation of this project so that investments are made in line with the development of the Baneasa District (the new residential district receiving bulk services and distribution network); and d) ensure that the sector municipalities maintain the roads as per the ongoing road maintenance program.

In Arad, as explained in Section B3, the municipality will carry out a competitive public tender process to select by June 30, 2008 an operator that would provide wastewater and drainage services in the areas

covered under the project. The contract will be signed between the Arad municipality and the operator and the contract is expected to be long term in nature. ANRSC will regulate the contract on matters of tariffs and performance standards. To ensure the sustainability of investments, the municipality will: (a) select an operator for the sewerage and drainage services through a competitive process to ensure economic prices for the consumers; (b) ensure that the selected operator maintains national performance standards on service delivery, as regulated by ANRSC; and (c) ensure that road maintenance is outsourced to a private firm, selected on a competitive basis, as per the practice in the municipality.

Given that a national regulatory regime is already in place, separate tariff covenants have not been designed under the project. However, to ensure the sustainability of investments and proper service, under the Loan Agreement, the Government will ensure that the regulatory activities of ANRSC are not hampered, especially those related to timely endorsement of tariffs and monitoring service performance standards. In addition, through the Project Agreement, Bucharest municipality will agree to approve tariffs proposed by Apa Nova and endorsed by ANRSC. Similarly, through the Project Agreement, the Arad municipality will agree to approve tariffs proposed by the operator to be competitively selected.

5. Critical risks and possible controversial aspects

The risks and mitigation measures are summarized below. There are no controversial aspects related to the project which responds to the *aquis* obligation undertaken by the Government.

Risk	Mitigation Measure	Risk Rating
Municipalities may not have adequate resources to meet their financial commitments under the project.	Through the Project Agreements, the municipalities will agree to make resources available for the implementation of the project and take corrective actions, as necessary. Failure to do so could lead to remedial measures.	M
Delays in selecting an operator in Arad could hamper services through assets created under the project.	There is a dated covenant in the Project Agreement to have an operator in place by June 30, 2008, well before the project closes. This early involvement of the operator, and effective project supervision by MoPF and the Bank, will ensure that services are expanded in a timely manner. Further, it is not in the interest of the municipality to create assets and not transfer them over to an operator and delay the provision of services to the citizens.	S
There is an exchange rate risk in Arad as the municipality wil borrow and repay the MoPF in Euro and its income is in RON. The financial position of the municipality will be affected if this risk materializes.	This risk is considered moderate as Romania's economy is linked to the Euro and the link will be even stronger once Romania becomes an EU member state. To account for the risk, in the financial projections, the Euro is assumed to appreciate against the RON in line with inflation. This risk does not arise for Bucharest municipality as it will not be responsible for the debt service of the Bank loan.	M
Delays in project implementation due to procurement delays.	The investments will be completed through a limited number of contracts (Annex 8). This will allow focused attention on procuring and supervising contractors by the municipalities.	M
Development in the Baneasa District is slower than estimated by the Bucharest municipality.	The municipality of Bucharest has agreed to a phased provision of water, sewerage and storm water services with the developer of Baneasa district such that services are only provided in areas where connections are assured.	M
H – High; S – Significant; M – Moderate; and N – Negligible		

6. Loan conditions and covenants

The list below is a summary of the key loan conditions and covenants in the legal documents of the project. In the legal documents, the Government is referred to as the Borrower and the municipalities of Bucharest and Arad as Project Implementing Entities.

Loan Agreement

Key conditions of the Loan Agreement are listed below.

Effectiveness Condition

- The Borrower has executed a Subsidiary Agreement and a Subsidiary Loan Agreement, respectively, with the Municipality of Bucharest and the Municipality of Arad, and they are valid, in force and binding in accordance with their terms.

Other Conditions

- The Borrower shall maintain within the MoEWM adequate staff and financial resources to effectively implement component 3 of the project;
- The Borrower shall ensure that component 3 of the project is carried out in conformity with the provisions of the Romanian Environmental Legislation and Cultural Property Legislation. Accordingly, the first three environmental impact assessment studies will be sent to the Bank;
- The Borrower, through the MoEWM, shall submit to the Bank a consolidated Project Progress Report covering all three components of the project on a semi-annual basis not later than two (2) months after the end of the period covered by such reports;
- The Borrower shall maintain a financial management system acceptable to the Bank;
- The project's financial statements, withdrawal applications and relevant Designated Account will be audited by independent auditors acceptable to the Bank and on terms of reference acceptable to the Bank. The annual audited financial statements and audit report will be provided to the Bank within six months after the end of each fiscal year;
- The Borrower through the MoEWM will prepare a consolidated mid-term report of the project by April 30, 2008, including measures to be taken to efficiently complete all parts of the project; and will review this report with the Bank not later than June 30, 2008; and
- The Borrower shall not take or permit to be taken any action that would affect the operations of ANRSC with respect to: (i) endorsing tariffs proposed by Apa Nova and the operator to be selected in Arad municipality, in line with applicable legislation to modify tariffs; and (ii) monitoring compliance by Apa Nova and the selected operator in Arad to meet applicable performance indicators for the delivery of public services.

Bucharest Project Agreement

The Bucharest Municipality shall:

- maintain adequate staff and financial resources to effectively implement component 1 of the project;
- ensure that component 1 of the project is carried out in conformity with the provisions of the Romanian Environmental Legislation and Cultural Property Legislation;
- ensure that implementation of component 1 of the project does not cause, or result in, resettlement as defined in the Loan Agreement;

- shall submit to the MoEW a Project Progress Report on a semi-annual basis, outlining the progress made in meeting the monitoring indicators for component 1 of the project;
- maintain a financial management system acceptable to the Bank;
- ensure that the project's financial statements, withdrawal applications and relevant Designated Account are audited by independent auditors acceptable to the Bank and on Terms of Reference acceptable to the Bank. The annual audited financial statements and audit report will be provided to the Bank within six months after the end of each fiscal year;
- prepare a mid-term report by March 31, 2008, including measures to carry out component 1 of the project efficiently; and submit this report to MoEWM and the Bank, and review the report with the Bank not later than June 30, 2008;
- keep Apa Nova informed about the progress in the implementation of component 1 of the project during the design and construction phase and provide to it the relevant information needed for Apa Nova to take on the services in the project area and provide them in an efficient manner;
- upon an exchange of views with Apa Nova, extend the area of the concession contract upon completion of the works financed under component 1 of the project;
- provide to the Bank annual reports of Apa Nova including the information on how Apa Nova is meeting performance standards established by ANRSC;
- in Baneasa district, agree with the developer upon a phased implementation plan of component 1 of the project to ensure that services are only provided to those areas that have been developed;
- ensure that the sector municipalities maintain the roads as per the ongoing road maintenance program;
- through its General Council: (i) approve tariffs proposed by Apa Nova and endorsed by ANRSC for drinking water supply and sewerage services in accordance with the provisions of national legislation and the concession contract with Apa Nova; and (ii) ensure adequate operation of ARBAC to monitor Apa Nova's compliance with the level of services stipulated in the concession contract and submit to the Bank ARBAC's annual report on an annual basis;
- submit to the Borrower and the Bank: (i) by June 30 of each year, the actual revenues and expenditure of the preceding year and the estimated draft budget for the current year; and (ii) by December 31 of each year, the draft budget for the following year; and
- take corrective actions agreed upon with the Borrower and the Bank as necessary to ensure that it is able to meet its financial obligations under the project which shall enable the Project Implementing Entity to make available the counterpart funds in a timely manner.

Arad Project Agreement

The Arad Municipality shall:

- maintain adequate staff and financial resources to effectively implement component 2 of the project;
- ensure that component 2 of the project is carried out in conformity with the provisions of the Romanian Environmental Legislation and Cultural Property Legislation;
- ensure that implementation of component 2 of the project does not cause, or result in, resettlement as defined in the Loan Agreement;
- shall submit to the MoEW a Project Progress Report on a semi-annual basis, outlining the progress made in meeting the monitoring indicators for component 2 of the project;
- maintain a financial management system acceptable to the Bank;
- ensure that the project's financial statements, withdrawal applications and the relevant Designated Account are audited by independent auditors acceptable to the Bank and on Terms of Reference acceptable to the Bank. The annual audited financial statements and audit report will be provided to the Bank within six months after the end of each fiscal year;

- prepare a mid-term report by March 31, 2008, including measures to carry out component 2 of the project efficiently; and submit this report to MoEWM and the Bank, and review the report with the Bank not later than June 30, 2008;
- undertake a public competitive tender process to conclude a service or a concession contract with an operator, by June 30, 2008, which will provide wastewater and drainage services through the assets created under component 2 of the project;
- provide to the Bank, annual report of the selected operator, including information on how it is meeting performance standards established by ANRSC;
- ensure that road maintenance is outsourced to a private firm selected on a competitive basis pursuant to the practice in the municipality;
- through its Local Council approve tariffs, proposed by the selected operator and endorsed by ANRSC, for sewerage and drainage services as per the provisions of national legislation;
- ensure that the proceeds of the loan will finance only road paving investments that yield a satisfactory economic rate of return; such assessment are to be based on an economic analysis previously reviewed and approved by the Bank;
- submit to the Borrower and the Bank: (i) by June 30 of each year, the actual revenues and expenditure of the preceding year and the estimated draft budget for the current year; and (ii) by December 31 of each year, the draft budget for the following year; and
- take corrective actions agreed upon with the Borrower and the Bank as necessary to ensure that it is able to meet its financial obligations under the project which shall enable the Project Implementing Entity to make available the counterpart funds in a timely manner.

D. APPRAISAL SUMMARY

1. Economic and financial analyses

Economic analysis

The project is justified on regulatory grounds given Romania's commitment to meet EU directives. The water supply, sewerage, and drainage investments proposed in this project are fully consistent with the commitments made by Romania to the EU and reflect the priorities of the Government (as expressed in the SOP) and the municipalities. Moreover, in Bucharest, the investments will support Apa Nova providing services in areas that do not have access to piped water and sewerage services and are not served by any utility. The incidence of water borne diseases in Bucharest and Arad are higher than the national average (see table 2). Through improvements in the water supply and sewerage system, the municipalities expect to reduce these diseases. Although the Government has identified improved health as an expected outcome of the investments, they lack epidemiological analysis demonstrating a causal link between the two. Therefore, no estimate of health benefits has been attempted.

Table 2
Incidence of Disease
(per 100,000 inhabitants in year 2004)

	Bucharest	Arad	National Average
Dysentery	6	19	3
Hepatitis A	24	17	17
Acute Diarrhea	381	467	142

In addition to the benefits from improved water and wastewater services of the serviced population, water supply pipelines will improve the hydraulics of the city-wide water supply network and improve the reliability and pressure in the network which in turn will improve the functioning of the system for the whole municipality.

Water and Wastewater Investments

The benefits of these investments are: (a) positive externalities at the regional and country levels due to the environmental improvements supported by the project. These externalities are difficult to quantify and as a result not included in a cost benefit analysis; (b) provision of water and wastewater services through an operator, which will improve the quality of service and reduce health and environmental risks. The incremental revenues due to piped water are used as a proxy for benefits of piped water services (convenience, better quality). Similarly, incremental wastewater revenues are used as a proxy for benefits of having a sewage system and discontinuing the use of septic tanks; (c) increase in the value of property and land where the infrastructure will be upgraded. The expected increase in the value of the property as judged by municipal authorities will be tremendous as seen in the incremental property tax revenues that the city plans to collect from the project areas. The property tax is assessed at around 0.2% of the value of the property and the expected incremental taxes from the project areas are as follows: Bucharest (2009) - RON 866,000; and Arad (2010) - RON 908,000. The incremental tax, representing a low estimate of the benefit of increased property value due to the upgraded infrastructure, is estimated to be € 12.8 and € 10.4 annually on a per capita basis in Bucharest and Arad, respectively.

A cost-benefit analysis for the water and wastewater investments was completed. The analysis did not capture the externalities and the full amount of increase in property value. Thus, the rates of return are a low estimate. Nevertheless, they provide a justification for the investments (Details in Annex 9).

- Bucharest (areas with existing population): These are the Straulesti, Vatra Noua, Giulesti Sarbi, Giulesti Triaj districts that need water and sewerage services. The expected rate of return is 12.3%.
- Bucharest (growth areas): These are the Banasea, Otopeni North, and Odai districts which are growth areas and where the city has to provide water and wastewater services. The rate of return is 9.4%.
- Arad: the sewage network will benefit the domestic population in the Gai, Bujac, and Sanicolaul Mic areas. In addition, the industries will benefit from the sewage installed. The rate of return is 6.2%, which is acceptable for such sewage investments, given the positive externalities.

Stormwater

Currently, most areas are served by a combined wastewater system. This results in a low concentration of BOD in wastewaters reaching the treatment plant. In most areas under the project, separate wastewater systems have been proposed due to the following reasons: (a) the increased BOD concentration in the sewerage will improve the operation of the Waste Water Treatment Plant (WWTP) to be completed in 2010 in Bucharest and 2008 in Arad; (b) by constructing separate wastewater systems in most districts in Bucharest and Arad, the additional hydraulic load reaching the WWTPs will be reduced; (c) in both cities it is possible to discharge stormwater near the project areas into open channels and rivers, and thus avoiding the construction of larger diameter pipes that would be needed to transport the wastewater over long distances.

A cost benefit analysis for stormwater has not been shown as the benefits of flood prevention and improved environmental and health conditions are difficult to quantify. During project implementation, both municipalities will have to demonstrate that the most cost effective design solution was chosen, prior to the Bank's no objection for financing.

Road Paving

Streets in which water, sewerage or stormwater pipes have been laid require the road to be restored to at least its original state. However, roads will be paved where there is a compelling economic justification for the investment.

In Bucharest, Apa Nova will only take on the responsibility of provision of water and wastewater services in new areas once the municipality has paved the roads. This is a condition of the concession contract for Apa Nova to expand services. Expanding water and wastewater service provision through utilities is also an objective of the Government. Thus, in project areas, paving of roads is justified.

In Arad, road paving will be financed if the investment is shown to have a satisfactory economic rate of return. This analysis will be carried out during project implementation. The Bank's Roads Economic Decision Model (RED) will be used for the analysis. This model takes into account, the traffic, condition of unpaved roads in dry and wet seasons, vehicle speed, types of paving, and accident rates. The municipality will conduct the analysis with assistance from the Bank.

Financial Analysis

The Borrower of the Bank loan will be Romania represented by its MoPF and the Bank loan will be denominated in Euros. The Government agreed on the following approach for its support to the municipalities. The decision to support the investments was taken by the central Government based on the country's need to meet EU directives and the high level of environmental externalities involved in the project.

In Bucharest, the municipality will finance 35% of the project costs (€ 25.9 million) from its own sources, the remaining 65% will be financed through the Bank loan which will be provided to the municipality by the MoPF on a grant basis. This grant assistance from the MoPF to Bucharest is in line with the EU grant assistance provided for projects where EU Cohesion and Structural grant funds are expected to finance 80% of costs of projects (where EU grants are available). The MoPF intends to incur the expenditure for the project and report it to the EU as Government contribution towards implementing the SOP, in line with EU's additionality principle where important investments – to meet EU directives – need to be completed even without the availability of EU grants. This assistance to the Bucharest municipality is very small compared to the overall transfers from the central Government to Bucharest. In 2006, the expected transfers, mainly due to shared tax, will be around € 465 million (RON 1.634 million), which will remain stable at the level of € 462 billion (Annex 9; Table 4).

In Arad, the municipality will contribute about € 3.1 million as counterpart funds and the Bank loan will be € 47.2 million, which will be on-lent to the municipality of Arad at terms and conditions that are identical to the Bank loan to the Government. The Arad municipality will service 20% of the debt (including principal and interest) and the remaining debt service will be borne by the MoPF. This will be in line with the EU grant assistance provided for projects where EU Cohesion and Structural grant funds are expected to finance 80% of project costs. All charges related to the Arad portion of the loan will be borne by the Arad municipality. Compared to the volume of central Government transfers, the assistance provided by the MoPF on this project is small. In 2006, the central Government transfers to Arad municipality are expected to be around € 34 million, which will steadily increase over 17 years, the period

over which MoPF will provide the debt service support (Annex 9; Table 5). As in Bucharest, the expenditures incurred by the central Government for the Arad portion of the project will also be reported by the MoPF to the EU as central Government financing of the SOP.

The municipalities will be responsible for providing the counterpart funds for the project and in the case of Arad the municipality will also be responsible for a portion of debt service. Financial projections, which were reviewed by the Borrower, of the two municipalities are shown in Annex 9. In the projections, the revenue and expenditure streams match because Romanian legislation requires that the budget for public institutions should be full balanced without any surplus or deficit. The exchange rate risks for both municipalities have been taken into consideration by adjusting the EUR to RON exchange rate with the projected RON inflation. However, the exchange rate risk in Bucharest does not arise as it will not service the Bank loan.

The projections indicate that both municipalities will be able to meet their obligations in regards to (a) local counterpart financing for the project; and (b) debt service (Arad only), while remaining in compliance with the applicable limits on borrowing. To ensure that municipalities have adequate revenues to implement the project, the following is included in the Project Agreement: on an annual basis, the municipalities will present to the MoPF and the Bank the budgeted and actual revenues and expenditures for the year and the draft budget for the next year. The incremental revenues and expenditures of the municipality due to the project will be presented in the actual and budget statements.

In Bucharest, the counterpart funding requirements are small compared to the overall revenues of the municipality and as a result the non-availability of counterpart funds is not expected to be an issue. The expenditures under this project have already been programmed under the total capital expenditures of the municipality. Nevertheless, the municipality has set aside reserves that will be used for the project, in case there is a shortage of funds. After 2010, there will be no counterpart funding requirements or debt service requirements for Bucharest.

2. Technical

There are no outstanding technical issues related to the project. Detailed feasibility studies were conducted to determine the technical options followed under the project. The Bank provided comments on draft feasibility reports. Some design features were modified based on the comments provided by the Bank – such as the scaling-down of the investments proposed for stormwater treatment, and the review of design and construction standards to comply with current EU practices. The proposed investments are technically viable, well tested and not complicated. The Project Progress Report will be used to determine the progress made in meeting the project outcome indicators. Details are provided in Annexes 3 and 4.

3. Fiduciary

Procurement

The procurement arrangements of the project are satisfactory. The implementing entities - Bucharest and Arad municipalities and MoEWM – are familiar with procurement procedures followed by International Financial Institutions (IFIs) and have adequate capacity to implement the project. The Bucharest municipality and the MoEWM have also worked with the Bank on other projects and are familiar with Bank's procurement procedures. Moreover,, the number of contracts will be limited which will minimize the procurement procedures to be followed. Detailed are provided in Annex 8.

Financial Management

The first Country Financial Accountability Assessment (CFAA) for Romania was finalized in December 2003 and concluded that the overall fiduciary risk associated with the public financial management and financial accountability arrangements of the Romanian government administration is moderate. The assessment concluded that systems for accounting, financial reporting, and internal control represent areas of high risk while budgeting, cash management, external audit, and Parliamentary oversight represent a lower risk.

The financial management arrangements of the project are satisfactory. Details are provided in Annex 7. The project will rely, to the extent possible, on the country's financial management country systems, as follows:

- Implementing entities – the project will be implemented by the Bucharest and Arad municipalities and the MoEWM using existing mechanisms in these institutions;
- Staffing – project implementation will be carried out by employees of Bucharest and Arad municipalities and the MoEWM;
- Internal control – the project will use the existing internal control mechanisms of the municipalities of Bucharest and Arad and within MoEWM with additional procedures developed for the project;
- Flow of funds – the loan funds will be used to directly pay contractors or suppliers or through the Designated Accounts;
- Internal audit – as the internal audit departments in the implementing entities continue to develop, the project will rely to the extent possible on these for the project internal audit;
- External audit – the Romanian Supreme Audit Institution, Court of Accounts will perform an operational review of the project; and
- Accounting and reporting system – the project will rely on the existing systems within the implementing entities.

The Borrower is in compliance with its audit covenants for existing Bank-financed projects. The formats of the Interim Financial Reports (IFR) and the financial reports and the Terms of Reference have been agreed.

The issues raised in the CFAA have been addressed in the following manner: a detailed review of the financial management systems was conducted for each implementing entity; each implementing entity will set up distinct project-specific accounting ledgers; project accounting staff are employees of the implementing entities; the format of the IFR and audit TORs have been agreed with the Bank; and project financial statements will be annually audited by independent auditors.

4. Social

The project will have significant social benefits due to increased coverage of basic services such as water and wastewater, in line with the urban development plans of Bucharest and Arad municipalities. The project will also support urban development in the northern part of Bucharest, which is a growing residential and commercial area. The infrastructure development in Arad will support the industrial growth in the city and support efforts to create a significant number of new jobs. In addition, the stormwater drainage will reduce flooding in the cities of Bucharest and Arad.

The project will also support the development of water and wastewater investments in 11 counties. Once these investments are completed, the population in these counties will receive improved water and wastewater services.

The financing arrangements for the Bucharest and Arad project components have been designed specifically taking into account the affordability of tariffs. Currently, the social affordability of tariffs is around RON 2.0/m^3 of water[1] which is close to the combined water and wastewater tariffs in the two municipalities (with VAT):

- Bucharest: RON 2.01/m^3 (water RON 1.38/m^3; wastewater RON 0.39/m^3; VAT 19%); and
- Arad: 2.03/m^3 (water RON 1.39/m^3; wastewater RON 0.32/m^3; VAT 19%)

The tariff methodology used by ANRSC takes into account affordability conditions in line with the practices of EU member countries in establishing a tariff methodology. Thus, the project will rely on the national system of establishing tariffs and the Government will facilitate proper functioning of ANRSC with regards to endorsing tariffs and regulating service standards.

5. Environment

The project will have an important and a positive environmental impact and will lead to: (a) provision of good quality piped water service (Bucharest); (b) reduction of pollution of groundwater which is currently affected by leaking septic tanks; and (c) elimination of flooding in urban areas. Further, these investments will help Romania comply with the EU environmental directives, in line with the commitments made by the country to the EU to become an EU member state.

The component with the MoEWM is designed to implement the Romanian environmental Sector Operational Plan. Priority water and wastewater investments will be defined in 11 counties and once these investments are completed, improved environmental conditions will be available to the population of these counties.

6. Safeguard policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[ ]	[X]
Natural Habitats (OP/BP 4.04)	[ ]	[X]
Pest Management (OP 4.09)	[ ]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[ ]	[X]
Involuntary Resettlement (OP/BP 4.12)	[ ]	[X]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[ ]	[X]
Forests (OP/BP 4.36)	[ ]	[X]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[ ]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[X]	[ ]
Piloting the Use of Borrower Systems to Address Environmental and Social Safeguard Issues in Bank-Supported Projects (OP 4.00)	[X]	[ ]

[1] The assumptions are: annual household income €2,500; affordable level of water and wastewater bills – 3% of household income; 2.8 persons per household; per capita daily consumption – 125 liters.

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

For the project, the following safeguards will be triggered: (a) Projects on International Waterways; and (b) Piloting the Use of Borrower Systems to Address Environmental and Social Safeguard Issues in Bank Supported Projects. Under the latter policy, the Bank is recommending the use of Romanian systems to address environmental and social safeguard issues in this project in the following areas: (a) Environmental Assessment; and (b) Cultural Property.

For components 1 and 2, works will be carried out on public lands owned by the municipalities of Bucharest and Arad. The municipalities through the Project Agreements have confirmed to the Bank that all construction will take place on land that is owned by them and on which there are no persons with legal claims to the land. Thus, the project will not result in any adverse impact on people due to loss of access to land or other assets. As a result the Bank's policy on Involuntary Resettlement will not be triggered. The final designs for the construction have not yet been completed and the land to be used for the works will be selected in line with the confirmations provided by the municipalities in the Project Agreements. Based on field visits, and information and assurances provided by the municipalities, the Bank team confirms that the approach proposed by the municipalities will help avoid any adverse impact on people due to project activities. Compliance with this approach will be verified during Bank supervision missions.

Equivalence and Acceptability Assessments: This project was selected for piloting the use of country systems under the Bank's OP/BP 4.00. Thus, a safeguards diagnostic study was undertaken to assess: (a) the equivalence of Romanian systems and World Bank requirements; and (b) the acceptability of implementation practices, track record and capacity of the agencies involved.[2] The equivalence and acceptability assessment was carried out by an interdisciplinary team of Bank staff in collaboration with relevant Government staff. The Bank review included meetings and site visits in cooperation with environmental officials at the central, regional and local levels. The methodology included desk review of current legislation and supporting mandatory guidelines.

The results of the diagnostic review indicate that the operational principles of Environmental Assessment as stated in Table A1 of OP 4.00 and the Romanian Environmental Impact Assessment (EIA) system have many common features and that there are no gaps in equivalency. With respect to the acceptability, it was also found that Romania's current approach to EIA conforms to OP 4.00. As per Bank's policy on Environmental Assessment, the project is categorized as an environmental category B since the investments will be related to small civil works without significant impact to the environment.

Regarding cultural property, the Romanian systems are equivalent to that of the Bank and appropriate for application, if needed. If the project requires construction or rehabilitation near historic buildings or other physical cultural resources, or if "chance finds" are encountered, Romanian systems are at least as effective as those outlined in OP/BP 4.00 on such points. Inventories of buildings and sites of cultural significance are available, and stakeholders are consulted to assess whether proposed investment projects might cause impact. Local experts on archeology, architecture and other relevant fields are brought in for assessments before construction decisions are made, and if "chance finds" are encountered during construction.

Bank supervision on safeguard-related matters will continue, on a semi-annual basis, throughout the implementation of the proposed project to: (a) ensure compliance with equivalent and acceptable Romanian procedures; and (b) track results in environmental outcomes.

[2] Safeguards Diagnostic Review for Piloting the Use of Romanian Systems to Address Environmental and Social Safeguard Issues in the Proposed World Bank-Assisted Romania Municipal Services Project and Transport Sector Support Project. Equivalence and Acceptability Assessment Report. World Bank, Final Draft April, 2006.

Public Consultation and Disclosure: Staff from the Ministry of Environment and Water Management (MoEWM) and the World Bank jointly organized a public consultation workshop to discuss the draft version of the Equivalence and Acceptability Report in Bucharest in December 2005. The MoEWM had circulated copies of the Executive Summary of the draft report to a large number individuals and relevant agencies inviting them to participate in the public consultation and comment on the report. Over thirty-five people, representing non-Government officials, consultants, academia, and various Government departments, attended this workshop. Participants expressed their support to the proposal to pilot Romanian environmental and social system in the context of the project and agreed with the findings and gap filling actions proposed to achieve and sustain equivalence and acceptability. The full report, including the executive summary, was disclosed in Romania and in Washington on January 25, 2006.

The equivalency analysis did not cover the Bank's policy on International Waterways where the Bank's policy will apply for components 1 and 2 of the project as: in Bucharest stormwater will be discharged to the Dambovita River that discharges to the Arges River that flows into the Danube River – an international waterway. In Arad the stormwater discharge will flow into the Mures river that flows into the Tisza river in Hungary which meets the Danube in Hungary before it flows through Romania to the Black Sea. Further, in both cities, additional wastewater will be collected due to sewerage connections. This wastewater will be fully treated before it is discharged to the Mures and Dambovita rivers. Although the impact of the project is negligible compared to the flow of the Danube River, in accordance with Bank policies, the MoEWM informed the International Commission for Protection of the Danube River (ICPDR) on December 28, 2005 about this project. On February 22, 2006, the ICPDR replied to the MoEWM acknowledging receipt of the letter from the Government and did not raise any objections to the project. The ICPDR also mentioned that it had informed the riparians and welcomed the initiative taken by Romania to improve the Danube water quality.

For component 3, the MoEWM sent a supplemental notification to ICPDR on May 15, 2006. In the supplemental notification, Romania informed the ICPDR that it would like to access EU Structural and Cohesion funds in 11 counties. To this end, Technical Assistance under the Bank project is required for preparing project applications to secure EU grants, institutional strengthening of stakeholders, screening of projects to establish priorities, preparation of feasibility studies, and completing tender dossiers (including detailed design and engineering studies). The notification also mentions that given the nature of the investments (improve water and wastewater quality), adverse effects on the riparian countries are not expected. The ICPDR was given until May 31, 2006 to respond to the supplemental notification. A response time of 15 days was considered sufficient as the notification is supplemental in nature, for activities that are not expected to have any adverse effects on the riparians.

7. Policy Exceptions and Readiness

The project does not require any exceptions to Bank policies. The project is ready for implementation as indicated through the following:

- Fiduciary arrangements – financial management and procurement – are satisfactory and in place;
- The staff in the municipalities of Bucharest and Arad and the MoEWM has been assigned to work on the project;
- The financing arrangement of the project has been confirmed with the MoPF, MoEWM, and the municipalities of Bucharest and Arad;
- The feasibility study for the entire project has been completed and a General Procurement Notice has been issued to select a consultant to carry out the detailed design and pre-qualify contractors that will carry out the works; and
- The disclosure requirements of the project have been met.

Annex 1: Country and Sector or Program Background
ROMANIA: MUNICIPAL SERVICES PROJECT

Sector Background

As part of its accession negotiations, Romania has agreed to comply with the EU directives on water and wastewater. The key issues and the actions being taken by Romania are summarized below.

Drinking Water

The Drinking Water Directive (98/83/EC) focuses on the quality of water intended for human consumption and introduces a comprehensive monitoring regime for various parameters affecting human health, while taking actions to disseminate results and increase public awareness of drinking water quality concerns. Investments are required throughout the agreed implementation period to improve the quality of delivered drinking water. Some of the key issues affecting water quality in Romania are high levels of bacteria, pesticides, nitrates in groundwater sources, and heavy metals in a limited number of communities due to past pollution. In addition, the aging water distribution network leads to high water losses and increases operation and maintenance costs. Further, the materials used in some pipes – asbestos cement, lead, and iron – need to be replaced.

About 65% of the population is served through piped water sources. Romania has 9 water treatment plants in cities with more than 200,000 people and 14 plants serving cities where the population ranges from 100,000 to 200,000. All the larger communities are expected to reach compliance with EU water quality parameters by 2010 and the smaller communities[3] by 2015.

Wastewater

The Urban Wastewater Directive (91/271/EEC) aims to help protect the environment from the adverse effects of wastewater discharges and wastewater of certain industrial sectors. It requires household wastewater to be collected and treated in all communities with a population equivalent greater than 2,000. Tertiary treatment is required for identified "sensitive" areas in the EU. Romania's commitments to the EU include designating the entire territory of Romania as "sensitive", due to its location in the Black Sea and Danube River Water Basins which have internationally known concerns with nutrient loading.

Approximately 52% of inhabitants have access to wastewater collection and treatment systems- with approximately 90% of this coverage in urban areas and approximately 10% coverage in rural areas. As a baseline - 112 wastewater treatment plants in Romania have primary (mechanical) treatment, 228 have biological treatment, and 6 treatment plants use chemical treatment. Key issues affecting the sector include: poor wastewater quality of discharges to open waterways due to low levels of treatment; lack of sewage network coverage for a high percentage of the population; sewage leaks in areas where the sewerage network is not in good condition; and inadequate tariffs to meet operation and maintenance costs which will go up to meet wastewater treatment costs. Investments related to meeting this directive include construction of new treatment plants and rehabilitation of existing ones. In addition, sewerage networks have to be rehabilitated and extended.

[3] 111 water treatment plants serving between 10,000 - 100,000 people; and 1,774 water treatment plants serving communities with less than 10,000 people.

Sectoral Operational Program – SOP Environment

Romania has drafted a Sectoral Operational Program (SOP) for the environmental sector which lays out the plan of the country to meet its commitment to the EU. The SOP is in draft form and the version described below has incorporated the comments from the EU. The SOP is expected to be finalized by December 2006. The SOP has the following objectives:

- Improvement of access to water infrastructure, by providing water supply and wastewater services in line with EU practices and policies, in most urban areas by 2015.
- Improvement of soil quality, by improving waste management services and improving environmental conditions of landfills in a minimum of 30 counties, in line with EU practices and policies by 2015.
- Reduction of negative environmental impacts caused by old municipal thermal plants in polluted localities by 2015.
- Protection and improvement of biodiversity and natural heritage by supporting protected area management, including NATURA 2000 implementation.
- Reduction of natural disasters affecting the population, by implementing preventive measures in most vulnerable areas by 2015.

To meet the above objectives, Romania is planning the following six priority activities which will be co-ordinated by the MoEWM:

1. **Extension and modernization of water and wastewater systems.** (Total Cost: € 2,870.59 million)

   The development of regional management systems for water and wastewater is planned. For the water and wastewater services, currently, there are about 950 operators throughout the country. The Government plans to group these operators into regional operators functioning at the county level and license the regional operators through ANRSC. Through these regional operators, good quality service at affordable tariffs will be provided. The operators are also expected to upgrade the infrastructure to provide efficient services.

   Indicative activities are: construction/modernization of water sources intended for the drinking water abstraction; construction/rehabilitation of water treatment plants; extension/rehabilitation of water and sewerage networks; construction/upgrading of wastewater treatment plants; construction/rehabilitation of sludge treatment facilities; and metering and purchase of laboratory equipment, leakage detection equipment.

   The SOP outlines the following indicators to measure progress. By 2013:

   - 250 new localities will have new or rehabilitated water systems, operated by regional utilities;
   - 70% of the population will have access to piped water. Currently 52% of the population benefits from this service;
   - 250 new wastewater treatment plants will be operational in compliance with EU Directives; and
   - 60% of the wastewater collected will be adequately treated. Currently, 35% is treated;

2. **Development of integrated waste management systems and reduction of hazardous sites.** (Total Cost: € 966.25 million)

An integrated waste management system is planned.

Indicative activities are: construction of new municipal waste disposal facilites and transfer stations; construction of sorting, recycling and composting facilities; purchase and installation of waste collection systems; purchase of waste transport vehicles; construction of environmentally sound landfills for municipal hazardous waste (medical waste, electric and electronics waste etc.) and other waste streams (construction and demolition waste etc.); and rehabilitation of old landfills.

The SOP outlines the following indicators to measure progress. By 2013:

- 8 million people will benefit from the strategic projects for waste management; and
- 90 old landfills will be rehabillitated. To date, 13 have been rehabilitated.

3. **Improvement of municipal heating systems in selected priority area.** (Total Cost: € 400 million)

The plan is to reduce the negative impact on the environment and human health in urban areas mostly polluted by old district heating systems.

Indicative activities are: upgrading large combustion plants with new technologies (rehabilitation of boilers and turbines); introduction of best available technologies for reduction of SO_2, NO_x, and dust; introduction of metering; rehabilitation of non-compliant slag and ash landfills; and rehabilitation of hot water and heating distribution networks.

The SOP outlines the following indicator to measure progress. By 2013:

- air quality improved in 8 localities due to rehabilitated district heating systems.

4. **Implementation of Adequate Management Systems for Nature Protection.** (Total Cost: € 187.5 million)

Activities will support biodiversity and nature conservation through development of an adequate management framework for protected areas, including NATURA 2000 sites.

Indicative activities are: capacity building for related institutions; completion of scientific studies including monitoring, mapping and preparation of inventories; development and implementation of management plans for the protected areas and Natura 2000 sites (ecological reconstruction, infrastructure development, public awareness, high biodiversity value land acquisition in order to become state public property).

The SOP outlines the following indicators to measure progress. By 2013:

- management plans effective in 35 protected areas; and
- 50% of the protected area benefiting from nature conservation measures

5. **Implementation of adequate infrastructure of natural risk prevention in most vulnerable areas.** (Total Cost: € 279.17 million)

Activities will focus on protection against floods and reducing coastal erosion in the southern Romanian Black Sea shore.

Indicative activities are: construction works for flood prevention; development of hazard and flood risk maps; and rehabilitation of Black Sea shore affected by erosion. The indicators for this priority are being developed and will include: population benefiting from floods protection measures, and kilometres of seashore rehabilitated.

6. **Technical assistance.** (Total Cost: € 200 million)

To be able to implement the SOP and effectively absorb EU Cohesion and Structural funds, Technical Assistance (TA) is planned.

Indicative activities are: project preparation; strengthening the central and local government agencies responsible for programming and utilizing the EU grants; monitoring and evaluation of the progress made in implementing SOP; and public awareness campaigns. The indicators for the TA are being developed and will include: number of projects prepared, training provided, audits completed, and number of public awareness events completed.

Financing Plan

The SOP covers the period between 2007 and 2013, the program is expected to cost around € 4,903.51 million, and the financing plan is shown below. The total EU grants to finance the SOP are expected to be around € 3,960 million, representing about 23.5% of the total EU grants allocated for Romania. The central and the local governments, together, are expected to contribute about € 943.51 million over the same period. The breakdowns on allocation of EU grants by year and the cost and financing plan are shown below.

Total SOP ENV financial allocation (2007-2013) (in million €)

Activity	EU Grants		National funding			Total Cost of OP	EU co-financing rate (%)
	Fund	Community funding	Public	Private	Total		
	1	2	3	4	5=3+4	6=2+5	7=2/6x100
1	CF	2,440	430.59	-	430.59	2870.59	85%
2	ERDF	773	193.25	-	193.25	966.25	80%
3	CF	200	200.00	-	200.00	400.00	50%
4	ERDF	150	37.50	-	37.50	187.50	80%
5	CF	237	42.17	-	42.17	279.17	85%
6	ERDF	160	40.00	-	40.00	200.00	80%
TOTAL	ERDF + CF	3,960	943.51	-	943.51	4903.51	81%

CF – Cohesion Fund; ERDF – European Regional Development Fund

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies
ROMANIA: MUNICIPAL SERVICES PROJECT

The most relevant Bank-financed project in the sector is the Bucharest Water Supply Project which had the following review:

- The Project Performance Assessment Report prepared by the Bank's Operations Evaluation Department (June 9, 2003) rated the outcome of the project as 'satisfactory', its sustainability as 'likely' and its institutional development impact as 'substantial'. The project is cited as "an example of successful assistance by the World Bank Group where the Bank helped prepare and finance much needed rehabilitation investments which facilitated the private concession for which the Government of Romania was assisted by the International Finance Corporation. Once a private concession became a possibility the Bank vigorously supported it."

- The Implementation Completion Report (June 24, 2002) rated the outcome of the project as 'satisfactory' and the institutional development of the project as 'substantial' given that the project supported the involvement of the Apa Nova, the private concessionaire that is now providing services to the city.

Annex 3: Results Framework and Monitoring
ROMANIA: MUNICIPAL SERVICES PROJECT

Results Framework

PDO	Project Outcome Indicators	Use of Project Outcome Information
Assist Romania to meet EU environmental directives in the water and wastewater sector, thereby improving the quality and coverage of water and wastewater services. This objective will be met through: a) the support of infrastructure development in the municipalities of Bucharest and Arad to provide better water and wastewater service and improve stormwater management; and b) preparation of priority water and wastewater projects in 11 counties	• Improved access to water supply meeting EU standards; • Improved access to sanitation meeting EU standards; • Proportion of the project area protected from flooding; • Improved road surfacing (in areas where water, sewerage, and stormwater networks will be laid); and • Projects applications prepared for EU funding	Determine the progress made in meeting the project objective
Intermediate Outcomes	**Intermediate Outcomes Indicators**	**Use of Intermediate Outcome Monitoring**
Procurement of construction contracts and works on schedule for Arad and Bucharest	Status of water, sewerage, stormwater, and road paving contracts	The status of the works contracts will be used to monitor implementation progress and corrective actions will be taken, as needed
Procurement of consulting contracts and consultancy assignment on schedule for the component managed by MoEWM	Status of the consulting contracts for the preparation of projects in 11 counties	The status of the consultancy contracts will be used to monitor implementation progress and corrective actions will be taken, as needed

Project Monitoring and Evaluation Indicators for the Project

Project Outcome Indicators	Unit	Baseline (2006)	Target Values				Data Collection and Reporting		
			YR1	YR2	YR3	YR4	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
Bucharest [4]									
• Incremental benefiting population	People	0	0	10,858	18,714	30,620	Semi-annual project progress reports	Technical reports	Municipality of Bucharest
• Incremental water sold	1000 m3	0	0	787	1,301	2,066			
• Incremental sewerage collected	1000 m3	0	0	708	1,172	1,860			
• Proportion of the project area protected from flooding;(39km)	%	0	0	38%	74%	100%			
• Improved road surfacing;(62km)	%	0	0	39%	65%	100%			
Arad [5]									
• Incremental benefiting population	People	0	0	0	14,955	23,238	Semi-annual project progress reports	Technical reports	Municipality of Arad
• Incremental sewerage collected	1000 m3	0	0	0	1,171	1,746			
• Proportion of the project area protected from flooding (81km)	%	0	0	41%	64%	100%			
• Improved road surfacing(84km)	%	0	0	39%	62%	100%			
MoEWM									
• Project applications prepared for EU funding	Completed reports (no.)	0		11	11	11	Reports as defined in TOR	Inception, Draft and Final Reports	MoEWM
Intermediate Outcome Indicators									
Arad Procurement of construction contracts and works on schedule	Percentage of works completed	0	15	40	65	100	As needed	Required reporting	Municipality of Arad
Bucharest Procurement of construction contracts and works on schedule	Percentage of works completed	0	15	40	65	100	As needed	Required reporting	Municipality of Bucharest
MoEWM Procurement of consulting contracts and consultancy assignment on schedule	Percentage of consulting services completed	0		100	100	100	As needed	Required reporting	MoEWM

[4] Target values are for urban services in unserved districts of Baneasa, Odai, Staulesti, Vatra Noua, Chitila Triaj and Giulesti Sarbi

[5] Target values are for urban services in unserved districts of Gai, Bujac and Sanicolaul

Annex 4: Detailed Project Description
ROMANIA: MUNICIPAL SERVICES PROJECT

Details of components 1 and 2 of the project are presented below.

A. BUCHAREST COMPONENT

Background

Bucharest, the capital of Romania, is the country's largest city with a population of 2.2 million. The city is divided into six sectors and currently about 20% of the population does not have access to centralized and quality water supply and sewerage services. Flooding of the city occurs frequently which creates health hazards. Further, the existing infrastructure is old and requires rehabilitation for the provision of quality service.

In order to address city's water supply and wastewater services need, the municipality has embarked on a 5-year upgrading program, consistent with the General Urban Plan for the metropolitan area which was approved in November 2005 and a Wastewater Master Plan (2004). The urban plan has four phases: Phase I foresees the extension of water supply and wastewater services in sectors 1 and 6 of the city which is expected to start in 2006; in Phase 2, services will be extended to sectors 3 and 4; in Phase 3, services will be extended for sectors 2 and 5; and Phase 4 will be to improve the services in the entire metropolitan area.

This project covers Phase 1 of the upgrading program. Sectors 1 and 6 were selected for the first phase mainly due to the high need for improved services: 22% and 24% of households do not have water supply in sectors 1 and 6, respectively. Similarly about 25% and 40% of households do not have sewerage connections in sectors 1 and 6, respectively. Further, the proposed investments in sector 1 will also help the expected urban development in the northern part of the city.

The city is served by a combined wastewater system (combined sewerage and stormwater system). Wastewater is collected in a culvert-interceptor underneath the Dambovita River and delivered to the Glina wastewater treatment plant (WWTP). The effluent from the treatment plant discharges into the Dambovita River, which is a tributary to the Danube. The WWTP is currently under renovation, financed in part by an ISPA grant. The renovation is scheduled to start mid 2006 and will be conducted in three phases: Phase I for mechanical and biological treatment by 2010 for a flow capacity of 10 m^3/s; Phase II to increase the capacity to 20 m^3/s by 2015; and Phase III for tertiary treatment to remove nutrients.

Proposed investments under the project

The investments and the proposed costs are summarized below. The cost estimates were carried out in 2005 and include Value Added Tax (VAT). Physical contingencies of 10% for the works and supply have been included in the cost. Investments have been designed for the population in 2035.

BUCHAREST PROJECT COST AND FINANING (Euro 1000)										
DESCRIPTION	COST								FINANCING	
	Baneasa Sector 1	Odai Sector 1	Otopeni North Sector 1	Straulesti Sector 1	Vatra Noua Sector 1	Chitila Triaj Sector 1	Giulesti Sarbi Sector 6	Total	Bank	Municipality
1. Works										
Water supply	4,962	315	8,539	1,180	1,347	265	6,162	**22,770**	14,801	7,970
Sewage	3,473	730	828	858	1,565	969	960	**9,384**	6,099	3,284
Drainage	1,828	457	1,997	1,931	0	0	2,430	**8,644**	5,618	3,025
Road Paving	9,463	613	0	3,131	3,645	1,326	4,699	**22,876**	14,869	8,007
Sub-total	**19,726**	**2,115**	**11,365**	**7,100**	**6,557**	**2,560**	**14,251**	**63,674**	**41,388**	**22,286**
2. TA and Engineering								**6,590**	4,284	2,307
3. Audit								**200**	0	200
4. Price contingencies								**3,408**	2,328	1,079
TOTAL								**73,872**	**48,000**	**25,872**

(a) Water supply. Domestic customers in built-up areas will be connected and bulk water will be supplied to new development areas. The existing water treatment plant and transmission lines have sufficient capacity for the proposed extension areas. The investments are in line with Romania's commitments to meet EU directives.

(b) Sewerage. Sewerage connections will increase and the wastewater treatment has sufficient design capacity for the increased sewerage load. Further, it is expected that the operation of the treatment plant will improve due to the increased pollution concentration of the wastewater. The investments are in line with Romania's commitments to meet EU directives.

(c) Stormwater drainage. An enhanced separate system has been designed (for most areas) to allow the stormwater discharge to comply with the EU directive 2000/60/EC; however a combined system has been designed in a few districts for various technical reasons. Stormwater pipes will be laid above the sewer pipes and the two will connected by a small pipe at specified intervals. This will allow a small amount of stormwater, including the first flush which typically has the most pollution, to flow to the sewerage system and be treated. The rest of the stormwater will flow through screens and grit chambers to reduce the pollution to the receiving water body. Lagoons will be used to retain stormwater to reduce the hydraulic load to the receiving water body.

(d) Road paving. Roads with new water supply and wastewater services laid in them need to be paved in order for Apa Nova to take over their operation and maintenance, as per the concession contract. National roads and highways are managed and maintained by the National Company for Motorways and National Roads. Streets are managed and maintained by the ADP (Public Domain Administration), a department of the respective Sector Municipalities.

Summary of the investments in project districts

The Municipality has identified 7 priority districts in sector 1 and 6 based on the approved urban development plan. The districts consist of built up areas which currently do not have water and wastewater services and new residential areas. The population served by the project (residents and business demand) is projected to exceed 133,000 by the year 2034 as per the General Urban Plan. The main growth will come from the Otopeni North and the Banasea regions which are growing very fast and as a result the development of infrastructure in these areas is included in Phase I of the urban development program.

Area	Population	
	Current	Year 2034
Banasea	new development	> 20,000
Otopeni North	new development	> 80,000
Odai	new development	1,500
Straulesti	5,000	5,778
Vatra Noua	2,200	2,542
Giulesti Sarbi	8,000	15,063
Giulesti Triaj	2,200	2,542
Total	**17,400**	**> 133,903**
Source: Bucharest General Urban Plan		

*1. **Baneasa District (Sector 1).*** Baneasa is a new area under development by a private developer to provide residential, business and commercial facilities. The construction of commercial areas is well advanced and the construction of the 3,000 housing units will start in mid 2006. An EU Phare financed project is under implementation which will bring in water to this district and also construct two 2500 m^3 reservoirs and a water pumping station. This project is expected to be completed in 2007. The Bank's project will help to build the water, sewerage, and stormwater networks in the district. Road paving will be done in the 20 hectares (ha.) of the publicly owned land in this district.

*2. **Vatra Noua District (Sector 1)*** is a built-up area of 50 ha. where the proposed investments are: (a) Water: it will be supplied through the extension of the 400 mm. pipeline along George Sisesti Street and 12.2 km distribution pipelines within the district; (b) A combined sewerage and stormwater system has been designed as the system is small and a part has already been constructed. The new wastewater network will be 9.6 km long and the wastewater is discharged by gravity through 5 outlet points into the existing main sewer along Gheorghe Sisesti Street; and (c) Roads: 11.1 km of roads (6 m wide) will be paved.

*3. **Straulesti District (Sector 1)*** is a built-up area of 115 ha. where the proposed investments are: (a) Water: It will be provided through the main line being constructed under the Otopeni-North project and a 12.1 km distribution pipeline within the district; (b) Sewerage: 10.7 km of sewerage will be constructed and the wastewater will discharge to the existing main sewer along the Bucharest-Targoviste road by gravity; (c) Stormwater: 10.9 km of network will be constructed; and (d) Roads: 9.5 km of roads (6 m wide) will be paved.

*4. **Otopeni North and Baneasa North Area (Sector 1)*** comprises an area of 570 ha for urban development for an estimated population of 80,000 to 95,000 people. Development of the area has not yet started, so the project will only provide bulk water to the area without the distribution network and bring in the sewerage connection points to the perimeter of the area. Investments include: (a) Water: bulk supply through mains of 14.3 km; (b) Sewerage: Extension of a main sewer line by 2.9 km; and (c) Stormwater – 0.6 km of collector with outfall structure and discharge into a lagoon;

*5. **Odai District (Sector 1)*** is a green-field area of 32 ha. where social housing will be built. Proposed investments are: (a) Water: it will be provided from the Otopeni North and Baneasa North project and through the 1.1 km distribution system; (b) Sewerage: 1.1 km of sewerage networks will be installed and the wastewater will be discharged to the sewer line in the Bucharest – Targoviste road; (c) Stormwater: 1.3 km of collectors will be constructed which will allow 1350 m^3 of underground and in-line storage; (d) Roads: 1.5 km. of roads (6 m wide) will be paved.

6. Chitila Triaj Area (Sector 1) is a built-up area of 70 ha. where the proposed investments are: (a) Water: It will be supplied through 1.7 km of distribution system; (b) Wastewater: Since the area is small and near a combined system, a combined sewerage and stormwater system has been designed. The proposed wastewater network has a length of 1.0 km and the wastewater will be pumped to an existing main collector; and (c) Roads: 4.5 km. of roads (6 m wide) will be paved.

7. Giulesti Sarbi District (Sector 6) is an area of 200 ha and only part of the area is built-up with partial drinking water and wastewater services. A large portion of the district is regularly flooded. Proposed investments are: (a) Water: construction of 10.3 km transmission main and 13.8 km distribution system; (b) Sewerage: a separate sewerage system has been designed for this district, except for some small area where a combined system exists already. 10.6 km of collectors will be constructed, the Boanca sewer line will be extended by 1.1 km, and a pumping station will be built; (c) Stormwater: 10.6 km of stormwater pipes will be installed. An additional drainage system of 2.3 km has been foreseen to lower the very high groundwater table in the south eastern part of the area; and (d) Roads: 10.2 km. of roads (6 and 10 m) will be paved.

B. ARAD COMPONENT

Background

Arad is a medium-size city of 190,000 located in the west of Romania close to the Hungarian border. It is situated on the Mures River which enters Hungary 50 km downstream of Arad and flows into the Tisza River which in turn flows into the Danube. The municipality has recently experienced rapid industrial growth stimulated by the automotive industry and border trade with Hungary and the EU.

The strategic plan of Arad municipality identified the development of urban services as one of the highest priorities. The plan lays out short, medium and long term plans for the construction of 220 km of sewerage and stormwater network. This project addresses priority districts identified in the plan where infrastructure will be developed. These three areas are Gai, Bujac and Sanicolaul where 90% of the population does not have access to public sewerage and the districts are frequently flooded due to non-existent or insufficient drainage facilities. A summary of the population covered under the project follows:

Area	Population	
	Current	Year 2025
Bujac	10,249	12,159
Gai	8,144	9,664
Sanicolaul Mic	3,938	4,716
Total	**22,331**	**26,539**
Source: General Urban Plan for Arad		

Arad is served by a combined wastewater system (combined sewerage and stormwater system). The wastewater is collected in a main collector and delivered to the wastewater treatment plant (WWTP) which comprises currently only mechanical treatment. The WWTP is under rehabilitation, financed by ISPA, and is expected to be completed in 2008 when it will be able to treat sewerage coming from the entire project area up to a tertiary level, so as to comply with the applicable discharge standards in sensitive areas.

Proposed investments under the project

The investments and the proposed costs are summarized below. The cost estimates were carried out in 2005 and include Value Added Tax (VAT). Physical contingencies of 10% for the works and supply have been included in the cost. Investments have been designed for the population in 2025.

ARAD PROJECT COST AND FINANCING (Euro 1000)						
DESCRIPTION	COST				FINANCING	
	Gai District	Bujac District	Sanicolaul District	Total	Bank	Municipality
1. Works						
Sewage	3,158	3,238	1,431	**7,826**	7,356	470
Drainage	6,574	6,801	2,044	**15,420**	14,494	925
Road Paving	7,224	7,959	4,955	**20,138**	18,930	1,208
Sub-total	**16,956**	**17,998**	**8,430**	**43,384**	**40,781**	**2,603**
2. TA and Engineering				**3,687**	3,466	221
3. Audit				**200**	0	200
4. Price contingencies				**3,030**	2,917	113
TOTAL				**50,301**	**47,163**	**3,138**

Investments to be supported under the project have been identified in a feasibility study financed by the municipality. The project will support the following types of investments:

(a) Sewerage. A separate sewerage and stormwater system will be used due to technical and environment considerations, and consistent with common practice in the EU. The sewerage investments are in line with Romania's commitments to meet EU directives.

(b) Stormwater drainage. An enhanced separate system has been designed, similar to Bucharest. All pumping stations will be equipped with remote monitoring and control of the pumps. The municipality of Arad has chosen to use piped stormwater drainage instead of open channels due to the lack of space, increased safety, and ease of maintenance. As the groundwater table is high in the project districts, the stormwater pipes will be laid no deeper than 3.5 to 4 meters.

(c) Road paving. Roads with an unpaved surface cause comparatively higher maintenance cost, as they easily cause the stormwater drainage system to get clogged by sand and solid particles, while manhole covers are frequently damaged. Therefore, it was agreed to carry out paving of the roads for those streets, in which wastewater and stormwater services shall be laid, that are economically viable, in order to ensure sustainable operation. Economic viability will be determined during project implementation, prior to Bank financing.

Summary of the investments in project districts

*1. **Bujac District*** is a residential district located in the north-western part of Arad, with a surface area of 325 ha. Only 10% of the population is connected to a sewerage system. Proposed investment are: (a) Sewerage: 40.3 km of sewerage distribution network, collected by gravity and pumped by two pumping stations into proposed collectors, which will discharge into the existing collector in Targului Street; (b) Stormwater: 39.1 km network and two outlet points will be constructed. The stormwater will be pumped into the lagoons and discharged by gravity into the Muresel channel that flows into the Mures River; and (c) Roads: 35.3 km of roads (6 and 7 m. wide) will be paved. Currently only 4.1 km is paved.

*2. **Gai District*** is located at the northern outskirts of the town and has a total area of 720 ha. An industrial park is planned to be constructed to the north of this area. At present, only one street in the

south-east of the district is connected to a public sewerage system. Proposed investments are: (a) Sewerage: 29.6 km of distribution network connected; (b) Stormwater: 29.1 km of network constructed along with 3 retention lagoons; and (c) Roads: 31.0 km of roads (6 and 7 meters wide) will be paved.

3. ***Sanicolaul District*** is located at the southern boundary of the town, with an area of 240 ha and a population of 5,000 and expected to grow to 28,000. Proposed investments are: (a) Sewerage: 15.4 km of distribution network plus three pumping stations; (b) Stormwater: 12.9 km network and a lagoon, functioning as a retention basin, to reduce the peak flow to the Mures river; and (c) Roads: Paving about 17.5 km of roads where the sewerage and stormwater investments will take place.

Annex 5: Project Costs
ROMANIA: MUNICIPAL SERVICES PROJECT

Project Cost By Component and/or Activity	Local € million	Foreign € million	Total € million
Component 1: Urban services in Bucharest Municipality	11.1	62.8	73.9
Component 2: Urban services in Arad Municipality	7.5	42.8	50.3
Component 3: Project Preparation with MoEWM	2.0	11.1	13.1
Total Project Costs	20.6	116.7	137.3
Front-end Fee		0.3	0.3
Total Financing Required	20.6	117.0	137.6

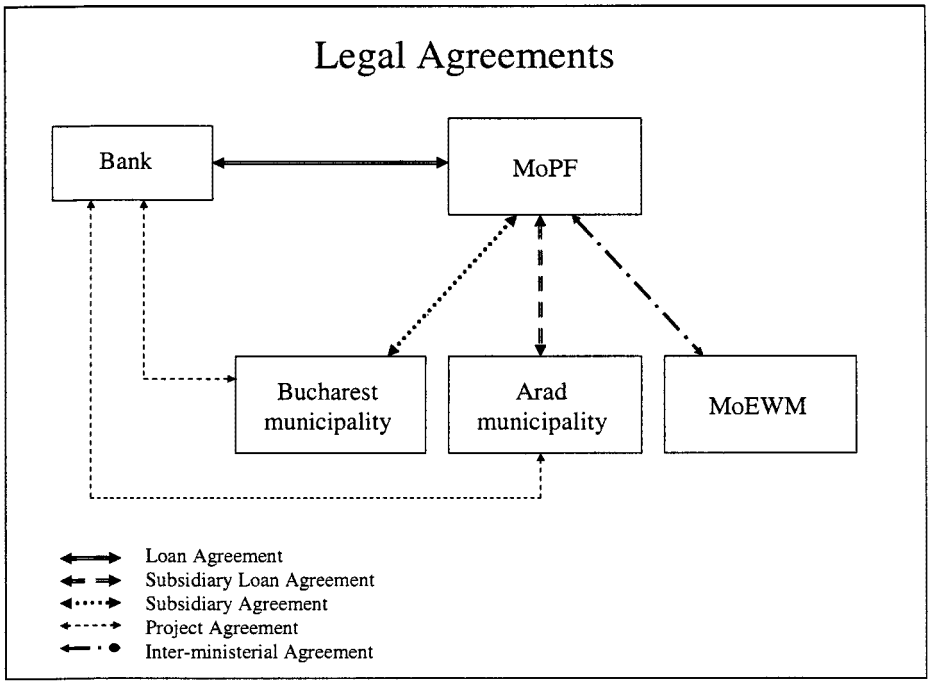
The cost estimates were carried out in 2005 and include 19% Value Added Tax (VAT).

Annex 6: Implementation Arrangements
ROMANIA: MUNICIPAL SERVICES PROJECT

The Borrower of the Bank loan will be Romania, represented by the MoPF. The project will be implemented by the following three implementing entities: municipality of Bucharest, municipality of Arad, and the MoEWM. The legal agreements for the project are shown below.

There will be a Loan Agreement between the Bank and MoPF for all three components of the project. For components 1 and 2, two Project Agreements will also be in place between the Bank and the two municipalities. There will also be a Subsidiary Loan Agreement between the MoPF and Arad municipality. In addition, there will be a Subsidiary Agreement between MoPF and Bucharest municipality. Both municipalities have experience in handling internationally financed projects and have the capacity to implement the project.

For Component 3, the MoPF will provide the Bank loan funds to the MoEWM through an inter-ministerial agreement which will outline the role of the MoEWM to implement the project. In the MoEWM, the General Directorate for Management of Structural Instruments will be responsible for implementation of this project. This General Directorate is responsible for programming, monitoring, and authorizing payments for the EU Structural and Cohesion funds for the environmental sector. Thus, this General Directorate will be able to fully integrate the activities of the Bank with the other ongoing activities related to EU accession, including development of a project pipeline. A Director in this General Directorate has been assigned to implement the project and for financial management purposes, the accounting system of MoEWM will be used.



Day-to-day implementation and coordination of the project will be carried out by staff assigned to the project in the implementing agencies. The municipalities of Bucharest and Arad and MoEWM will each nominate a Director and qualified staff to implement the project and provide them with adequate resources to do so. The staff members should be specialized on technical, procurement, and financial management matters and may carry out other functions in the implementing agencies. The staff will implement the project and specifically carry out the following functions: (a) review the technical requirements of the project and ensure that economic investment decisions are being taken; (b) prepare bidding documents; (c) disburse loan funds and carry out proper financial management functions; (d) monitor the progress of the project and prepare and submit Project Reports to the MoPF and the Bank.

Annex 7: Financial Management and Disbursement Arrangements
ROMANIA: MUNICIPAL SERVICES PROJECT

1. Summary

Country Issues

The first Country Financial Accountability Assessment (CFAA) for Romania was finalized in December 2003. The assessment concluded that the overall fiduciary risk associated with the public financial management and financial accountability arrangements of the Romanian government administration is moderate, with the systems for accounting, financial reporting and internal control representing areas with higher risks and budgeting, cash management and external audit and Parliamentary oversight representing lower risks. The implications of the CFAA for the project have been addressed by the following actions:

- A detailed review of the systems was performed for each implementing entity;
- The implementing entities will set up distinct project-specific accounting ledgers;
- Project accounting staff are employees of the implementing entities;
- The format of the IFRs and audit TORs agreed with the implementing entities; and
- Project financial statements will be audited by an independent auditor annually.

Risk Assessment and Mitigation Measures

The risk analysis from the Financial Management Questionnaires is presented below.

Type of Risk	*Risk Rating*	*Comments/Mitigation measures*
Inherent Risk		
Country level	M	The mitigation measures were identified in the CFAA and are mentioned above
Entities level	M	Dedicated project units in charge with the project implementation established within MoEWM, and municipalities of Bucharest and Arad
Project level	M	Non–complicated project components
Overall Inherent Risk	M	
Control Risk		
Budget	M	Project's budgets updated regularly and included in the budgets of MoEWM, and municipalities of Bucharest and Arad
Accounting	M	Project's accounting records kept distinctly from the rest of the operations of the entities
Internal Control	M	Additional procedures developed for the project
Funds Flow	M	Simple flow of funds in place
Financial Reporting	M	MoEWM will aggregate the Interim Financial Reports for the project.
Auditing	M	Project financial statements audited annually; The audit Terms of Reference and the auditors have to be acceptable to the Bank
Overall Control Risk	M	

Strengths and Weaknesses

The strengths of the project's financial management system include: (a) non-complicated fund flow structure and a centralized financial management arrangements; and (b) adequate accounting and reporting systems for the implementing entities. There are no significant weaknesses of the project financial management system.

Implementing Entities

The municipalities of Bucharest and Arad and the MoEWM will be responsible for financial management, using the existing structures of these institutions. The Loan Agreement will be signed between the World Bank (IBRD) and Romania, represented by the Ministry of Public Finance (MoPF). A Subsidiary Loan Agreement will be signed between the MoPF and the municipality of Arad. In addition, a Subsidiary Agreement will be signed between MoPF and the municipality of Bucharest. There will be an inter-ministerial agreement between MoPF and MoEWM. There will be two Project Agreements signed between the Bank and the two municipalities.

Funds Flow

The municipalities of Bucharest, Arad, and the MoEWM will each open a Designated Account (DA) in a commercial bank and on terms and conditions acceptable to the World Bank. Foreign currency amounts will be exchanged as needed in local currency (RON), to cover eligible expenditures payments in local currency to suppliers. Payments will be made directly by the Bank to the suppliers or through the three DAs.

Government counterpart contribution payments for the component managed by MoEWM will be made from separate Treasury project accounts, and which will be used specifically for the counterpart contributions to the project. These contributions will be received monthly in accordance with normal budget procedures.

Staffing

The project units in each municipality and the MoEWM include a finance team comprising a financial manager and an accountant. The finance teams will work closely with the existing economic, budget, finance and accounting departments in their respective entities. The financial staff are employees of the implementing entities. Representatives of the project finance teams have registered to participate at the joint financial management and disbursement workshops organized by the Bank in May and June 2006.

Accounting Policies and Procedures

The project's accounting books and records will be maintained on an accrual basis and denominated in Romanian Lei (RON) with the exception of the books and records in the DAs which will be maintained in Euros, the currency of the Bank loan. The project units will build upon the existing implementing entities' accounting procedures and internal control framework to ensure that all project procedures and controls are adequately documented, contract monitoring and invoice payment procedures are consistently adhered to and documented. Accordingly, for each contract, a monitoring sheet would be opened, filled in and updated by each implementing entity, as follows: (a) date of the contract; (b) number of the

contract; (c) name of the contractor; (d) contract start date; (e) contract end date; (f) name of the assigned resident inspector for works or recipient for goods or services, where relevant; (g) name of the assigned contract monitoring staff within the project team; (h) contract value; (i) list of invoices received for the contract; (j) amounts paid in respect of the contract; (k) date of the last inspection, where relevant; and (l) record of procurement complaints.

For each payment, the following standard checklist would be filled in prior to the payment of any invoice to ensure that all appropriate contract monitoring procedures have been carried out, confirming: (a) that the invoice was accompanied by an appropriate certified completion certificate by the assigned resident inspector or other goods received note or acknowledgement of receipt of the goods or services; (b) the mathematical accuracy of the invoice; (c) that the invoice agrees to the terms of payment as specified in the contract; (d) that the works described in the invoice and resident inspector's report are linked to the contracts; (e) the approval by the relevant staff member; (f) the approval by the project manager; (g) the date of payment of the invoice; and (h) that the contract monitoring sheet has been updated.

The other procedures that would be performed include:

- close monthly project accounting books no later than the 15th of the following month;
- close yearly project accounting books no later than January 31st of the following year;
- check the mathematical accuracy of the Interim Financial Reports (IFRs) inputs with the accounting records;
- check the opening figures of the IFRs with the closing figures of the previous semester;
- check the semestrial IFRs figures for consistency between the various reports (Statement of Sources and Uses of Funds, Uses of Funds by Project Activities, Dedicated Accounts Statements, Physical Progress Reports, Procurement Reports and Contract Monitoring);
- reconcile monthly bank accounts statements with project accounting records;
- reconcile monthly World Bank disbursement records with project accounting books; and
- complete inventory and fixed assets stock taking at least once per year and more often, if needed.

2. Audit Arrangements

Internal Audit

Internal audit departments exist within the municipalities of Bucharest and Arad and within MoEWM. The internal audit departments will review the project's financial management arrangements as part of their function to audit each implementing entity. The project will rely on the internal audit departments for the internal audit functions of the implementing entities.

External Audit

The Borrower is in compliance with the audit covenants of existing Bank-financed projects.

The project will be audited annually by independent auditors acceptable to the Bank and under Terms of Reference (ToR) acceptable to the Bank. The ToR for the audit has been agreed with the Bank. The audit scope will include the project's books and records as maintained by each implementing entity, all withdrawal applications, and the DAs. The audited project financial statements together with the auditor's opinions will be provided to the Bank within six months of the end of the reporting period

which is a fiscal year. The project audit costs would be covered from their own sources by the Municipality of Bucharest and by the Municipality of Arad. The Bank loan proceeds will be used to finance the audit for the MoEWM component.

In addition, the Romanian Court of Accounts (CoA), the country's supreme audit institution, will continue to perform ad hoc external audits of the implementing entities, including of this project. The CoA will perform an operational review of the project to look at the specific issues related to governance, efficiency and performance. The most recent audit reports prepared by the CoA for the Bucharest municipality covering FY 2004 and the Arad municipality covering FY 2003 have been reviewed. Regarding MoEWM, the CoA has not yet finalized the audit field work for FY 2004 and this report is expected to be issued by mid 2006.

3. Disbursement Arrangements

Bank funds will be disbursed either as direct payments by the Bank or through the three DAs which will be replenished under the transactional disbursement procedures. Withdrawal applications for the replenishments of the DAs will be sent to the Bank monthly, or when about a third of the initial deposit in the DAs has been utilized, whichever comes first. The maximum amount of the loan proceeds that may be deposited in the Designated Accounts are: € 5,000,000 for the component with Bucharest and Arad municipalities; and €1,000,000 for the MoEWM component. The reimbursement of expenditures made from the DA may be made on the basis of certified Statement of Expenditures (SOEs) for the following items: (a) contracts for works less than € 4,000,000; (b) consulting contracts with firms valued less than € 200,000; and with individuals valued less than € 50,000.

All replenishments for transactions above the above mentioned SOE thresholds will be fully documented. Supporting documentation for all transactions, including completion reports, goods received notes and acceptance certificates, will be retained by the implementing entities and made available to the Bank during project supervision. There is no plan to move to forecast-based periodic disbursements. The disbursement categories and the Bank financing are summarized below.

Disbursement Categories		
Category	**Amount of the Loan allocated (€)**	**Percentage of Expenditures to be financed**
Works, goods and consultants' services for Urban Services in Bucharest municipality	48,000,000	65%
Works, goods and consultants' services for Urban services in Arad municipality	47,200,000	94%
Consultants' services for project application for EU grants	11,000,000	84%
TOTAL AMOUNT	106,200,000	

4. Reporting and Monitoring

Project management-oriented un-audited Interim Financial Reports (IFRs) will be used for project monitoring and supervision. The IFRs will be prepared by the municipalities of Bucharest and Arad and MoEWM every calendar semester and the reports will be submitted to the Bank within 60 days after the end of the semester. The format of the IFR has been agreed with the Bank. The MoEWM would aggregate the IFRs for the entire project, with inputs received from the Municipality of Bucharest and from the Municipality of Arad.

5. Information Systems

The Bucharest and Arad municipalities and MoEWM have in place modern accounting software systems. Project specific ledgers will be created with the existing systems for each implementing entity to allow the respective project unit to record distinctly the operations of the project using the existing chart of accounts.

6. Supervision Plan

During project implementation, the Bank will supervise the project's financial management arrangements in two ways: (a) review the project's semestrial IFRs as well as the project's annual audited financial statements and auditor's management letter; and (b) during the Bank's supervision missions, review the project's financial management and disbursement arrangements (including a review of a sample of withdrawal applications and movements on the dedicated accounts) to ensure compliance with the Bank's financial management requirements.

Annex 8: Procurement Arrangements
ROMANIA: MUNICIPAL SERVICES PROJECT

A. General

Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement Under IBRD Loans and IDA Credits" dated May 2004; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and the provisions stipulated in the Legal Agreement. For each contract to be financed by the loan, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank project team in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Advertising: A General Procurement Notice (GPN) listing all main procurement packages was advertised on-line in United Nations Development Business (UNDB) on January 24, 2006. Specific Procurement Notices (SPN) for ICB Goods and Works packages will be advertised on-line in UNDB, dgMarket and on the above-mentioned websites. Advertisement of NCB contracts for goods and works would be done in local newspapers and the appropriate government website. The results of contract awards for goods and works will be posted in UNDB on-line and dgMarket as required under the Guidelines.

Procurement of Works: Works procured under this project would include: rehabilitation and construction of water supply network, sewage, drainage and road paving. Procurement will be done using the Bank's Standard Bidding Documents (SBD) for all International Competitive Bidding (ICB) contracts for Large Works (based on FIDIC-type contracts). ICB contracts estimated to cost above € 4,000,000 per contract and all direct contracting will be subject to prior review by the Bank.

Procurement of Goods: As currently planned, the project will include all goods and equipment required for the project as part of civil works packages. However, provisions have been made under the project to procure goods separately, if needed. In such case, ICB, NCB or shopping procedures may be followed. All ICB contracts, first NCB and Shopping Contracts will be subject to prior review.

Selection of Consultants: Consulting services will be required to prepare the design documents and for supervision of the works contracts. In addition, consultants will be hired for the component to be managed by MoEWM to prepare a pipeline of projects. Short lists of consultants for services estimated to cost less than € 200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Table 8.1: Thresholds for Procurement Methods and Prior Review

Estimated cost (€)	Procurement / Selection method	Prior review by Bank
Civil Works		
Above 4,000,000	ICB	All
Below 4,000,000	NCB	First contract and as agreed in the procurement plan
Below 80,000	Shopping	First contract and as agreed in the procurement plan
Goods		
Above 800,000	ICB	All
Below 800,000	NCB	First contract and as agreed in the procurement plan
Below 80,000	Shopping	First contract and as agreed in the procurement plan
Consulting Services		
As appropriate	QCBS	All
As appropriate	QBS	All
	LCS	First contract and as agreed in the procurement plan
	FBS	First contract and as agreed in the procurement plan
Below 80,000	CQ	First contract and as agreed in the procurement plan
	SSS	All
	IC	First contract and as agreed in the procurement plan

ICB – International Competitive Bidding
NCB – National Competitive Bidding
QCBS – Quality and Cost based Selection
QBS – Quality Based Selection
LCS – Least Cost Selection
FBS – Fixed Budget Selection
CQ – Selection based on Consultant Qualifications
SSS – Single Source Selection
IC – Individual Consultant Selection

B. Assessment of the agency's capacity to implement procurement

Staff of the municipalities of Bucharest and Arad and the MoEWM will carry out procurement activities. In November 2005, the Bank carried out the assessment of the procurement capacity to implement the project in Bucharest and Arad. The assessment reviewed the proposed organizational structure for implementing the project and the interaction between the staff working on procurement and MoPF's requirements. There is adequate capacity in these two municipalities to implement the project.

The MoEWM is already implementing the Bank financed Hazard Risk Mitigation and Emergency Preparedness project and the procurement staff working on this project will also be assigned to the Municipal Services Project. As an earlier assessment was carried out for the Hazard Risk Mitigation and Emergency Preparedness project and the MoEWM has demonstrated that it has the procurement capacity, a separate assessment was not carried out for the Municipal Services Project.

Risks related to procurement and the proposed mitigation measures are:

- Limited experience in implementing large works contract, following Bank procedures. Details of the works contracts are shown in the Procurement Plan. To address this risk, the Bank will provide support to the municipalities of Bucharest and Arad, as necessary. Also, the Bank will conduct a prior review of all works contract for contracts above the € 4.0 million threshold.

- Careful planning is required to implement the project in a timely manner. To address this risk, consultants will be hired to support the municipalities of Bucharest and Arad, as needed.

The overall project risk for procurement is high given the overall procurement risks in Romania and is not specific to the project.

C. Procurement Plan

The Borrower, at appraisal, developed a Procurement Plan for project implementation, which provides the basis for the procurement methods. This plan will be available in the project's database and in the Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Table 8.2: Procurement Plan

Ref no	Contract Description	Estimated cost	No of contracts	Procurement Method	Review by Bank prior/post	P-Q Yes/No
	Urban Services in Bucharest					
B1	Baneasa District: Water Supply, Sewage, Drainage, & Road paving	€ 19,725,850	1	ICB*	Prior	Yes
B2	Straulesti, Odai, Vatra Noua, Otopeni North, Chitila Triaj (Sector 1): Water Supply, Sewage, Drainage, & Road paving	€ 29,696,614	1	ICB*	Prior	Yes
B3	Giulesti Sarbi (Sector 6): Water Supply, Sewage, Drainage, & Road paving	€ 14,251,352	1	ICB*	Prior	Yes
B4	TA and Engineering	€ 6,590,108	1	QCBS*	Prior	
B5	Audit	€ 200,000		NBF*	Prior	N/A
	Contingency	*€ 3,407,899*				
	Sub-total component 1	**€ 73,871,823**				
	Urban Services in Arad					
A1	Gai District: Water Supply, Sewage, Drainage, & Road paving	€ 16,955,779	1	ICB*	Prior	Yes
A2	Bujac District: Water Supply, Sewage, Drainage, & Road paving	€ 17,997,837	1	ICB*	Prior	Yes
A3	Sanicolaul District: Water Supply, Sewage, Drainage, & Road paving	€ 8,430,080	1	ICB*	Prior	Yes
A4	TA and Engineering	€ 3,687,163	1	QCBS*	Prior	N/A
A5	Audit	€ 200,000		NBF*	Prior	N/A
	Contingency	*€ 3,030,058*				
	Sub-total component 2	**€ 50,300,917**				
	Project Preparation in 11 Counties					
ME 1	Consulting services in 6 counties	€ 7,000,000	1	QCBS*	Prior	N/A
ME 2	Consulting services in 5 counties	€ 6,000,000	1	QCBS*	Prior	N/A
ME 3	Audit	€ 100,000		LCS**	Post	N/A
	Sub-total component 3	**€ 13,100,000**				
	Total for all sub-components	**€ 137,272,740**				

NBF - Not Bank Financed
* prior review by the Bank
** post review by the Bank
P-Q: Pre-qualification

D. Frequency of Procurement Supervision

In addition to the prior review carried out by the Bank, there will be at least one procurement supervision mission per year to carry out post review of procurement actions. The procurement staff in the MoEWM and the municipalities of Bucharest and Arad will collect and maintain the procurement documentation in a systematic way.

Annex 9: Economic and Financial Analysis
ROMANIA: MUNICIPAL SERVICES PROJECT

ECONOMIC ANALYSIS

As part of the National Development Plan (NDP), the Government has prepared a Sector Operational Plan (SOP) for the environment sector (Annex 1). The SOP has been endorsed by the EU and reaffirms Romania's commitment to meet EU directives and outlines the plans to use Structural and Cohesion funds, wherever possible. The SOP has the following three objectives, which are in line with the investments proposed in the project:

- improve the access of the population to public utilities;
- improve the environmental quality which includes: (a) wastewater treatment for 200 settlement clusters with population greater than 10,000; and (b) adequate drinking water quality in all urban settlements; and
- improve the nature protection and flood risk management.

Background

Brief background information on the cities follow.

Bucharest

Bucharest has a population of 2.2 million and is administratively divided into 6 sectors. Currently about 20% of the population of Bucharest does not have access to centralized and quality water supply and sewerage services. People currently rely on water from individual shallow wells with unsafe water quality. Flooding in the project areas occurs frequently. The Government considers the urban improvements in Bucharest a priority which is soon to become a capital city of an EU member country.

The municipality has embarked on a 5-year program, consisting of four phases, to improve the urban infrastructure in the city (Annex 4). This project covers Phase I of this program and foresees the extension of water supply, sewerage and stormwater services in sectors 1 and 6 of the city, including paving of streets. Within these two sectors, the municipality has identified 7 priority locations – a combination of partly built-up area and new developments – based on approved urban development plan.

Arad

The city of Arad is located in the west in the west of Romania close to the Hungarian border, along the river Mures which enters Hungary 50 km downstream of Arad. The Mures River is a tributary of the Tisza River which in turn discharges into the Danube River, ending up in the Black Sea. The population of Arad town is 190,000. The town is experiencing a rapid industrial growth stimulated by the industrial zones created within the city and with border trade with Hungary and other EU member countries.

Development of urban services is a high priority for the municipality which includes the construction of sewerage and stormwater network. The project will have a significant impact on economic growth by providing the supporting infrastructure to new industrial zones and residential growth areas. The project will supply sewerage and storm water services to the two new industrial zones in Gai (150 ha.) and Sanicolaual (265 ha.) areas which is expected to create 36,000 new jobs over the next 20 years. The collected sewage will be treated by a wastewater plant being constructed with the main financing coming from EU ISPA grants.

Overall, the project will cover three areas within the municipality. These areas are Gai, Bujac and Sanicolaul Mic and about 90% of the population (22,000 people) living in these areas has no access to public sewerage and use septic tanks. The groundwater in Arad area is high -- less than 2 m in some places -- and the city currently pumps out the groundwater from areas that are settled which creates the risk of the septic tanks contaminating the groundwater. No water supply investments are proposed as the project areas are connected to the central water supply system.

The drainage investments are necessary to avoid flooding in the three project areas which do not have sufficient drainage facilities. Floods in 2005 created damage to the low lying areas that are included in the project – about 50 streets in Bujac and Gai were flooded. The combination of insufficient drainage infrastructure and high groundwater level results in damages to foundations of buildings as seen in the recent floods.

Regulatory Requirement

The project is justified on regulatory grounds, given Romania's commitment to meet EU directives during the accession negotiations which are summarized below. The water supply, sewerage, and drainage investments proposed in this project are fully consistent with the priorities of the Government, as reflected in the SOP.

- Water: EU Directive 98/83/EC addresses quality of water for human consumption. As per the SOP, Romania plans that by 2013, 70% of the population will be served through utilities and receive good quality water.

- Sewerage: EU Directive 91/271/EEC outlines the process for urban water collection, treatment and discharge. As per SOP, Romania plans that by 2013, wastewater will be collected and treated from 250 new settlements with population greater than 10,000. In the Implementation Plan, initial estimate of the costs to meet EU directives, the entire territory of Romania has been classified as a 'sensitive area' regarding wastewater disposal. Thus, proper usage of sewerage systems and treatment plants is important.

- Drainage: EU Directive 2000/60/EC defines the European water policy and specifies that river basins should be the unit for integrated water resource management. In the SOP, Romania states its intention to take a pro-active role in flood management, especially given the recent floods in the country.

Benefits of the Project

Apart from the regulatory requirement, the project will yield the following benefits. They are summarized below by sectors

Water and Wastewater Investments

The benefits of these investments are:

- Positive externalities at the regional and country levels due to the environmental improvements supported by the project. These externalities are difficult to quantify and as a result are not included in the cost benefit analysis;

- Provision of water and wastewater services through an operator, which improves quality of service and reduces health and environmental risks. The incremental revenues due to piped water are used as a proxy for benefits of piped water services (convenience, better quality). Similarly, incremental wastewater revenues are used as a proxy for benefits of having a sewage system and discontinuing the use of septic tanks. To estimate the incremental revenue due to the project, the per capita consumption and average tariffs have been used. The per capita consumption is calculated on the basis of total volume of water sold to domestic, commercial, and industrial consumers divided by the number of consumers. The current consumption of 220 liters per capita day (lpcd) in Bucharest is expected to decline around 165 lpcd in about 10 years with an increase in tariffs. In Arad, the current consumption of 275 lpcd is expected to drop to around 196 lpcd in about 10 years. Assumptions on decrease in per capita consumption with increase in prices are shown in the calculations.

- Increase in the value of property and land where the infrastructure will be upgraded. The increase in the value of the property will be tremendous as seen in the incremental property tax revenues that the city plans to collect from the project areas. The property tax is assessed at around 0.2% of the value of the property and the incremental taxes from the project areas are as follows: Bucharest (2009) - RON 866,000; and Arad (2010) - RON 908,000. The incremental tax, representing a low estimate of the benefit of increased property value due to the upgraded infrastructure, is estimated to be € 12.8 and € 10.4 on a per capita basis in Bucharest and Arad, respectively. This has been calculated by diving the tax by the number of existing homes (6,960 in Bucharest; and 8,933 in Arad) and the number of members per household (2.8).

For purposes of the analysis, the growth in property value is assumed to start in 2008, given that citizens already know about the investments and services will start in some project areas by that time. In Bucharest the willingness to pay this tax in 2008 on a per capita basis is assumed to be € 12.16 (discounted by 95% from 2009). The similar figure for Arad in 2008 is assumed to € 9.39 (discounted 95% each year from 2010).

The Cost-benefit analyses are summarized below. As indicated, the analyses do not capture the externalities and the full amount of increase in property value. Thus, the rates of return are a low estimate. Nevertheless, they provide a justification for the investments.

- Bucharest (areas with existing population): These are the Straulesti, Vatra Noua, Giulesti Sarbi, Giulesti Triaj districts that need water and sewerage services. The expected rate of return is 12.3%. The population growth in these areas is modest (around 2%) and after the water and sewerage investments are in place and the streets are paved, they will have an opportunity to be served by Apa Nova. (Annex 9; Table 1);

- Bucharest (growth areas): These are the Banasea, Otopeni North, and Odai districts which are growth areas and where the city has to provide water and wastewater services. The rate of return is 9.4%. These areas are in the northern part of the city which is experiencing rapid growth. Apartments, homes, and commercial buildings are expected to develop in these areas which will result in high incremental value of property. At the same time, the project is providing bulk services in some areas (especially around Otopeni North) and investments have to be incurred by the city to provide the distribution network. The costs for the distribution network are included in the analysis. (Annex 9; Table 2); and

- Arad: the sewage network will benefit the domestic population in the Gai, Bujac, and Sanicolaul Mic areas. In addition, the industries will benefit from the sewage installed. The rate of return is

6.2%, which is acceptable for such sewage investments. The municipality estimates that by 2025 about 36,000 new jobs will be created in the industries, and some employees will come from outside Arad municipality. The incremental wastewater generated in the industries due to the employees who come from outside Arad municipality has not been taken into account, to have a conservative estimate on the incremental revenues due to wastewater treated (Annex 9; Table 3). The municipality also intends to collect a development tax based on the improvement in the project areas. The willingness to pay this tax, representing the increased property value, has not been taken into account in the analysis to have a conservative estimate.

Stormwater

Currently, most areas are served by a combined wastewater system. This results in a low concentration of BOD in wastewaters reaching the treatment plant. In most areas under the project, separate wastewater systems have been proposed due to the following reasons: (a) the increased BOD concentration in the sewerage will improve the operation of the WWTP, to be completed in 2010 in Bucharest and 2008 in Arad; (b) by constructing separate wastewater systems in most districts in Bucharest and Arad, the additional hydraulic load reaching the wastewater treatment plants will be reduced; and (c) in both cities it is possible to discharge stormwater near the project areas into open channels and rivers, and thus avoiding the construction of larger diameter pipes that would be needed to transport the wastewater over long distances.

A cost benefit analysis for stormwater has not been shown as the benefits of flood prevention and improved environmental and health conditions are difficult to quantify. During project implementation, both municipalities will have to demonstrate that the most cost effective design solution was chosen, prior to the Bank's no objection for financing.

Road Paving

Roads will be paved in Arad and Bucharest – only in the project areas - to sustain the water supply, sewerage, and drainage investments. Improved road surfaces will result in shorter travel time and less wear and tear on vehicles.

In Bucharest, Apa Nova (the concessionaire) will only take on the responsibility of provision of water and wastewater services in new areas once the municipality has paved the roads. This is a condition of the concession contract for Apa Nova to expand services. Expanding water and wastewater service provision through utilities is also an objective of the Government. Thus, in project areas, roads will be paved and the implementation will be carried out as the project develops.

In Arad, roads will be paved after a cost-benefit analysis is done during project implementation. As some roads in Arad have low traffic volume, the analysis will be conducted to confirm the need to pave roads. The Bank's Roads Economic Decision Model (RED) will be used for the analysis. This model takes into account, the traffic, condition of unpaved roads in dry and wet seasons, vehicle speed, types of paving, and accident rates. The municipality will conduct the analysis with assistance from the Bank team.

Unit Costs

The proposed technology used in laying water, sewerage, and stormwater pipes and paving roads is standard and the unit costs are within the expected construction costs in Romania, as shown below. Bucharest costs for sewerage and stormwater are higher than that of Arad as larger diameter pipes will be laid in Bucharest, leading to a higher unit cost. In Arad, there are more pipes laid compared to Bucharest, apart from the outlet structures constructed that are common in both cities. This leads to a relatively

larger denominator in Arad to calculate cost per meter of pipes (unit cost). Further, the construction costs are expected to be higher in Bucharest given the soil conditions and the presence of more utility lines in the ground that could delay construction. The cost of materials is assumed to be same in both cities.

Comparison of Unit Costs		
Item	Bucharest	Arad
Water supply (all costs divided by length of pipes)	€ 290/m	Not applicable
Sewerage (all costs divided by length of pipes)	€125/m	€ 75 /m
Stormwater (all costs divided by length of pipes)	€ 195/m	€150 /m
Road paving (all costs divided by area paved)	€40/m²	€35 /m²

FINANCIAL ANALYSIS

To receive the Bank loan from the MoPF, both municipalities carried out detailed financial projections which were submitted to an inter-ministerial commission that approves loans for municipalities. As per Romanian legislation, an approval of this commission is necessary – from a financial and technical standpoint - for the MoPF to borrow from the Bank and provide the loan funds to the municipalities. The financial information that was reviewed and approved by this commission and the MoPF is summarized in the attached tables. The conclusion of the review was that both municipalities will be able to meet their obligations in regards to: (i) local counterpart financing for the project and (ii) debt service, while remaining in compliance with the applicable limits on borrowing.

Past and recent financial results

For Bucharest, the total revenues in 2006 are expected to be around RON 1,828 million, compared to a figure of RON 1,261 million in 2004 (Annex 9; Table 4). The central Government budget contribution to Bucharest is expected to be around 89% in 2006, primarily because of the tax sharing arrangements as per Romanian legislation. There has been an increase in the shared taxes collected in the Bucharest area given the increased economic activity in the city. Between 2004 and 2006, the share of central budget allocation increased by 49% due to an increase in shared Value Added Tax (VAT) and income tax.

In Arad, the total revenues in 2006 are expected to be around RON 192 million, compared to a figure of RON 147 million in 2004 (Annex 9, Table 5). In line with policies of increasing financial self reliance, Arad municipality has been increasing its share of current revenues derived through local direct and indirect taxes, and other fees and charges. Between 2004 and 2006, the locally generated revenues are expected to increase by 73% leading to a decline in the share of central budget allocation to the municipal revenues. In 2006, its share of current revenues will be 37% compared to a figure of 29% in 2004.

Current expenditures - mainly for education, health, housing, heating subsidies, transport and other municipal services - account for the major part of total expenditures. In 2006, the current expenditures will be around 76% and 80% of total revenues for Arad and Bucharest, respectively. Capital expenditures have been limited as the operating surplus (revenues minus operating expense) is often not adequate to pay for the investments and service the debt on borrowings. Municipal borrowings are also regulated by legislation where the annual municipal debt service cannot exceed 20% of the sum of own revenues and shared taxes.

The Project

The counterpart financing and the municipal debt service (Arad only) will be funded out of the general budget of the two municipalities. Incremental revenues generated due to the project will be included in the general budget of the two municipalities. The sources of the incremental revenues are:

- Property tax (Bucharest and Arad): Romanian legislation outlines a methodology to be used to estimate property taxes. This methodology is based on the type of property and the infrastructure available in the zone. Due to improvements under the project, both municipalities expect to collect additional property tax. In 2010, the incremental property tax is estimated to be RON 0.9 million and RON 1.06 million in Arad and Bucharest, respectively. The property tax in Bucharest is not shown explicitly, but is included in the non-fiscal revenues.

- Development tax (Arad): A tax can be levied by a water and wastewater utility on every cubic meter of water sold as long as the use of this tax is mentioned in the concession contract between the utility and the municipality or county. Taxes collected are transferred to the municipality or the county. For Arad, the revenues from this tax are expected to be around RON 0.738 million in 2010. In Bucharest, the concession contract does not include development tax and as a result it is not considered as a source of revenue;

- Concession Fee (Arad): The concession fee paid by the utility to the municipality or county may be modified, to allow the municipality or county to collect additional revenues to support investments. In Arad, a concession fee of RON 0.7 million (in 2010) is assumed. This fee, however, is subject to negotiations with the concessionaire. For Bucharest, the existing annual concession fee is € 5,000 and as per the concession agreement, the additional fees may not exceed € 5,000. Thus, reliance has not been placed on using the concession fee as an incremental revenue source.

In the financial projections, the revenue and expenditure streams match because Romanian legislation requires that the budget for the public institutions should be fully balanced without any surplus or loss. Considering this legislation, the capital expenditure item is used as a balancing item in order to match the revenues and expenditures. Reserve funds are provided for every year in the budget, but are not shown in the budget execution account. They feed a contingency account, which is kept outside the budget for exceptional circumstances (i.e. gaps in cash, overspending on some investments or expenditure).

Exchange rate risks for the municipalities have been taken into account as they would borrow in Euros from the MoPF. The financial projections incorporate an assumption about inflation: 9.5% (2005); 6% (2006); 4.4% (2007); 3.5% (2008); 3% from 2009-2016 and 2% from 2016 onwards. Devaluation has been assumed to be in line with inflation, although in the last 3 years, devaluation was lower than inflation. With these assumptions, the exchange rate for 1 Euro is RON 3.65 (2005) and RON 4.02 (2010), reaching up to RON 5.4 in 2022, the end of the repayment. The exchange risk is not considered as high, given that Romania's economy is already linked to the Euro and the link will be even stronger once Romania enters the EU. The financial projections show the exchange rate provisions.

Although the cash flows related to the project will be part of the general budget of the municipality, to increase transparency, the cash flow related to the project is also summarized at the end of the financial statement (Annex 9, Tables 4 and 5). The cash surplus, if any related to the project, would be used for general municipal expenditure, including road maintenance.

Annex 9, Table 1. BUCHAREST - Straulesti, Vatra Noua, Giulesti Sarbi,Giluesti Triaj (water and sewerage only)
All Costs in 2006 Real Terms

Year	Cost (1000 EUR)			Population	Per capita consumption (lpcd)	Combined tariff (EUR/m3)	Incremental Water/Wastewater Service			Willingness to pay higher tax (EUR/capita)	Willingness to pay higher tax (1000 EUR) [Low estimate of increase of property value]	Net Benefit (1000 EUR)
	Investment	Incremental O&M	Total				Per capita tariff revenue (EUR)	Incremental Water Sold (1000 m3)	Incremental Water Sold (1000 EUR)			
2006	-		-	17,400	220	0.52						
2007	1,455		1,455	17,769	209	0.54						-1,455
2008	2,425	78	2,502	18,146	199	0.57	41.3	526	300	12.16	221	-1,982
2009	2,425	126	2,551	18,530	191	0.60	41.7	838	502	12.80	237	-1,812
2010	3,395	194	3,588	18,923	185	0.63	42.4	1,277	803	13.44	254	-2,531
2011		194	194	19,324	181	0.66	43.7	1,278	844	14.11	273	922
2012		194	194	19,734	178	0.69	44.9	1,279	887	14.82	292	985
2013		194	194	20,152	174	0.73	46.2	1,280	932	15.56	314	1,051
2014		194	194	20,580	171	0.76	47.6	1,281	979	16.34	336	1,121
2015		194	194	21,016	167	0.80	48.9	1,282	1,029	17.15	360	1,195
2016		194	194	21,461	165	0.84	50.7	1,293	1,089	18.01	387	1,282
2017		194	194	21,916	165	0.88	53.3	1,320	1,168	18.91	414	1,388
2018		194	194	22,381	165	0.93	55.9	1,348	1,252	19.86	444	1,502
2019		194	194	22,855	165	0.98	58.7	1,376	1,343	20.85	477	1,625
2020		194	194	23,340	165	1.02	61.7	1,406	1,440	21.89	511	1,756
2021		194	194	23,835	165	1.08	64.8	1,435	1,544	22.99	548	1,897
2022		194	194	24,340	165	1.13	68.0	1,466	1,655	24.14	587	2,049
2023		194	194	24,856	165	1.19	71.4	1,497	1,775	25.34	630	2,211
2024		194	194	25,383	165	1.24	75.0	1,529	1,903	26.61	675	2,384
2025		194	194	25,921	165	1.31	78.7	1,561	2,040	27.94	724	2,571
											ERR	12.3%

Investments (1000 EUR)	
Straulesti water	1,179
Straulesti sewage	857
Vatra Noua water	1,346
Vatra Noua sewage	1,565
Giulesti Triaj water	265
Giulesti Triaj sewage	970
Giluest Sarbi water	6,162
Giluest Sarbi sewage	960
Total	13,304
Economic price (discounted for VAT - 19%; discounted for contingency - 10%)	**9,699**

Investment Completion rate		
	Annual	Cumulative
2006	0%	0%
2007	15%	15%
2008	25%	40%
2009	25%	65%
2010	35%	100%

Incremental Property Value		
Incremental Property tax (2009)	866000	RON
No. of houses	6960	
Persons/household	2.8	
Willingness to pay/capita	12.8	EUR
Growth rate in property value	5%	

Average Tariffs (without VAT)		
2006 water tariff	1.4	RON/m3
2006 wastewater tariffs	0.4	RON/m3
exchange rate	3.48	RON/EUR
Combined tariff	0.52	EUR/m3
Growth in tariff	5.0%	

Assumptions
O&M Costs are assumed to be 2% of assets created
Water sold in 2008, 2009, and 2010 is pro-rated, based on investment completion rate
Population growth figures from general urban plans

Annex 9, Table 2. BUCHAREST - Banasea, Otopeni North, and Odai districts (water and sewerage only)
All Costs in 2006 Real Terms

Year	Cost (1000 EUR)				Population	Per capita consumption (lpcd)	Combined tariff (EUR/m3)	Incremental Water/Wastewater Service			Willingness to pay higher tax (EUR/capita)	Willingness to pay higher tax (1000 EUR) [Low estimate of increase of property value]	Net Benefit (1000 EUR)
	Investments supported by project (bulk)	Other investments (distribution)	Incremental O&M	Total				Per capita tariff revenue (EUR)	Incremental Water Sold (1000 m3)	Incremental Water Sold (1000 EUR)			
2006	-			-		220	0.52					0	0
2007	2,061			2,061		209	0.54					0	-2,061
2008	3,434		69	3,503	9,000	199	0.57	41.3	261	149	12.16	109	-3,245
2009	3,434		179	3,613	10,260	191	0.60	41.7	464	278	12.80	131	-3,204
2010	4,808		275	5,083	11,696	185	0.63	42.4	789	496	13.44	157	-4,429
2011		164	278	442	13,334	181	0.66	43.7	882	582	14.11	188	329
2012		187	282	468	15,201	178	0.69	44.9	985	683	14.82	225	440
2013		213	286	499	17,329	174	0.73	46.2	1,101	801	15.56	270	572
2014		243	291	533	19,755	171	0.76	47.6	1,230	940	16.34	323	729
2015		277	296	573	22,520	167	0.80	48.9	1,374	1,102	17.15	386	916
2016		315	303	618	25,673	165	0.84	50.7	1,546	1,303	18.01	462	1,147
2017		359	310	669	29,268	165	0.88	53.3	1,763	1,559	18.91	553	1,444
2018		410	318	728	33,365	165	0.93	55.9	2,009	1,867	19.86	663	1,801
2019		467	327	795	38,036	165	0.98	58.7	2,291	2,234	20.85	793	2,233
2020		533	338	871	43,361	165	1.02	61.7	2,611	2,674	21.89	949	2,753
2021		607	350	957	49,432	165	1.08	64.8	2,977	3,201	22.99	1136	3,380
2022		692	364	1,056	56,352	165	1.13	68.0	3,394	3,832	24.14	1360	4,136
2023		789	380	1,169	64,241	165	1.19	71.4	3,869	4,587	25.34	1628	5,046
2024		899	398	1,297	73,235	165	1.24	75.0	4,411	5,490	26.61	1949	6,142
2025		1,025	418	1,444	83,488	165	1.31	78.7	5,028	6,572	27.94	2333	7,461
												ERR	9.4%

Investments (1000 EUR)	
Baneasa water	4,962
Baneasa sewage	3,473
Odai water	314
Odai sewage	729
Otopeni water	8,538
Otopeni sewage	828
Total	18,844
Economic price (discounted for VAT - 19%; discounted for contingency - 10%)	**13,737**

Investment Completion rate		
	Annual	Cumulative
2006	0%	0%
2007	15%	15%
2008	25%	40%
2009	25%	65%
2010	35%	100%

Incremental Property tax (2009)	866000	RON
No. of houses	6960	
Persons/household	2.8	
Willingness to pay/capita	12.8	EUR

Average Tariffs (without VAT)		
2006 water tariff	1.4	RON/m3
2006 wastewater tariffs	0.4	RON/m3
exchange rate	3.48	RON/EUR
Combined tariff	0.52	EUR/m3
Growth in tariff	5.0%	
Population growth	14.00%	

Assumptions

O&M Costs are assumed to be 2% of assets created

Water sold in 2008, 2009, and 2010 is pro-rated, based on investment completion rate

Population growth figures from municipal estimates, general urban plan, and letter from mayor to the Bank (around 100,000 people in the areas by 2025)

Investment cost for distribution taken to be around EUR 100 on a per capita basis

In the Banasea area, population is already moving in and commercial establishments are being developed. For purposes of this calculation, water revenues from 2008 have been taken into account

Annex 9, Table 3. ARAD - Bujac, Gai, and Sanicolaul Mic (sewerage only)
All Costs in 2006 Real Terms

Year	Cost (1000 EUR)			Population	Per capita consumption (lpcd)	Wastewater tariff (EUR/m3)	Incremental Wastewater Service		Willingness to pay higher tax (EUR/capita)	Willingness to pay higher tax (1000 EUR) [Low estimate of increase of property value]	Net Benefit (1000 EUR)
	Investments supported by project (bulk)	Incremental O&M	Total				Incremental Wastewater treated (1000 m3)	Incremental Revenue (1000 EUR)			
2006	-		-	22,331	275	0.09					**0**
2007	856		856	22,554	261	0.10					**-856**
2008	1,426		1,426	22,780	248	0.10		-	9.39	214	**-1,212**
2009	1,426	74	1,500	23,008	238	0.11	1,301	138	9.88	227	**-1,134**
2010	1,996	114	2,110	23,238	229	0.11	1,940	217	10.40	242	**-1,652**
2011		114	114	23,470	222	0.12	1,901	223	10.92	256	**365**
2012		114	114	23,705	215	0.12	1,862	229	11.47	272	**387**
2013		114	114	23,942	209	0.13	1,824	236	12.04	288	**410**
2014		114	114	24,181	205	0.14	1,806	245	12.64	306	**437**
2015		114	114	24,423	200	0.14	1,787	255	13.27	324	**465**
2016		114	114	24,667	196	0.15	1,769	265	13.94	344	**495**
2017		114	114	24,914	193	0.16	1,751	275	14.63	365	**526**
2018		114	114	25,163	185	0.17	1,699	281	15.37	387	**553**
2019		114	114	25,415	185	0.17	1,716	298	16.13	410	**594**
2020		114	114	25,669	185	0.18	1,733	316	16.94	435	**636**
2021		114	114	25,926	185	0.19	1,751	335	17.79	461	**682**
2022		114	114	26,185	185	0.20	1,768	355	18.68	489	**730**
2023		114	114	26,447	185	0.21	1,786	376	19.61	519	**781**
2024		114	114	26,711	185	0.22	1,804	399	20.59	550	**835**
2025		114	114	26,978	185	0.23	1,822	423	21.62	583	**893**
										ERR	**6.2%**

Investments (1000 EUR)	
Gai sewage	3,157
Bujac sewage	3,237
Sanicolaul Mic sewage	1,430
Total	7,824
Economic price (discounted for VAT - 19%; discounted for contingency - 10%)	**5,704**

Incremental Property Value		
Incremental Property tax (2010)	908000	RON
No. of houses	8933	
Persons/household	2.8	
Willingness to pay/capita	10.4	EUR
Growth rate in property value	5%	

Investment Completion rate		
	Annual	Cumulative
2006	0%	0%
2007	15%	15%
2008	25%	40%
2009	25%	65%
2010	35%	100%

Average Tariffs (without VAT)		
2006 wastewater tariffs	0.32	RON/m3
exchange rate	3.48	RON/EUR
2006 wastewater tariffs	0.09	EUR/m3
Growth in tariff	5.0%	
Population growth	1.00%	
Job growth	6.80%	

Assumptions
O&M Costs are assumed to be 2% of assets created
Wastewater treated in 2008, 2009, and 2010 is pro-rated, based on investment completion rate
Population growth figures from municipal estimates and general urban plan
The municipality estimates that 50,000 jobs will be created by 2025. The additional wastewater revenues due to this population has not been considered to have a conservative estimate on the ERR

Annex 9, Table 4. Bucharest Municipality - Revenues and Expenditures (in '000 RON)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			Grace Period**					Repayment Period												
Inflation rate	11.90%	9.50%	6%	4.40%	3.50%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%
Exchange rate			3.5	3.7	3.8	4.0	4.1	4.2	4.3	4.5	4.6	4.7	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6
REVENUES																				
I. Current revenues																				
A. Fiscal revenues																				
A.1 Direct taxes																				
Tax on profit	256	2.800	2.968	3.098	3.207	3.303	3.402	3.504	3.609	3.717	3.829	3.944	4.023	4.103	4.185	4.269	4.354	4.441	4.530	4.621
Taxes from the population	94	175	262	274	283	292	300	309	319	328	338	348	355	362	370	377	384	392	400	408
Tax on legal entities	194	10	15	15	16	16	17	17	18	18	19	20	20	20	21	21	22	22	23	23
Other direct taxes	3.746	3.994	5.192	5.421	5.610	5.779	5.952	6.131	6.315	6.504	6.699	6.900	7.038	7.179	7.322	7.469	7.618	7.771	7.926	8.084
Total direct taxes	**4,290**	**6,978**	**8,436**	**8,808**	**9,116**	**9,389**	**9,671**	**9,961**	**10,260**	**10,568**	**10,885**	**11,211**	**11,436**	**11,664**	**11,898**	**12,136**	**12,378**	**12,626**	**12,878**	**13,136**
A.2 Indirect taxes																				
Tax on exhibitions	-	-																		
Other indirect taxes	21,437	24.358	79.879	83.394	86.313	88.902	91.569	94.316	97.146	100.060	103.062	106.154	108.277	110.442	112.651	114.904	117.202	119.546	121.937	124.376
Total indirect taxes	**21,437**	**24,358**	**79,879**	**83,394**	**86,313**	**88,902**	**91,569**	**94,316**	**97,146**	**100,060**	**103,062**	**106,154**	**108,277**	**110,442**	**112,651**	**114,904**	**117,202**	**119,546**	**121,937**	**124,376**
Total fiscal revenues	**25,727**	**31,336**	**88,316**	**92,201**	**95,429**	**98,291**	**101,240**	**104,277**	**107,406**	**110,628**	**113,947**	**117,365**	**119,712**	**122,107**	**124,549**	**127,040**	**129,580**	**132,172**	**134,816**	**137,512**
B. Non-fiscal revenues																				
Profit of local public companies	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Payments from public entities	15.712	14.076	14.920	15.577	16.122	16.606	17.104	17.617	18.145	18.690	19.250	19.828	20.224	20.629	21.042	21.462	21.892	22.329	22.776	23.232
Miscellaneous revenues	75.369	122.852	80.000	83.520	86.443	89.036	91.708	94.459	97.293	100.211	103.218	106.314	108.441	110.609	112.822	115.078	117.380	119.727	122.122	124.564
Total non-fiscal revenues	**91,166**	**136,928**	**94,920**	**99,097**	**102,565**	**105,642**	**108,811**	**112,076**	**115,438**	**118,901**	**122,468**	**126,142**	**128,665**	**131,238**	**133,863**	**136,540**	**139,271**	**142,057**	**144,898**	**147,796**
Total current revenues (fiscal+non-fiscal)	**116,894**	**168,264**	**183,236**	**191,298**	**197,994**	**203,933**	**210,051**	**216,353**	**222,844**	**229,529**	**236,415**	**243,507**	**248,377**	**253,345**	**258,412**	**263,580**	**268,852**	**274,229**	**279,713**	**285,307**
II. Capital revenues		4.350	4.034	4.211	4.359	4.490	4.624	4.763	4.906	5.053	5.205	5.361	5.468	5.577	5.689	5.803	5.919	6.037	6.158	6.281
III. Earmarked revenues	-	15.000																		
IV. State budget allocations	-	-																		
Share of tax on wages	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Share of VAT	163.377	152.080	172.660	200.000	207.000	213.210	219.606	226.194	232.980	239.970	247.169	254.584	259.676	264.869	270.166	275.570	281.081	286.703	292.437	298.286
Share of income tax	934.476	1.104.826	1.461.771	1.526.089	1.579.502	1.626.887	1.675.694	1.725.965	1.777.743	1.831.076	1.886.008	1.942.588	1.981.440	2.021.069	2.061.490	2.102.720	2.144.774	2.187.670	2.231.423	2.276.052
Total State budget allocations	**1,097,875**	**1,256,906**	**1,634,431**	**1,726,089**	**1,786,502**	**1,840,097**	**1,895,300**	**1,952,159**	**2,010,724**	**2,071,045**	**2,133,177**	**2,197,172**	**2,241,116**	**2,285,938**	**2,331,657**	**2,378,290**	**2,425,856**	**2,474,373**	**2,523,860**	**2,574,337**
VI. Subsidies from State budget	46,693	6,115	6,482	6,768	7,005	7,215	7,431	7,654	7,884	8,120	8,364	8,615	8,787	8,963	9,142	9,325	9,511	9,702	9,896	10,093
VIII. Revenues from loans granted																				
IX. Loans received																				
Investment loans																				
Domestic investment loans																				
Foreign investment loans of which:																				
EBRD																				
World Bank				26,405	45,945	47,553	68,571													
Total funds from investment loans				26,405	45,945	47,553	68,571													
X. Donations and sponsorships	-	-																		
Total revenues	**1,261,462**	**1,450,635**	**1,828,183**	**1,954,771**	**2,041,804**	**2,103,288**	**2,185,978**	**2,180,929**	**2,246,357**	**2,313,748**	**2,383,160**	**2,454,655**	**2,503,748**	**2,553,823**	**2,604,899**	**2,656,997**	**2,710,137**	**2,764,340**	**2,819,627**	**2,876,019**

Annex 9, Table 4. Bucharest Municipality - Revenues and Expenditures - continued -

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
					Grace Period**						Repayment Period									
EXPENDITURES																				
I. Current expenditures																				
Wages and social security	27,765	30,179	35,000	36,540	37,819	38,953	40,122	41,326	42,566	43,842	45,158	46,512	47,443	48,392	49,359	50,347	51,354	52,381	53,428	54,497
Materials and services	266,724	276,106	350,000	365,400	378,189	389,535	401,221	413,257	425,655	438,425	451,577	465,125	474,427	483,916	493,594	503,466	513,535	523,806	534,282	544,968
Public institutions allocation	111,030	123,598	150,000	156,600	162,081	166,943	171,952	177,110	182,424	187,896	193,533	199,339	203,326	207,392	211,540	215,771	220,087	224,488	228,978	233,558
Subsidies	603,808	778,505	744,200	704,125	666,519	686,515	707,110	728,323	750,173	772,678	795,859	819,735	836,129	852,852	869,909	887,307	905,053	923,154	941,617	960,450
Thermo energy	303,808	458,505	405,000	350,000	300,000	309,000	318,270	327,818	337,653	347,782	358,216	368,962	376,341	383,868	391,546	399,377	407,364	415,511	423,822	432,298
Transport	300,000	320,000	339,200	354,125	366,519	377,515	388,840	400,505	412,521	424,896	437,643	450,772	459,788	468,984	478,363	487,930	497,689	507,643	517,796	528,152
Transfers	4,955	4,315	183,541	197,497	205,109	211,262	217,600	224,128	230,852	237,778	244,911	252,258	257,303	262,449	267,698	273,052	278,513	284,084	289,765	295,561
Total current expenditures	**1,014,282**	**1,212,703**	**1,462,741**	**1,460,161**	**1,449,717**	**1,493,209**	**1,538,005**	**1,584,145**	**1,631,669**	**1,680,619**	**1,731,038**	**1,782,969**	**1,818,628**	**1,855,001**	**1,892,101**	**1,929,943**	**1,968,542**	**2,007,913**	**2,048,071**	**2,089,032**
II. Capital expenditures	**154,677**	**202,069**	**200,811**	**300,414**	**397,448**	**397,508**	**427,927**	**394,040**	**414,171**	**434,966**	**456,476**	**486,363**	**524,095**	**539,365**	**550,722**	**566,431**	**596,905**	**613,902**	**629,638**	**645,831**
of which: Project investments				40,658	70,745	73,221	105,585													
III. Financial transactions																				
Interest payments other loans	1,538	13,634	*108,211*	*116,896*	*115,722*	*111,943*	*107,708*	*103,668*	*100,199*	*96,657*	*92,863*	*97,504*	*87,774*	*86,329*	*84,884*	*83,439*	*82,215*	*81,726*	*81,261*	*80,500*
Interest payments WB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal payments other loans	17,801	22,229	*36,420*	*57,300*	*58,918*	*70,627*	*82,538*	*69,276*	*70,519*	*71,705*	*72,983*	*52,819*	*38,252*	*38,128*	*37,193*	*37,185*	*22,476*	*20,800*	*20,656*	*20,656*
Principal payments WB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bond redemption																				
Total financial transactions	**19,339**	**35,863**	**144,631**	**174,196**	**174,639**	**182,571**	**190,246**	**172,944**	**170,717**	**168,362**	**165,846**	**150,323**	**126,025**	**124,457**	**122,077**	**120,624**	**104,691**	**102,525**	**101,917**	**101,156**
Reserve fund			20,000	20,000	20,000	30,000	29,800	29,800	29,800	29,800	29,800	35,000	35,000	35,000	40,000	40,000	40,000	40,000	40,000	40,000
Total expenditures	**1,188,299**	**1,450,636**	**1,828,183**	**1,954,771**	**2,041,804**	**2,103,288**	**2,185,978**	**2,180,929**	**2,246,357**	**2,313,747**	**2,383,160**	**2,454,655**	**2,503,748**	**2,553,823**	**2,604,900**	**2,656,997**	**2,710,138**	**2,764,340**	**2,819,626**	**2,876,020**
Investment details (CAPEX)				**40,658**	**70,745**	**73,221**	**105,585**	-												
- loan				26,405	45,945	47,553	68,571	-												
- counterpart financing (municipality)				14,253	24,801	25,669	37,014	-												
Total debt service				**1,896**	**2,932**	**4,464**	**6,692**	**6,769**	**24,003**	**24,124**	**24,231**	**24,323**	**24,399**	**24,220**	**24,024**	**23,811**	**23,579**	**23,329**	**23,059**	**22,769**
- interest				886	2,466	4,147	6,572	6,769	6,682	6,284	5,856	5,397	4,905	4,336	3,742	3,123	2,477	1,805	1,105	376
- principal				-	-	-	-	-	17,321	17,840	18,376	18,927	19,495	19,885	20,282	20,688	21,102	21,524	21,954	22,393
- PEF				440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- commitment charge				570	466	316	120	-	-	-	-	-	-	-	-	-	-	-	-	-
less grant 100% (from MoF)				**(1,896)**	**(2,932)**	**(4,464)**	**(6,692)**	**(6,769)**	**(24,003)**	**(24,124)**	**(24,231)**	**(24,323)**	**(24,399)**	**(24,220)**	**(24,024)**	**(23,811)**	**(23,579)**	**(23,329)**	**(23,059)**	**(22,769)**
Net repayment - municipality				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total municipality contribution for the project				**14,253**	**24,801**	**25,669**	**37,014**	-	-	-	-	-	-	-	-	-	-	-	-	-
ANNUAL SURPLUS/(DEFICIT)	**73,164**	**(0)**	**0**	**0**	**(0)**	**(0)**	**0**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**(0)**	**0**	**0**	**(0)**
CUMULATIVE SURPLUS/DEFICIT																				

Annex 9, Table 4. Bucharest Municipality - Revenues and Expenditures
- continued -

CASH FLOW OF THE PROJECT (in 000 RON)																				
000 RON	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
OUTFLOWS																				
Investment			-	40,658	70,745	73,221	105,585	-	-	-	-	-	-	-	-	-	-	-	-	-	290.210
Total Debt Service			-	1,896	2,932	4,464	6,692	6,769	24,003	24,124	24,231	24,323	24,399	24,220	24,024	23,811	23,579	23,329	23,059	22,769	308,624
- interest and charges			-	1,896	2,932	4,464	6,692	6,769	6,682	6,284	5,856	5,397	4,905	4,336	3,742	3,123	2,477	1,805	1,105	376	68,839
- principal repayment			-	-	-	-	-	-	17,321	17,840	18,376	18,927	19,495	19,885	20,282	20,688	21,102	21,524	21,954	22,393	239,785
Total			**-**	**42,554**	**73,678**	**77,685**	**112,277**	**6,769**	**24,003**	**24,124**	**24,231**	**24,323**	**24,399**	**24,220**	**24,024**	**23,811**	**23,579**	**23,329**	**23,059**	**22,769**	**598,835**
INFLOWS																				
Counterpart financing from the municipality			-	14,253	24,801	25,669	37,014	-	-	-	-	-	-	-	-	-	-	-	-	-	101,737
Incremental revenue (tax)			-	-	-	866	1,057	1,184	1,268	1,356	1,406	1,569	1,665	1,775	1,940	2,005	2,072	2,141	2,211	2,284	24,799
Support from MOF			-	1,896	2,932	4,464	6,692	6,769	24,003	24,124	24,231	24,323	24,399	24,220	24,024	23,811	23,579	23,329	23,059	22,769	308,624
Bank loan			-	26,405	45,945	47,553	68,571	-													
Total			**-**	**42,554**	**73,678**	**78,551**	**113,335**	**7,953**	**25,271**	**25,481**	**25,637**	**25,892**	**26,065**	**25,995**	**25,964**	**25,816**	**25,651**	**25,469**	**25,270**	**25,053**	**623,633**
General municipal expenditure			-	-	-	866	1,057	1,184	1,268	1,356	1,406	1,569	1,665	1,775	1,940	2,005	2,072	2,141	2,211	2,284	24,799
Net flow			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exchange rate provision on total debt service			-	83	264	572	1,084	1,332	5,585	6,506	7,457	8,440	9,452	10,055	10,654	11,246	11,831	12,406	12,969	13,518	**123,454**
Exchange rate provision on municipality contribution			-	627	2,230	3,288	5,994	-	-	-	-	-	-	-	-	-	-	-	-	-	**12,139**

Source:
Budget execution statements of 2002 to 2005.
The municipality budget forecasts between 2005 and 2030 were presented to the MoPF. These forecasts have been used for the PAD.

Annex 9, Table 5. Arad Municipality - Revenues and Expenditures (in 000 RON)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Inflation rate	11.90%	9.50%	6%	4.40%	3.50%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%
Exchange rate			3.5	3.7	3.8	3.9	4.0	4.1	4.3	4.4	4.5	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5
REVENUES																				
I. Current revenues																				
A. Fiscal revenues																				
A.1 Direct taxes																				
Tax on profit	577	1.290	180	190	195	200	205	211	217	225	232	240	245	250	255	260	265	270	275	281
Taxes from the population																				
Tax on property	24.777	34.368	36.560	38.400	39.950	41.150	42.390	43.660	44.970	46.320	47.710	49.140	50.130	51.130	52.150	53.195	54.260	55.350	56.450	57.579
Other direct taxes (dev tax)	-	-	-	-	-	738	760	782	806	830	855	880	898	916	934	953	972	992	1.012	1.032
Total direct taxes	**25,354**	**35,658**	**36,740**	**38,590**	**40,145**	**42,088**	**43,355**	**44,653**	**45,993**	**47,375**	**48,797**	**50,260**	**51,273**	**52,296**	**53,339**	**54,408**	**55,497**	**56,612**	**57,737**	**58,892**
A.2 Indirect taxes																				
Admin taxes and issue of IDs	813	947	1.000	1.050	1.092	1.130	1.165	1.200	1.236	1.273	1.310	1.350	1.377	1.405	1.433	1.460	1.490	1.520	1.550	1.581
Other indirect taxes	4.741	8.414	8.625	9.008	9.361	9.707	10.021	10.347	10.658	10.975	11.305	11.655	11.929	12.220	12.516	12.767	13.021	13.281	13.547	13.818
Total indirect taxes	**5,554**	**9,361**	**9,625**	**10,058**	**10,453**	**10,837**	**11,186**	**11,547**	**11,894**	**12,248**	**12,615**	**13,005**	**13,306**	**13,625**	**13,949**	**14,227**	**14,511**	**14,801**	**15,097**	**15,399**
Total fiscal revenues	**30,908**	**45,019**	**46,365**	**48,648**	**50,598**	**52,925**	**54,541**	**56,200**	**57,887**	**59,623**	**61,412**	**63,265**	**64,579**	**65,921**	**67,288**	**68,635**	**70,008**	**71,413**	**72,834**	**74,291**
B. Non-fiscal revenues																				
Revenues from property	4.196	5.050	8.262	7.137	7.495	8.145	8.467	8.802	9.108	9.424	9.752	9.998	10.250	10.458	10.672	10.890	11.325	11.550	11.781	12.017
Revenues from services and sale of goods	5.270	17.282	15.245	15.085	15.088	13.091	10.093	10.096	9.099	9.102	9.105	7.608	7.610	6.112	5.664	5.116	5.118	5.120	5.122	5.224
Miscellaneous revenues	1.488	1.525	1.670	1.744	1.792	1.843	1.895	1.948	2.005	2.062	2.120	2.180	2.222	2.265	2.310	2.355	2.400	2.446	2.493	2.543
Total non-fiscal revenues	**10,954**	**23,857**	**25,177**	**23,966**	**24,375**	**23,079**	**20,455**	**20,846**	**20,212**	**20,588**	**20,977**	**19,786**	**20,082**	**18,835**	**18,646**	**18,361**	**18,843**	**19,116**	**19,396**	**19,784**
Total current revenues (fiscal+non-fiscal)	**41,862**	**68,876**	**71,542**	**72,614**	**74,973**	**76,004**	**74,996**	**77,046**	**78,099**	**80,211**	**82,389**	**83,051**	**84,661**	**84,756**	**85,934**	**86,996**	**88,851**	**90,529**	**92,230**	**94,075**
II. Capital revenues																				
III. Earmarked revenues																				
IV. State budget allocations																				
Share of tax on wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Share of VAT	60.114	69.876	67.803	76.710	79.258	63.799	66.489	69.403	72.343	75.091	78.084	81.429	83.363	86.113	88.658	91.251	93.855	97.002	100.220	102.224
Share of income(revenue) tax	44.913	48.117	52.851	56.927	60.251	62.534	64.903	67.421	69.600	72.485	75.262	78.167	80.855	82.603	84.798	87.915	90.272	92.588	95.554	97.465
Total State budget allocations	**105,027**	**117,993**	**120,654**	**133,637**	**139,509**	**126,333**	**131,392**	**136,824**	**141,943**	**147,576**	**153,346**	**159,596**	**164,218**	**168,716**	**173,456**	**179,166**	**184,127**	**189,590**	**195,774**	**199,689**
V. Subsidies from State budget	**623**	**2,700**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VI. Revenues from loans granted	**200**	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
VII. Loans received																				
Investment loans																				
Domestic investment loans	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Foreign investment loans of which:				25,965	44,790	46,133	66,524	-	0	0	0	0	0	0	0	0	0	0	0	0
EBRD																				
World Bank				25,965	44,790	46,133	66,524													
Total funds from investment loans	-	-	-	**25,965**	**44,790**	**46,133**	**66,524**	-	0	0	0	0	0	0	0	0	0	0	0	0
VIII. Donations and sponsorships																				
Total revenues	**147,712**	**189,569**	**192,196**	**232,216**	**259,272**	**248,470**	**272,912**	**213,870**	**220,042**	**227,787**	**235,735**	**242,647**	**248,879**	**253,472**	**259,390**	**266,162**	**272,978**	**280,119**	**288,004**	**293,764**

Annex 9, Table 5. Arad Municipality - Revenues and Expenditures
- continued -

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
EXPENDITURES																				
Personnel	**45,020**	**55,865**	**63,160**	**74,446**	**78,262**	**81,078**	**84,652**	**88,467**	**93,084**	**96,152**	**100,040**	**104,408**	**107,912**	**110,827**	**114,200**	**117,686**	**122,092**	**125,438**	**129,725**	**132,320**
Materials and services	**31,690**	**40,869**	**49,801**	**51,419**	**49,664**	**51,104**	**52,685**	**54,646**	**57,420**	**61,236**	**63,448**	**65,045**	**66,978**	**69,340**	**71,635**	**73,397**	**74,620**	**76,258**	**77,950**	**79,509**
- repairs	*27,848*	*36,600*	*46,703*	*48,274*	*46,944*	*48,454*	*50,085*	*52,046*	*54,670*	*58,546*	*60,618*	*62,235*	*64,128*	*66,370*	*68,485*	*69,897*	*71,060*	*72,568*	*73,940*	75,419
- maintenance	*3,842*	*4,269*	*3,098*	*3,145*	*2,720*	*2,650*	*2,600*	*2,600*	*2,750*	*2,690*	*2,830*	*2,810*	*2,850*	*2,970*	*3,150*	*3,500*	*3,560*	*3,690*	*4,010*	4,090
Subsidies	**28,591**	**26,239**	**23,500**	**23,500**	**23,500**	**23,500**	**23,500**	**23,600**	**23,700**	**23,300**	**23,350**	**23,400**	**23,500**	**23,700**	**23,600**	**23,750**	**23,400**	**23,100**	**22,650**	**23,103**
- heating	*24,879*	*22,942*	*20,000*	*20,000*	*20,000*	*20,000*	*20,000*	*20,000*	*20,000*	*19,500*	*19,500*	*19,500*	*19,500*	*19,500*	*19,300*	*19,300*	*18,900*	*18,500*	*18,000*	18,360
-public transport	*3,712*	*3,297*	*3,500*	*3,500*	*3,500*	*3,500*	*3,500*	*3,600*	*3,700*	*3,800*	*3,850*	*3,900*	*4,000*	*4,200*	*4,300*	*4,450*	*4,500*	*4,600*	*4,650*	4,743
Social assistance	**2,295**	**2,572**	**2,748**	**3,482**	**3,595**	**3,692**	**3,802**	**3,911**	**4,020**	**4,130**	**4,254**	**4,380**	**4,464**	**4,553**	**4,639**	**4,729**	**4,820**	**4,920**	**5,010**	**5,110**
Other expenditure	**7,978**	**7,232**	**7,585**	**7,901**	**7,963**	**8,669**	**8,969**	**9,280**	**9,700**	**10,186**	**10,538**	**10,964**	**11,230**	**11,530**	**11,843**	**12,147**	**12,475**	**12,817**	**13,158**	**13,421**
VIII. Debt service																				
Interest on local debt	2,006	761	230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on foreign debt	-	-	519	1,847	3,071	3,185	2,803	2,422	2,040	1,658	1,276	894	512	113	-	-	-	-	-	-
Interest on WB loan + fees			433	735	935	1,112	1,392	1,313	1,296	1,219	1,136	1,047	947	833	719	600	476	347	212	72
Other financial expenses	2	1,087	454	278	150	106	106	106	106	106	106	106	106	106	-	-	-	-	-	-
Total interest and financial expenses	2,008	1,848	1,636	2,860	4,156	4,403	4,301	3,841	3,442	2,983	2,518	2,047	1,560	1,052	719	600	476	347	212	72
Repayment of local debt	5,271	5,371	2,158	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repayment of foreign debt	-	-	-	0	3,872	7,744	7,744	7,744	7,744	7,744	7,744	7,744	7,744	4,576	-	-	-	-	-	-
Repayment of WB loan									4,361	4,462	4,595	4,672	4,746	4,831	3,897	3,975	4,055	4,136	4,218	4,303
Total repayment of debt	5,271	5,371	2,158	0	3,872	7,744	7,744	7,744	11,105	11,206	11,309	11,416	11,490	8,397	3,897	3,975	4,055	4,136	4,218	4,303
Total debt service	**7,279**	**7,219**	**3,794**	**2,860**	**8,028**	**12,147**	**12,045**	**11,585**	**14,547**	**14,189**	**13,828**	**13,463**	**13,050**	**9,449**	**4,616**	**4,575**	**4,531**	**4,483**	**4,431**	**4,375**
IX. Capital expenditures	**14,656**	**28,434**	**40,032**	**66,654**	**86,159**	**65,281**	**83,759**	**18,881**	**14,071**	**15,094**	**16,777**	**17,487**	**18,245**	**20,573**	**25,357**	**26,378**	**27,540**	**29,603**	**31,580**	32,427
Capex for WB project				27,670	47,731	49,163	70,893		-	-	-	-	-	-	-	-	-	-	-	
X. Reserve funds	-	-	**1,576**	**1,954**	**2,100**	**3,000**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	3,500
Total expenditures	**137,509**	**168,430**	**192,196**	**232,216**	**259,271**	**248,471**	**272,912**	**213,870**	**220,042**	**227,787**	**235,735**	**242,647**	**248,879**	**253,472**	**259,390**	**266,162**	**272,978**	**280,119**	**288,004**	**293,764**
Investment details (CAPEX)				**27,670**	**47,731**	**49,163**	**70,893**	-	-	-	-	-	-	-	-	-	-	-	-	-
- loan				25,965	44,790	46,133	66,524	-	-	-	-	-	-	-	-	-	-	-	-	-
- counterpart financing (municipality)				1,705	2,942	3,030	4,369	-	-	-	-	-	-	-	-	-	-	-	-	-
Total debt service			**433**	**1,431**	**2,859**	**4,330**	**6,492**	**6,567**	**23,286**	**23,404**	**23,508**	**23,597**	**23,441**	**23,269**	**23,081**	**22,876**	**22,653**	**22,413**	**22,153**	**21,875**
- interest				871	2,404	4,024	6,376	6,567	6,482	6,096	5,681	5,236	4,712	4,165	3,595	3,000	2,380	1,734	1,061	361
- principal				-	-	-	-	-	16,804	17,308	17,827	18,362	18,729	19,104	19,486	19,875	20,273	20,678	21,092	21,514
- PEF			433	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-commitment charge				560	455	307	116	-	-	-	-	-	-	-	-	-	-	-	-	-
less grant 80% (from MoF)			-	(697)	(1,923)	(3,219)	(5,101)	(5,254)	(18,629)	(18,723)	(18,806)	(18,878)	(18,753)	(18,615)	(18,465)	(18,301)	(18,122)	(17,930)	(17,723)	(17,500)
Net repayment - municipality			**433**	**735**	**935**	**1,112**	**1,392**	**1,313**	**4,657**	**4,681**	**4,702**	**4,719**	**4,688**	**4,654**	**4,616**	**4,575**	**4,531**	**4,483**	**4,431**	**4,375**
Total municipality contribution for the project			**433**	**2,440**	**3,877**	**4,141**	**5,761**	**1,313**	**4,657**	**4,681**	**4,702**	**4,719**	**4,688**	**4,654**	**4,616**	**4,575**	**4,531**	**4,483**	**4,431**	**4,375**
NET ANNUAL SURPLUS/(DEFICIT)	**10,203**	**21,139**	**0**	**0**	**0**	**(0)**	**0**	**(0)**	**(0)**	**0**	**0**	**(0)**	**(0)**	**0**	**(0)**	**(0)**	**0**	**0**	**0**	**(0)**

Annex 9, Table 5. Arad Municipality - Revenues and Expenditures
- continued -

CASH FLOW OF THE PROJECT (*in* 000 RON)																				
000 RON	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
OUTFLOW																					
Investment			-	27,670	47,731	49,163	70,893	-	-	-	-	-	-	-	-	-	-	-	-	-	195,458
Total Debt Service			433	1,431	2,859	4,330	6,492	6,567	23,286	23,404	23,508	23,597	23,441	23,269	23,081	22,876	22,653	22,413	22,153	21,875	297,235
- interest and charges			433	1,431	2,859	4,330	6,492	6,567	6,482	6,096	5,681	5,236	4,712	4,165	3,595	3,000	2,380	1,734	1,061	361	66,184
- principal repayment			-	-	-	-	-	-	16,804	17,308	17,827	18,362	18,729	19,104	19,486	19,875	20,273	20,678	21,092	21,514	231,051
Total			**433**	**29,102**	**50,590**	**53,494**	**77,386**	**6,567**	**23,286**	**23,404**	**23,508**	**23,597**	**23,441**	**23,269**	**23,081**	**22,876**	**22,653**	**22,413**	**22,153**	**21,875**	**492,693**
INFLOW																					
Counterpart financing from the municipality			433	2,440	3,877	4,141	5,761	1,313	4,657	4,681	4,702	4,719	4,688	4,654	4,616	4,575	4,531	4,483	4,431	4,375	72,644
Incremental revenues, of which:			-	-	-	-	2,346	2,416	2,488	2,563	2,639	2,718	2,801	2,875	2,953	3,032	3,114	3,197	3,262	3,327	39,731
Development tax	-	-	-	-	-	-	*738*	*760*	*782*	*806*	*830*	*855*	*881*	*898*	*916*	*934*	*953*	*972*	*992*	*1,012*	*12,329*
Property tax: land and buildings	-	-	-	-	-	-	*908*	*935*	*963*	*992*	*1,021*	*1,052*	*1,084*	*1,116*	*1,150*	*1,184*	*1,220*	*1,256*	*1,282*	*1,307*	*15,470*
Concession fee	-	-	-	-	-	-	*700*	*721*	*743*	*765*	*788*	*811*	*836*	*861*	*887*	*914*	*941*	*969*	*988*	*1,008*	*11,932*
Support from MOF			-	697	1,923	3,219	5,101	5,254	18,629	18,723	18,806	18,878	18,753	18,615	18,465	18,301	18,122	17,930	17,723	17,500	236,638
Bank loan			-	25,965	44,790	46,133	66,524	-	-	-	-	-	-	-	-	-	-	-	-	-	183,412
Total			**433**	**29,102**	**50,590**	**53,494**	**82,078**	**11,399**	**28,262**	**28,530**	**28,786**	**29,033**	**29,043**	**29,019**	**28,987**	**28,940**	**28,881**	**28,807**	**28,677**	**28,529**	**572,155**
General municipal expenditure			-	-	-	-	2,346	2,416	2,488	2,563	2,639	2,718	2,801	2,875	2,953	3,032	3,114	3,197	3,262	3,327	39,731
Net flow			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exchange rate provision on total debt service			-	63	230	489	950	1,187	5,033	5,913	6,823	7,762	8,333	8,903	9,469	10,030	10,585	11,130	11,664	12,185	**110,750**
Exchange rate provision on municipality contr.			-	107	312	468	843	237	1,007	1,183	1,365	1,552	1,667	1,781	1,894	2,006	2,117	2,226	2,333	2,437	**23,534**

Source:
Budget execution statement of 2004
The municipality budget forecasts between 2005 and 2022 were presented to MoPF. These forecasts have been used for the PAD.

Annex 10: Safeguard Policy Issues
ROMANIA: MUNICIPAL SERVICES PROJECT

Executive summary of the final draft World Bank document (April 2006) "Equivalence and Acceptability Assessment Report for Piloting the Use of Romanian Environmental and Social Safeguards Systems in Bank-Assisted Projects" is presented below.

Executive Summary

Introduction

1. Following extensive global notification and consultations, in March 2005 the World Bank Board approved a pilot program to test the use of borrower or "country" systems to meet the objectives of World Bank environmental and social safeguard policies. This led to the issuance of World Bank Operational Policy 4.00[6] (OP 4.00) which lays out specific criteria for advancing pilot projects. It was recognized in the background paper for Board consideration that sector-specific Bank operations in new member states and candidates for European Union (EU) accession hold particular promise as pilots.

2. The Municipal Services Project will support the rehabilitation and improvement of wastewater, stormwater and drinking water systems to reduce pollution, improve public health, and assist Romania in meeting environmental requirements for European Union accession. This operation is proposed for Romania for piloting OP 4.00, and also is subject of review in this report.

3. In cooperation with Romanian officials, and with the support of European Commission staff, the World Bank has compared the Romanian systems (including those which stem from EU directives) against the Operational Principles laid out in OP 4.00-Table A1 for key safeguards that would normally apply to this Bank-assisted project. This assessment included a legal and technical review; both on paper and through field interviews and site visits.

4. Report conclusions were discussed at a public meeting in Bucharest on December 12, 2005, following disclosure in Romania of a draft Executive Summary. A full draft report was disclosed in English in the World Bank InfoShop and in Romanian on the MoEWM web site on January 25, 2006. The comment period in Romania closed on March 10, 2006 and no comments were received from the public.

Principal Observations - Environmental Assessment (EA) and Cultural Property

5. The World Bank examined the equivalency and acceptability of the EA process along two lines: EA approval procedures, and compliance monitoring during construction and operation. The Bank is pleased to note that there is a well defined process in place for screening, scoping, review, public consultation during EA procedure, disclosure, and approval of EA documents. Regarding screening (i.e. determination of the appropriate EA category), projects falling on Romania's Annex I list[7] would typically fall within the World Bank's EA Category A. Mandatory full EAs required under Romania's system provide an equivalent level of attention to assessing risk, alternatives and mitigation/monitoring (i.e. scoping) as compared to World Bank requirements for Category A projects. The Municipal Services Project is, however, Category B for Environmental Assessment under the World Bank system. Most sub-

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6 http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/tocall/E49CED1645FB433885256FCD00776B19?OpenDocument

7 Annex I to GD 918/2002; projects subject to mandatory EA; based on EU Directive 85/337/EEC as amended

projects correspond to the comparable Romania Annex II. Sub-project categories being considered under the Municipal Services Project will likely, therefore, be subject under the Romanian system to at least an equivalent approach to EA screening, scoping and analysis as set forth in World Bank OP 4.00.

6. A Technical Review Committee is established, according to the legal requirements, at the local, regional or national level to ensure an integrated approach to the environmental permitting procedure. At the local level, this Committee is set up by the joint decision of the Prefect and the President of the County Council. The Committee is composed of at least 7 members, including representatives of local or regional environmental agencies, other local officials, representatives of the Health Services, the National Environmental Guard (inspection service), the Romanian Water Company ("*Apele Romane*"), research institutes, and others as deemed necessary. Public participation during the EA process includes one public consultation, and as many as four public announcements in local newspapers or on the local environmental authority website. This approach should achieve comparable outcomes as envisaged by the Bank under OP 4.00.

7. Regarding implementation, a successful project application results in the issuance of two documents which contain mitigation and monitoring measures comparable in aim to the Environmental Management Plan required for Bank projects. Following the acceptance of the EA, an *Environmental License to Construct* (called the "environmental agreement") is issued by municipal authorities for all projects with civil works. After construction, the project proponent is required by law to apply for the *Environmental Permit to Operate* (sometimes called "environmental authorization"), which is issued only after a review by local or regional environmental authorities. The *Environmental License* sets the measures/conditions to mitigate adverse impacts during construction and is issued by the competent environmental authority based on the information obtained during the environmental assessment process. The *Environmental Permit to Operate* (issued by environmental authorities) verifies that mitigation and monitoring measures are in place.

8. The permitting process includes setting wastewater discharge limits (by *Apele Romane).* Discharge standards and wastewater management programs (e.g. receiving water quality) set by Romanian authorities are aligning with comparable EU directives on wastewater and watershed management (as transposed into Romanian law), and are quite consistent with the Bank's narrative descriptions of good water quality management programs in the Pollution Prevention and Abatement Handbook (Part II).

9. This review included meetings and site reviews in cooperation with environmental officials at the local and regional levels. In Romania all key environmental responsibilities fall under the Ministry of Environment and Water Management (MoEWM). Preparation for EU accession has led, and will likely continue to lead, to considerable increases in staff at both the policy and field levels.

10. Regarding compliance monitoring, an independent agency under the MoEWM – the National Environment Guard (NEG) – is tasked to carry out this responsibility. The NEG is being staffed up and responsibilities strengthened through passing bylaws and establishing good working procedures. An ambitious training program is also being implemented. If violations in licenses or permits are found, the NEG has a range of administrative orders and penalties to issue at its disposal. There seems to be serious commitment at the senior management level to improve the overall compliance level. The trend is positive, with reportedly increased fines for violations, more transparency, and reduced ambiguity in setting the fines (thereby helping reduce corruption). It should be noted, however, that a fully staffed NEG will not be in place for about a year, so effectiveness cannot yet be fully documented.

11. In the area of Environmental Assessment, the safeguard diagnostic review concludes that there are no major gaps regarding the equivalence of Romanian systems that would inhibit piloting.

12. With respect to EA implementation practices (the core of the "acceptability analyses"), the Bank finds the current approach and direction of Romanian institutions in carrying out sub-sector laws and policies (including compliance and enforcement) to conform to the goals of OP 4.00. While several areas would benefit from strengthening (as part of the country's overall improvement in environmental management and implementation of sectoral policies), these are not significant enough to hinder the Municipal Services Project from being approved as a pilot.

13. Regarding cultural property, the Bank believes that Romanian systems are equivalent and appropriate for application under this operation. If the operation would require construction or rehabilitation near historic buildings or other physical cultural resources, or if "chance finds" are encountered, the assessment concludes that Romanian systems are at least as effective as those outlined in OP/BP 4.00 on such points. Inventories of buildings and sites of cultural significance are available, and are consulted to assess whether proposed investment projects might cause impact. Local experts on archeology, architecture and other relevant fields are brought in for assessments before construction decisions are made and after, if "chance finds" are encountered during construction. While there have been reported instances where construction has taken place in areas of cultural importance without the full engagement and approval of experts, this does not appear to be a systemic issue which would hamper the acceptability of piloting in this area. The Bank will work with Romanian implementing authorities to closely monitor this aspect.

Principal Observations – Dam Safety

14. During the preparation of the Municipal Services Project (i.e. before the selection of Bucharest and Arad for the bulk of investments), it was possible that candidate sub-projects might have included rehabilitation or extension of drinking water systems where supply is obtained from dams or other control structures. New dams would not have been financed by the project, nor would dams have been rehabilitated under the project, but the capability of Romanian authorities to ensure dam safety was considered important should water supplies under the project be associated with control structures. Good alignment was found between Romanian requirements and those of the Bank for dam safety. Experience by the World Bank in ongoing projects in Romania also suggests that the country's system for ensuring the safety of existing dams that are utilized for water supply is adequate for piloting. The project as appraised, however, does not include investments reasonably associated with any control structures so the dam safety safeguard is not triggered. The background assessment is included, however, for general information and possible relevance to future projects.

Principal Observations – Other Issues

15. The International Waterways Safeguard will be triggered by the Municipal Services project, and World Bank procedures under OP/BP 7.50 do apply. As per OP 4.00, this policy cannot be piloted for the use of borrower systems.

16. No other safeguard-related policies are currently being advanced for piloting.

Conclusions

17. This diagnostic review concludes that the Romanian system of laws, regulations and practices in the sectors to be supported by the proposed Municipal Services is *sufficiently equivalent* to those of the World Bank, and *sufficiently acceptable in practice,* to support piloting under OP/BP 4.00 in the areas of environmental assessment and cultural property. Safeguard-related matters will be supervised regularly by the World Bank through the implementation of the proposed project.

Annex 11: Project Preparation and Supervision
ROMANIA: MUNICIPAL SERVICES PROJECT

	Planned	Actual
PCN review	11/22/2004	11/22/2006
Initial PID to PIC	12/10/2004	12/10/2006
Initial ISDS to PIC	12/13/2004	12/13/2006
Appraisal	05/01/2006	05/10/2006
Negotiations	05/08/2006	05/15/2006
Board/RVP approval	06/22/2006	
Planned date of effectiveness	10/30/2006	
Planned date of mid-term review	06/30/2008	
Planned closing date	06/30/2011	

The following agencies worked with the Bank to prepare the project: Ministry of Public Finance, Ministry of Environment and Water Management, Municipality of Bucharest, and Municipality of Arad. Project preparation was supported through grant support from the Spanish Government and the Austrian Government.

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Sudipto Sarkar	Lead Specialist (Team Leader)	ECSIE
Doina Visa	Operations Officer	ECSIE
Michael Webster	Water and Sanitation Specialist	ECSIE
Claudia M. Pardinas Ocana	Senior Counsel	LEGEC
Alexandra Ana Maria Stan	Operations Officer	ECSIE
Ana Otilia Nutu	Consultant	ECSIE
Henry Kerali	Lead Transport Specialist	ECSIE
Mirela Mart	Financial Management Specialist	ECSPS
Ruxandra Maria Floroiu	Consultant (Environment and Social)	ECSSD
Stan Peabody	Lead Social Development Specialist	ECSSD
Vladislav Krasikov	Senior Procurement Specialist	ECSPS
Bogdan Constantinescu	Senior Financial Management Specialist	ECSPS
Nicholay Chistyakov	Senior Finance Officer	LOAG1
George Alexandru Moldoveanu	Team Assistant	ECCRO
Larisa Marquez	Senior Program Assistant	ECSIE
Hana Huzjak	ET Temporary	ECSIE
Milane Reyes	Program Assistant	ECSIE
Ljiljana Boranic	Team Assistant	ECCHR
Fritz Schwaiger	Consultant (Engineering)	ECSIE
Kishore Nadkarni	Consultant (Finance)	ECSIE

Bank funds expended to date on project preparation: as of April 13, 2006

1. Bank resources: $231,715
2. Trust funds: $34,800 – Austrian Trust Fund;
   $99,918 – Spanish Trust Fund
3. Total: $366,433

Estimated Approval and Supervision costs:

1. Remaining costs to approval: $30,000
2. Estimated annual supervision cost: $90,000

Annex 12: Documents in the Project File
ROMANIA: MUNICIPAL SERVICES PROJECT

1. Mission Documents: Aide Memoires, letters, Back-To-Office Reports;

2. World Bank draft document (December 2005) "Equivalence and Acceptability Assessment Report for Piloting the Use of Romanian Environmental and Social Safeguards Systems in Bank-Assisted Projects";

3. EU Environmental Directives as laid out in chapter 22 "Environmental Protection", in particular, Directives No. 98/83/EEC for drinking water and Directive No. 91/271/EEEC for urban wastewater;

4. EU Phare financed project (August 2005) TA for Elaboration of the Environmental Cost Assessment and Investment Plan;

5. Municipal Services Project – Review and Assessment of the Water/Wastewater and Solid Waste Management Sector; Report prepared by Eptisa International; April 2006;

6. S.C. Romair Consultants Ltd (December 2005) Rehabilitation of the urban areas with severe shortages in sewerage and water supply services in Bucharest Municipality (Draft Feasibility study);

7. S.C. Romair Consultants Ltd (December 2005) Rehabilitation of the urban areas with severe shortages in sewerage services in Arad Municipality (Draft Feasibility study);

8. Justification Note sent by the Mayor of Bucharest received on December 20, 2005; and

9. Justification Note sent by the Mayor of Arad received on December 12, 2005.

Annex 13: Statement of Loans and Credits
ROMANIA: MUNICIPAL SERVICES PROJECT

Project ID	FY	Purpose	Original Amount in US$ Millions				Cancel.	Undisb.	Difference between expected and actual disbursements	
			IBRD	IDA	SF	GEF			Orig.	Frm. Rev'd
P090309	2006	JUDICIAL REFORM	130.00	0.00	0.00	0.00	0.00	131.73	9.64	0.00
P088165	2006	KNOW ECON	60.00	0.00	0.00	0.00	0.00	58.44	0.00	0.00
P086694	2005	ECSEE APL #1 (CRL)	84.30	0.00	0.00	0.00	0.00	80.99	3.87	0.00
P078971	2005	HEALTH SEC REF 2 (APL #2) (CRL)	80.00	0.00	0.00	0.00	0.00	77.91	18.43	0.00
P087807	2005	MINE CLOSURE, ENV & SOCIO-ECO REG (CRL)	120.00	0.00	0.00	0.00	0.00	119.80	7.13	0.00
P086949	2005	MOD AGRIC SUPPT SERVS (MAKIS) (CRL)	50.00	0.00	0.00	0.00	0.00	48.84	6.71	0.00
P083620	2005	TRANSPORT RESTRUCTURING	225.00	0.00	0.00	0.00	0.00	222.57	63.40	0.00
P075163	2004	HAZ MITIG	150.00	0.00	0.00	0.00	0.00	146.91	10.91	0.00
P081950	2004	HAZARD MITIGATION (GEF)	0.00	0.00	0.00	7.00	0.00	6.44	1.20	0.00
P043881	2004	IRRIG REHAB	80.00	0.00	0.00	0.00	0.00	78.47	16.44	0.00
P081406	2003	ELEC MARKET	82.00	0.00	0.00	0.00	0.00	49.86	21.41	0.00
P068062	2003	ENERGY EFF (GEF)	0.00	0.00	0.00	10.00	0.00	5.22	5.05	0.00
P067367	2003	FOREST DEVT	25.00	0.00	0.00	0.00	0.00	23.30	8.20	0.00
P069679	2003	PPIBL	18.60	0.00	0.00	0.00	0.00	14.84	14.84	0.00
P073967	2003	RURAL EDUC	60.00	0.00	0.00	0.00	0.00	40.40	5.27	6.94
P066065	2002	AG POLLUTION CONTROL (GEF)	0.00	0.00	0.00	5.15	0.00	0.84	0.22	0.00
P057960	2002	RURAL DEV (APL #1)	40.00	0.00	0.00	0.00	0.00	21.49	14.65	0.00
P068808	2002	SDF 2 (APL #2)	20.00	0.00	0.00	0.00	0.00	2.49	1.49	1.66
P056891	2001	RURAL FIN (APL #1)	80.00	0.00	0.00	0.00	0.00	25.03	25.03	-6.97
P008783	2001	SOC SECT DEV (SSD)	50.00	0.00	0.00	0.00	0.00	34.48	34.48	
P056337	2000	MINE CLOSURE	44.50	0.00	0.00	0.00	0.00	7.05	7.05	1.71
P044176	1999	BIODIV CONSV MGMT (GEF)	0.00	0.00	0.00	5.50	0.00	0.70	0.70	0.70
P034213	1998	GEN'L CADASTRE	25.50	0.00	0.00	0.00	0.00	9.55	9.55	9.55
P039250	1997	ROADS 2	150.00	0.00	0.00	0.00	0.00	3.10	3.10	0.00
			1574.90	0.00	0.00	27.65	0.00	1210.43	287.21	13.59

STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
1999	Ambro	0.72	0.00	0.00	0.00	0.72	0.00	0.00	0.00
2003	Arctic	9.41	0.00	0.00	0.00	9.41	0.00	0.00	0.00
2002	Banc Post	0.00	8.00	0.00	0.00	0.00	8.00	0.00	0.00
2006	Banc Post	0.00	6.75	0.00	0.00	0.00	6.75	0.00	0.00
2003	Banca Comerciala	63.82	0.00	0.00	0.00	63.82	0.00	0.00	0.00
2004	Banca Comerciala	0.00	111.00	0.00	0.00	0.00	111.00	0.00	0.00
2006	Banca Comerciala	89.38	0.00	0.00	0.00	89.38	0.00	0.00	0.00
2005	Banca Tiriac	25.96	0.00	0.00	0.00	25.29	0.00	0.00	0.00
2005	DistrigazSud	0.00	47.67	0.00	0.00	0.00	0.00	0.00	0.00
2001	ICME	7.65	0.00	0.00	0.00	7.65	0.00	0.00	0.00
2004	Mindbank	0.00	0.00	7.00	0.00	0.00	0.00	7.00	0.00
2005	Petrotel-Lukoil	35.00	0.00	0.00	47.00	35.00	0.00	0.00	47.00
2002	ProCreditRomania	0.00	1.56	0.00	0.00	0.00	1.56	0.00	0.00
2003	ProCreditRomania	0.00	0.41	0.00	0.00	0.00	0.41	0.00	0.00
2004	ProCreditRomania	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
2004	RZB Romania	10.00	0.00	0.00	30.00	10.00	0.00	0.00	30.00
2003	Ro-Fin	4.70	0.00	0.00	0.00	4.64	0.00	0.00	0.00
2004	Romanian-Amer...	3.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00
2001	Romlease	0.89	0.00	0.00	0.00	0.89	0.00	0.00	0.00
2006	TTS SA	16.68	0.00	0.00	0.00	4.77	0.00	0.00	0.00
2004	Transilvaniabank	24.01	0.00	0.00	0.00	24.08	0.00	0.00	0.00
2005	Transilvaniabank	23.84	0.00	20.00	0.00	11.92	0.00	20.00	0.00
2005	Unicredito	8.94	0.00	0.00	0.00	8.94	0.00	0.00	0.00
	Total portfolio	329.00	175.39	27.00	77.00	304.51	127.72	27.00	77.00

		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic.
2005	Banat	46.23	0.00	18.25	42.58
2005	Dobrogea	47.83	0.00	12.93	45.24
2005	Banvit Romania	15.00	0.00	0.00	0.00
2003	Ro-Fin Mortgage	0.00	0.00	1.00	0.00
	Total pending commitment:	109.06	0.00	32.18	87.82

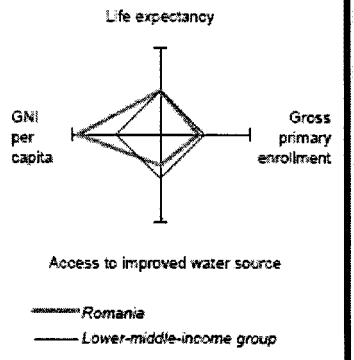
Annex 14: Country at a Glance

Romania at a glance

8/25/05

POVERTY and SOCIAL	Romania	Europe & Central Asia	Lower-middle-income
2004			
Population, mid-year *(millions)*	21.9	472	2,430
GNI per capita *(Atlas method, US$)*	2,940	3,290	1,580
GNI *(Atlas method, US$ billions)*	64.3	1,553	3,847
Average annual growth, 1998-04			
Population *(%)*	-0.5	-0.1	1.0
Labor force *(%)*	-0.3	-0.5	0.7
Most recent estimate (latest year available, 1998-04)			
Poverty *(% of population below national poverty line)*	..	..	..
Urban population *(% of total population)*	55	64	49
Life expectancy at birth *(years)*	70	68	70
Infant mortality *(per 1,000 live births)*	18	29	33
Child malnutrition *(% of children under 5)*	3	..	11
Access to an improved water source *(% of population)*	57	91	81
Literacy *(% of population age 15+)*	97	97	90
Gross primary enrollment *(% of school-age population)*	99	101	114
Male	100	103	115
Female	98	101	113

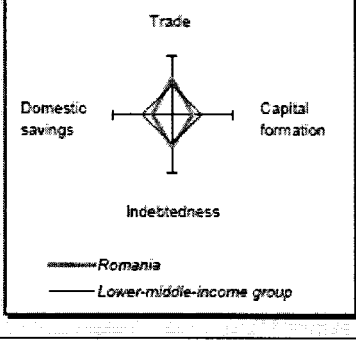
Development diamond*



KEY ECONOMIC RATIOS and LONG-TERM TRENDS	1984	1994	2003	2004
GDP *(US$ billions)*	..	30.1	57.0	73.2
Gross capital formation/GDP	..	24.8	24.6	21.7
Exports of goods and services/GDP	..	24.9	36.3	34.5
Gross domestic savings/GDP	..	22.7	16.8	21.2
Gross national savings/GDP	..	23.2	18.2	21.9
Current account balance/GDP	..	-1.4	-5.8	-5.3
Interest payments/GDP	..	1.2	2.0	1.4
Total debt/GDP	..	28.1	42.6	29.7
Total debt service/exports	14.6	62.4	26.3	20.8
Present value of debt/GDP	..	..	38.0	..
Present value of debt/exports	..	..	102.8	..

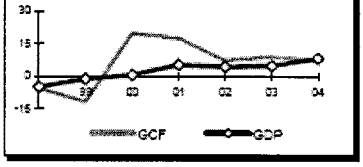
	1984-94	1994-04	2003	2004	2004-08
(average annual growth)					
GDP	-3.8	1.1	4.9	8.3	4.0
GDP per capita	-3.8	1.6	5.2	7.7	4.1
Exports of goods and services	..	10.5	7.1	16.2	0.3

Economic ratios*



STRUCTURE of the ECONOMY	1984	1994	2003	2004
(% of GDP)				
Agriculture	..	21.5	13.0	..
Industry	..	46.3	37.9	..
Manufacturing	..	31.1	31.5	..
Services	..	32.2	49.1	..
Household final consumption expenditure	..	63.5	70.8	67.4
General gov't final consumption expenditure	..	13.8	12.4	11.4
Imports of goods and services	..	27.0	44.1	..

Growth of capital and GDP (%)



	1984-94	1994-04	2003	2004
(average annual growth)				
Agriculture	1.3	-0.5	3.0	19.7
Industry	-5.1	1.3	4.6	6.2
Manufacturing	..	..	..	..
Services	..	1.7	5.2	6.0
Household final consumption expenditure	..	3.4	7.3	9.8
General gov't final consumption expenditure	..	-0.2	4.6	4.3
Gross capital formation	..	2.5	9.2	7.2
Imports of goods and services	..	12.1	13.6	20.2

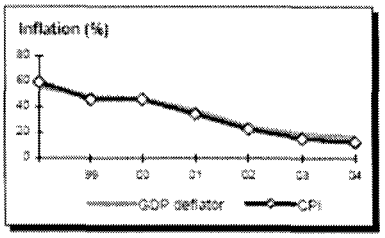
Growth of exports and imports (%)

Note: 2004 data are preliminary estimates.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

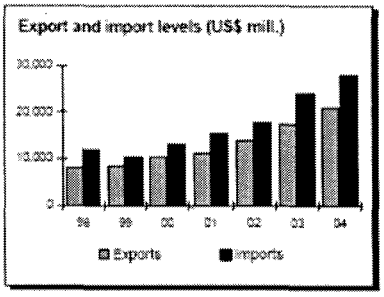
PRICES and GOVERNMENT FINANCE

	1984	1994	2003	2004
Domestic prices				
(% change)				
Consumer prices	.	136.7	15.3	12.5
Implicit GDP deflator	0.3	138.9	19.2	16.6
Government finance				
(% of GDP, includes current grants)				
Current revenue	.	31.1	29.9	27.1
Current budget balance	.	3.5	1.2	0.4
Overall surplus/deficit	.	-2.2	-2.3	-2.4



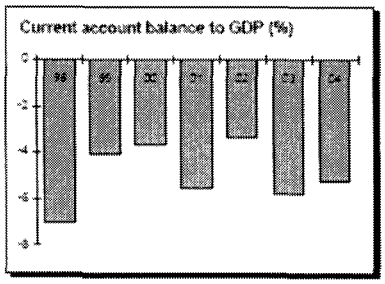
TRADE

	1984	1994	2003	2004
(US$ millions)				
Total exports (fob)	12,646	6,151	17,618	20,963
Basic metals and articles	.	1,065	2,282	.
Mineral products	.	714	1,482	.
Manufactures	6,543	3,754	12,534	15,232
Total imports (cif)	10,334	7,109	23,983	27,931
Food	.	661	1,737	.
Fuel and energy	.	1,906	2,615	.
Capital goods	1,540	1,782	7,017	7,728
Export price index *(2000=100)*	.	.	99	99
Import price index *(2000=100)*	.	.	98	100
Terms of trade *(2000=100)*	.	.	100	99



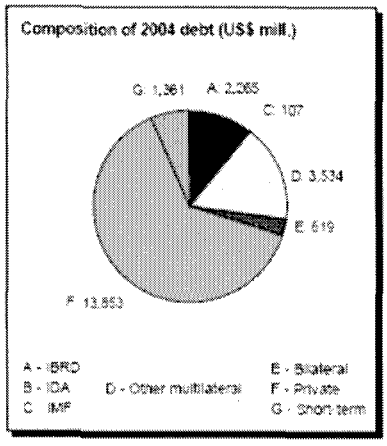
BALANCE of PAYMENTS

	1984	1994	2003	2004
(US$ millions)				
Exports of goods and services	13,486	7,195	20,646	24,563
Imports of goods and services	11,108	7,777	25,113	29,224
Resource balance	2,378	-582	-4,467	-4,660
Net income	-659	-129	-705	-999
Net current transfers	0	283	1,861	1,810
Current account balance	1,719	-428	-3,311	-3,849
Financing items (net)	-1,591	1,046	4,445	5,481
Changes in net reserves	-128	-618	-1,134	-1,633
Memo:				
Reserves including gold *(US$ millions)*	.	1,598	9,364	10,878
Conversion rate *(DEC, local/US$)*	.	1,655.1	33,200.1	32,636.6



EXTERNAL DEBT and RESOURCE FLOWS

	1984	1994	2003	2004
(US$ millions)				
Total debt outstanding and disbursed	6,983	8,454	24,267	21,739
IBRD	1,836	1,009	2,370	2,265
IDA	0	0	0	0
Total debt service	1,991	4,568	5,630	6,210
IBRD	365	63	317	321
IDA	0	0	0	0
Composition of net resource flows				
Official grants	0	104	0	.
Official creditors	13	746	173	-27
Private creditors	-352	306	-1,973	-2,325
Foreign direct investment *(net inflows)*	0	263	0	.
Portfolio equity (net inflows)	0	0	0	.
World Bank program				
Commitments	0	476	0	0
Disbursements	9	228	74	131
Principal repayments	200	0	226	236
Net flows	-192	228	-152	-106
Interest payments	164	63	91	85
Net transfers	-356	166	-243	-191



The World Bank Group: This table was prepared by country unit staff; figures may differ from other World Bank published data. 8/25/06

MAP SECTION

IBRD 34517

ROMANIA
MUNICIPAL SERVICES PROJECT

COUNTIES IN WHICH PROJECTS WILL BE PREPARED
MUNICIPALITIES IN WHICH INVESTMENTS WILL BE IMPLEMENTED
SELECTED CITIES AND TOWNS
COUNTY (JUDET) CAPITALS
NATIONAL CAPITAL
RIVERS
MAIN ROADS
RAILROADS
COUNTY (JUDET) BOUNDARIES
INTERNATIONAL BOUNDARIES

UKRAINE
HUNGARY
SERBIA AND MONTE-NEGRO
MOLDOVA
BULGARIA
Black Sea

SATU MARE
MARAMUREŞ
SUCEAVA
BOTOŞANI
BISTRIŢA-NĂSĂUD
IAŞI
BIHOR
SĂLAJ
CLUJ
NEAMŢ
MUREŞ
HARGHITA
BACĂU
VASLUI
ALBA
ARAD
COVASNA
VRANCEA
GALAŢI
SIBIU
BRAŞOV
HUNEDOARA
TIMIŞ
VÂLCEA
ARGEŞ
BUZĂU
BRAILA
GORJ
CARAŞ-SEVERIN
PRAHOVA
TULCEA
DÂMBOVIŢA
IALOMIŢA
ILFOV
MEHEDINŢI
OLT
TELEORMAN
GIURGIU
CĂLĂRAŞI
DOLJ
CONSTANŢA

Satu Mare, Baia Mare, Zalău, Oradea, Dej, Bistriţa, Cluj-Napoca, Turda, Târgu Mureş, Gheorgheni, Piatra-Neamţ, Roman, Iaşi, Botoşani, Suceava, Vaslui, Huşi, Bacău, Miercurea-Ciuc, Comăneşti, Onesti, Bârlad, Focşani, Tecuci, Galaţi, Brăila, Buzău, Tulcea, Arad, Timişoara, Lugoj, Deva, Hunedoara, Mediaş, Sibiu, Alba Iulia, Brad, Petroşani, Reşiţa, Târgu Jiu, Râmnicu Vâlcea, Târgovişte, Ploieşti, Piteşti, Orşova, Drobeta-Turnu Severin, Slatina, Craiova, Caracal, Calafat, Alexandria, Turnu Măgurele, Giurgiu, Slobozia, Feteşti, Călăraşi, Năvodari, Constanţa, Medgidia, Mangalia, BUCUREŞTI, Stântu Gheorghe, Braşov

Mureş, Someş, Crişul Alb, Timiş, Siret, Prut, Bistriţa, Buzău, Ialomiţa, Argeş, Jiu, Olt, Dunav, Trotuş

To Uzhhorod; To Ivano-Frankivs'k; To Bălţi; To Chişinău; To Budapest; To Subotica; To Novi Sad; To Niš; To Sofiya; To Veliko Tŭrnovo; To Shumen; To Varna

22°E; 24°E; 26°E; 30°E; 48°N; 46°N; 44°N

0 25 50 75 100 Kilometers
0 25 50 75 Miles

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JUNE 2006