Strategy for Restructuring
the Public Utility Companies in Serbia
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Strategy for restructuring of public utility companies (PUC) in Serbia has been prepared with the objective of gradually transforming PUC’s which are the responsibility of local governments into financially sustainable, market-oriented companies that provide high quality services to its clients. Efficient provision of utility services is important for the economy and for the benefit of all citizens of Serbia.

This strategy identifies the main obstacles to achieving these objectives and recommends reform options. Effective implementation of this strategy depends heavily on the cooperation and coordination of activities at the national and local levels of government. Measures recommended in the Strategy are interdependent and should not be applied selectively. However, limited resources, both financial and human, can cause phased implementation of the strategy.

Key recommendations of the Strategy are:

**Improve the Operational Performance of the PUC:** The state should support programs through technical assistance and financial assistance should be contingent on good business results that will actually lead to improved financial and operational performance of the PUC. The state and local governments should encourage the PUC to introduce long-term business planning, to assess property value and increase budgets for maintenance, where necessary, to reduce running costs; the PUC’s are to implement the rationalization of staff and improve their qualification structure, to improve the consumers’ records system and improve the collection, and to reduce technical and market losses.

**Introduce a Methodology for Tariff-setting and Business Standards:** For large PUC, which generate income and which depend on collecting tariffs for services rendered, the tariffs are too low to improve existing or introduce new services. It is necessary to change practice of increasing the tariff with inflation change. Methodology for tariff setting in the utilities sector (water and solid waste) should be established by law in order to achieve a return on investment as a whole, including at least a small portion for investment maintenance. At the same time, all PUC should be encouraged to improve business efficiency through the introduction of indicators and benchmarks for performance monitoring. These indicators should be a part of the contract to be signed between the founder and the PUC. Once the methodology for business monitoring has been established, municipalities will have a regulatory role in both the issues of structure and increase in price and to achieve the desired business effect for most activities within the PUC. The government will have a controlling role and will use the PUC performance data to meet the expected performance so that funds for capital investment financing, which are granted from central level and as international aid, are distributed by the performance indicators.

**Define Relations Between Municipalities and the PUCs:** PUC’s need to operate as commercial entities, eliminating political influence on the business policy. Relations between the founders and their PUC’s and the private operators who provide utility services, should be regulated by Service Level Agreements, which clearly define the goals that PUC should achieve, and which are established under the annual business plans and monitored through quarterly reports of the companies. To achieve this, the state and local governments should set goals to be achieved in a gradual improvement of business efficiency and to establish a system of indicators and benchmarks for monitoring the effectiveness along with monitoring of goals in a clear and transparent
manner. Executives in the PUC should be assessed and evaluated according to business performance or based on the success of achieving the set goals. PUC should take responsibility for planning and implementation of investments. Local governments should establish a service that will monitor and supervise the work of PUC in accordance with the Service Level Agreement on the provision of services.

**Improve and Increase Capital Investment:** PUC is to establish responsibility for defining and implementing long-term and annual investment plans. PUC should have the means to finance a part of capital works program from its own resources as well as commercial loans. Grants for capital investment should be accompanied by co-financing by PUC. The state should take part in order to improve availability of loans for financing of municipal infrastructure by providing guarantees for loans from international financial institutions and commercial banks. Funds for capital investment financing from the central level should be directed only to the PUC’s who have committed to strengthening institutional capacity and improving efficiency, which is determined by performance indicators, that is, directed to the PUC’s which partly participate in the financing of capital investments.

**Allow Participation of Private Capital:** Private sector can be an important source of financing of capital investment and source of transferring technical and operational "know-how" (technological know-how). Private sector can be involved in the utilities sector in the management of PUC activities and the implementation of capital investment. Private sector participation should be implemented as a "pilot approach" and not as a general rule. The legal framework for public-private partnerships (PPP) should be stimulating, that is to encourage private sector investment in municipal infrastructure. In this sense, the state should define the methodology for setting the tariffs of municipal services and pass a law on returning property to local governments. Where municipalities choose to independently carry out public-private partnership in utility sector, the state should support them by providing them with appropriate technical assistance so that local governments have sufficient capacity to enter into a rational agreement.

**Reform of PUC Ownership and Management Structure:** Ownership of the assets used by PUC is to be transferred to local governments, so that they together with the PUC could define the criteria for exact regulation of property relations in each case. PUC’s should be transformed into commercial entities whose business is regulated under the Law on Commercial Entities. Establishing clear property relations between the founders and the PUC would allow easier implementation of the process of regionalization of services and would simplify private sector participation in providing utility services. One should encourage regionalization in certain sectors, such as water supply and solid waste management, in order to achieve more efficient production while reducing costs (economy of scale) and with rational planning. Multi-purpose PUC’s should have separate revenue and cost estimation for each utility activity in a transparent manner, so that actual revenues and expenditures for services could be documented and compared. PUC’s and municipalities should eliminate their non-core activities and property pertaining to their performance.

The Strategy Action Plan which will be elaborated on will outline the need to define the legal and institutional reforms, as well as the resources needed to implement reforms, including requests for technical assistance, to ensure efficiency and effectiveness of the process.
1. INTRODUCTION TO STRATEGY

1.1 Background

Serbian municipalities are obliged under the Law on Communal Activities (Official Gazette of RS, no. 16/97 and 42/98) (hereinafter: the Law) to provide (art. 6) utility services, which are exactly specified in Article 4 of the Law, as follows:

- Water treatment and distribution;
- Storm water and wastewater treatment and drainage;
- Steam and hot water production and supply;
- Passenger transport in urban traffic;
- Maintenance of cleanliness in towns and villages in the municipality;
- Organization and maintenance of parks, green and recreational areas;
- Maintenance of streets, roads and other public areas in towns and other settlements, and public lighting;
- Landfill maintenance;
- Organization and maintenance of cemeteries.

In addition to these "mandatory municipal services" (which are described in more detail in Article 5 of the Law) for which the municipality is to provide "an organized and permanent performance and development" (Article 6 of the Law), the Municipal Assembly is allowed by Article 4 of the Law, to "define other activities of local interest and prescribe the conditions and manner of their performance, such as chimney sweeping services, maintenance of public toilets, the maintenance of public baths, rendering plants, public parking lots, maintenance of markets and services provided there, maintenance of public wells and fountains, and other activities of local interest.

The same Law, Article 8, provides that "for public utility purposes, municipalities establish public utilities, or their execution is entrusted to another company, or entrepreneur, in accordance with law and regulations of the municipal assembly."


According to amendments to the Law on Public Enterprises from 2005 (Articles 22, 22a and 22b) the PUC are obliged to submit Annual Business Plans to the Government, which are approved by the founder or the relevant local government, to monitor the movement of prices and wages (Article 22 b).

This law was amended so that restructuring of public enterprises, conducted by the Republic of Serbia over the public enterprises founded by the state in the "stand by" arrangement with the International Monetary Fund (IMF), could be transferred to local governments. The reason for this amendment of the Law on Public Enterprises was the fact that the macroeconomic analysis found that local public utility companies carry inflationary pressures by raising prices and thus cover their inefficiency.
Annual business plan was chosen as a method of control because Article 22 of the Law on Public Enterprises provides mandatory content of the business plan: "the planned sources of revenue, and expenditure items by specific purpose; envisaged manner of public enterprise revenue distribution; elements for a comprehensive view of pricing policy for products and services, as well as wage and employment policy in the enterprise."

As a punitive measure for local governments whose firms do not provide business program that is consistent with law and policy of the projected rise in prices and wages, which for the year determined by the Government of the Republic of Serbia, minister responsible for finance may issue an order to suspend the transfer of funds transfer from the budget ...

"(Article 22b of the Law on Public Enterprises)

In the first year of monitoring in 2005, for 2006 business plans there was a brief instruction with deadlines for submission of plans, information on government policy in relation to projected growth in prices and revenues for that year, as well as on monitoring of the plan, with reference to the legal provisions governing the mandatory content of the program.

However, upon receipt of annual Business Plans, it was immediately obvious that in a large number of local governments and public utilities there is not a basic knowledge of the planning process. The positive effect of the first year of monitoring was essentially the final unified list of public utility companies in the Republic of Serbia, with exact allocation by municipalities and towns.

That is why in 2006 a series of trainings and seminars was organized on annual business plans, with guidelines for 2007 plans, explaining reasons and goals which the central government was guided by when they laid down this procedure.

With the help of the United Nations Development Programme (UNDP) a system was designed by which professional assistance to local governments in the process of program operations, monitoring and controlling public utility companies was provided by the Ministry of Finance - Treasury, through its subsidiaries. In this way, other than specific seminars and manuals, local government officials had daily help in the field.

Only with this approach, local governments have accepted the idea and realized the importance of business planning and their responsibility for public utility companies which they founded.

Upon completion of the UNDP project (which was voted "best practice" at the global level) further development of this assistance system to local governments was stopped.

Due to delays in further monitoring and providing expert assistance, PUC generally operate inefficiently, offer insufficient quality of service, and there are few signs of improvement. At the same time, private sector participation in providing public utility services is relatively small. The reasons are mainly inadequate legal framework with regards to PUC ownership structure and setting of the utility services tariff, and the general reluctance of municipalities to give up political control over utility companies.

1.2 The objectives of the Strategy

The objective of the Strategy is to help the state and local governments to implement reform steps, which will improve provision of utility services while reducing costs. Since PUC’s perform activities of general interest, PUC transformation can not be done in the same way as the privatization of state owned enterprises. In this context, the objectives of the PUC reform can not be equated with privatization or transformation of public ownership in the PUC to private ownership. It is unlikely that the full privatization of the PUC will be possible even in
the medium term. Therefore, directions of PUC reform are considered towards their organizational transformation, that is, their transformation into commercial entities (limited liability companies and joint stock companies in terms of the Law on Commercial Entities), as well as developing alternatives for private capital entry into the sector. In this regard, private sector participation is a part of an overall strategy of transformation. The key objectives of this Strategy can be summarized through the following:

- Improving level of PUC service delivery while reducing costs;
- Stimulation of financing capital investment in municipal infrastructure to improve the quality of services;
- Creation of a guarantee to keep the quality of services even when there are not sufficient funds for investment by the state;
- Preparation of utilities sector for integration into the European Union;
- Encouraging private capital participation where it can improve services and reduce costs;
- Attracting private capital in the public sector in order to compensate for the lack of public resources.

The result of the Strategy should be:

- New regulatory and legal framework and appropriate incentives to achieve objectives, and
- Integrated Action Plan at the national and local level, to achieve goals.
- Achievement of goals in a clear and transparent manner and responsibility in the event of non-realization.

If the strategy is successfully implemented, the future status of PUC sector will be one in which municipal services are provided by both public and private companies that are efficient, effective and responsive to the needs of consumers. This will translate into the following:

- Both public and private companies will provide utility services based on identical methodology for tariff setting and clear legal procedures;
- PUC and other operators will sign a contract for provision of utility services with local governments, which will clearly set out goals and incentives to achieve those goals - goals should be realistic, according to the analysis of criteria for achieving adequate performance of PUC;
- An important part of the contract for providing utility services, should be the annual business plan and a multi-year capital investment plan with financial projections;
- PUC should be concentrated on providing basic services for which they were established;
- PUC will be managed by professional managers without political influence;
- For many services provided by PUC private sector will be engaged, for example construction and maintenance of roads, street cleaning, parks maintenance and solid waste management. Consumers will be more satisfied with their services, and customer satisfaction with service quality will be monitored and will represent one of the criteria for measuring the efficiency of the company (as part of the annual business plan);
- Tariffs should reflect the true cost of a PUC’s operation including maintenance as well as a portion of their investment costs, but remain affordable for the majority of the population.

The strategy highlights key areas where reforms are needed: clear regulation of property and legal relations related to property that is now used by PUC; financial and operational performance improvement; defining methodology for utility tariff setting, undertaking and financing of capital investments, and encouraging private capital participation in the utilities sector. Each area contains strategic policies and key actions for their implementation. This Strategy is the first step in PUC reform and transformation, which should improve the PUC operation and encourage private sector participation in financing municipal infrastructure and public utilities. However, for successful implementation of the strategy all stakeholders, both at central and local levels, should be engaged in implementation of these recommendations. Therefore, the aim of the Strategy is to be a starting point for discussion with stakeholders, as well as the basis for the Draft Action Plan for implementing the Strategy.
2. DESCRIPTION OF EXISTING SITUATION

The importance of utility sector in the Serbian Economy: The importance of the utility sector for the economy as a whole can be evaluated in several ways:

- **Number of employees:** In the communal sector there are about 53,000 employees, which make up 2.5% of total employment in the country (source: Ministry of Finance). Belgrade PUC’s account for around one third of the total number of employees. The average utility company has 176 employees, although some Belgrade utility companies have over 2,000 employees.

- **Total revenue:** The total revenue of PUC’s in 2007 was around 100 billion RSD (about 2% of GDP in Serbia), of which almost a half is the revenue of Belgrade PUC (source: Ministry of Finance). A part of total revenues consists of revenues from collecting tariffs for utility services as well as the budget subsidies of the founder.

- **Assets:** According to the Ministry of Finance, total assets of PUC are about 173 billion RSD.

- **Household expenditure:** The results of household survey conducted in 2007 show that on average 1.4% of household income is spent on water and sewerage services, along with garbage collection (1.9% in urban households). 1.2% of household expenditure is spent on district heating. Disproportionately small share of heating costs in total household expenses is due the fact that a small percentage of households is connected to district heating system. About 4-5% of household income is spent on total heating costs, including other sources such as coal, firewood, etc.¹

**Scope of PUC services:** Local governments are responsible for a wide range of public utilities. According to the Law on Local Government, regulating organized and permanent performance and development of public utility services are under the jurisdiction of local governments. They are obliged to provide organizational, material and financial conditions for providing these services. The law defines utility services as follows: water treatment and distribution, storm water and wastewater treatment and drainage, steam and hot water production and supply, transportation of passengers in public transport, maintenance of cleanliness in towns and villages in the municipality, organization and maintenance of parks, green and recreational areas, maintenance of streets, roads and other public areas in towns and other settlements and public lighting, landfills maintenance, organization and maintenance of cemeteries.

**Number of PUC:** Based on the data provided by the Business Registers Agency (BRA), there are about 310 public utility enterprises founded by local governments in Serbia.² Over 100 companies are multi-purpose ones, providing more than one utility service. They are usually located in small municipalities, as well as in sectors that could be considered related - for example, solid waste removal and street cleaning. In larger local governments there are specialized PUC: water and sewerage (50), solid waste collection (60), district heating (35), markets (8), and other dealing with maintenance of cemeteries and street cleaning. Municipalities have also established specialized PUC for distribution of gas and parking, but these sectors are not explicitly regulated by the Law on Utility Services.

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¹ Statistical Office of Serbia, Review of the household budget

² BRA, Belgrade, March, 2011
**Public Utility Financing:** Some key service sectors are funded by PUC billing of customers such as water supply and waste water collection and treatment, district heating and solid waste management. Other services, such as maintenance and cleaning of streets and parks, are financed from municipal budgets. Public transport is typically funded from revenues generated from services (ticket sales) and partly from the budget.

Other services, such as maintenance of cemeteries, parking and green markets, are funded by direct charges to service users who use these facilities. There is no available comprehensive financial information on PUC, although data from provided the Ministry of Finance, from 2007, show that PUC expenditures were about 8 billion RSD higher than revenues. Most of the PUC’s do not receive subsidies from founders to cover operational costs. However, when elaborating the PUC operations, it can be established that the value of contracts concluded between the PUC’s and their founders to provide services financed from the budget, and not from the price of utilities such as street cleaning, organizing of streets and parks, snow removal or construction works, is often well above market rates for such services to compensate the losses incurred by PUC performing core activities. Capital investments are primarily financed from the state budget, international development programs and from municipal budget (through the Construction Site Directorate).
3. KEY PROBLEMS FACING PUCs

3.1 Problems Facing all PUCs

- **Unclear property-legal relations between the PUC and the founder.** Local governments are founders, but do not own their PUCs. Complete PUC property is owned by the state of the RS and the PUCs have the right to use them. This situation causes concerns in practical application in various fields – starting with responsibility for financing investments in communal activities and responsibilities for keeping records on real estate and fixed assets in general, responsibilities for the calculation of depreciation, and it also creates problems for local governments in the process of attracting private investment in this area.

- **Inefficient performance of activities:** PUCs are often seen by the founders as institutions suitable for employment. Therefore, the number of employees in the PUC’s is oversized, and often the salaries are financed from the funds which should be spent on maintenance and investment. In addition, smaller municipalities insist on maintaining their PUC’s order, so that based on economies of scale they could be far more functional as part of a regional system.

- **Politicized management:** Management Structure of PUC is often established for political reasons and it changes with the change of municipal government. Politicization of management results in a lack of independence of PUC in managing business policies, and frequent changes of directors after local elections, regardless of achieved business results.

- **Insufficient resources to finance capital investment.** For PUCs whose revenues depend on the billing of services, prices are generally too low to maintain the system and to fund new investments. In addition, low collection rate contributes significantly to financial problems. The absence of long-term financial planning which leads to the situation that each year different utility departments compete among themselves to get investment funds from the founders’ budget, results in impossible realization of infrastructure projects that require substantial financial outlays and long-term planning.

- **Lack of capital investment in recent years:** Due to lack of funds and state-owned fixed assets and total assets of PUC, there is a systematic long-term underinvestment in fixed assets of the PUC. This results in inadequate provision of services and higher maintenance costs, and inefficient performance of activities, eg. if water pipes are not replaced that will cause huge water losses on distribution network.

- **Fragmented responsibilities:** Many different bodies at several levels, from local to state level including PUC, the Construction Site Directorate, local government, several ministries and other administrative agencies at the state level have jurisdiction in the area of conducting and monitoring the performance of public utility services. This leads to conflicting and insufficiently clear responsibilities in terms of supervision and monitoring of implementation of regulations.

- **Inadequate capacity of PUCs regarding financial management:** Traditionally, PUC management focuses on technical aspects of delivering public utility services. In contrast, the management structure of PUC does not have much affinity and ability to improve financial performance (better evidence of consumers and more efficient
collection) through introduction of basic business principles. *Lack of accountability to consumers* results in inadequate provision of services.

- **Poverty**: High rates of poverty and inadequate social protection policy at local level affect the utility services tariff policy in a number of ways because people with low incomes do not pay utilities, and on the other hand for the purpose of maintaining social peace, paying for utility services have several affects, including: potential difficulties *for citizens with low income*; not paying for PUC services, and artificial setting of tariffs at low level.

3.2 **Specific Problems Facing Key PUC Sectors**

**Water/waste water:**

- A high level of water loss in the network is the consequence of inadequate maintenance and lack of funds for replacement of worn-out parts of the system, and therefore production costs are higher and can not be covered from commercial revenues.
- Harmonization with the EU would require major investments in wastewater treatment systems.
- Water production and sources of supply require regional solutions.
- Network extension in rural areas will require large investments with limited return on investment opportunities in service prices.
- Low prices, inadequate consumer records and poor collection are the cause of declining revenues.
- Funding of disproportionately large number of employees prevents directing resources to maintenance and capital investment.

**Local public transport:**

- Lack of quality rolling stock.
- Using outdated map systems.
- Unsatisfactory management qualifications in the provision of public transport.
- Limited use of strategic planning to achieve sector modernization.

**Solid Waste Management:**

- Large investment requirement for regional landfills that are in line with the EU; this will, in most cases, require regional management, instead of management by a local government unit.
- The current fee for waste disposal is not sufficient to provide funds for capital investment.

**District heating:**

- The absence of capital investment leads to limitation of production and distribution capacities and their reduced efficiency (low production efficiency and increased costs of production and distribution).
- Non acceptance of tariffs structured on consumption.
The absence of technical requirements for introduction of cost-effective combined production process (CHP).

District heating rates do not allow for adjustment of prices of production inputs, and primarily heating. The heating rate changes very often and makes up to 50% of production costs.

Increased availability of gas distribution networks will increase potential competitiveness of gas distributors for district heating.

**Road maintenance:**

- Unreliable sources of funding are hampering long-term capital investment planning.
- Insufficient budget for road network maintenance prevents its repair, and it is generally in poor condition.
- There is no clear mechanism which would provide the private investor participation in the construction and maintenance of local roads, which again leads to the problem of lack of competition and potential multiplication of costs.
- Insufficient number of financing sources for construction or reconstruction of the road network.
- Lack of modern traffic management systems in major cities.
- Lack of investment in management systems leads to lack of road safety, and lack of pedestrian safety.
4. ELEMENTS OF THE STRATEGY

Elements of the Strategy are focused on four areas:

1. **Issues related to the structure of PUC:**
   - ownership of the assets used by PUC
   - form of PUC organization
   - PUC to provide more than one service and
   - regionalization of services

2. **Issues related to improving operational performance of PUC;**

3. **Issues related to the legal regulation of tariffs and performance of the PUC, and**

4. **Issues related to the financing of capital investments and encouraging participation of private capital in these activities.**

Each question deals with a description of: **the history**, including the current situation, **strategic policies and key actions** and **relevant experiences in other countries**.

PUCs can be divided into three categories:

1. **Natural monopolies that provide revenue** (water supply and drainage and waste water treatment, district/remote heating, solid waste management) where the natural requirements for efficiency dictate the existence of only one service provider;

2. **Non-monopoly services that provide revenue** (public transport, green markets, cemetery) where there is possible competition, but the municipality may decide that these services should continue to be provided by public companies in order to ensure that they will continue to be provided at all; and

3. **Services that do not provide revenue** (road maintenance, street cleaning, parks), where performance of these services is in the public interest but is not paid by end users. Provision of these services is financed by the local government.

Many elements of the strategy, especially with regard to tariffs and regulations, refer to the first category PUCs, while other elements, such as setting performance criteria and encouraging private sector participation, can be applied to all PUCs.

**4.1 Ownership of the PUC and Their Assets**

4.1.1 Background

Units of local self-government establish PUCs and practice management rights over them. Simultaneously, the PUCs are not owners of the assets used by them, and those are neither their founders - the cities and municipalities. The owner of all assets used by the PUCs is the state. According to the existing regulations, PUCs are entitled to use the property. Records of the property used by PUC are usually very poor. Sometimes the main assets used by a PUC are presented in the balance sheets of the founders (ULG), sometimes in the balance sheets of the Directorate for Construction Sites (Construction Directorate) and sometimes in the very PUC. It is rare case that the inventory lists is complete, and almost always it is presented at book value of assets, which does not reflect their actual value and leads to the calculation of the underestimated value of depreciation.

Republic of Serbia is in the process of preparing legislation which should enable transfer of the property used by PUCs from the state to local governments’ ownership. The fact that the state owns all assets that PUCs use can create issues when taking investment loans and on the
provision of private capital in this sector, since neither creditors nor investors can use a real estate as a means to ensure the enforcement of contractual obligations. This also could potentially require participation of the state in signing the loan agreement, as it is expected that the state guarantees fulfilment of PUC’s or municipality’s contractual obligations, because they possess no assets. This situation significantly complicates the position of local governments and the PUCs in the process of securing strategic partners for investment projects in utility services areas.

4.1.2 Strategic Policies and Key Actions

4.1.2.1 Ownership of the assets used by PUC should be transferred to local governments, in accordance with the current draft law

Transfer of ownership to local governments will mark as well the transfer of responsibilities to cities and municipalities for maintenance and investment in municipal infrastructure. Local governments will easily be able to, as owners of communal infrastructure and facilities, get together in larger regional PUCs or legal entities established under the Law on Enterprises.

Municipalities will be eligible to transfer all property or part of the property, which is used for provision of public services, to the PUC; at the same time, they will have the right to enter into contracts with the PUC on the lease/use of the property. Right to use the assets could be extended to private operators who provide public utility services, as a part of the lease agreement, but only for the duration of the contract. Minimal conditions for the transfer of rights to use for the private sector shall be determined by the state.

4.1.3 Relevant Experience in Other Countries

– In some countries the state has transferred ownership of public utilities to local governments (eg, Polish and Slovakian water sectors). In Slovakia, the water sector, which is state owned, has been decentralized to the regional level – to the local authorities in certain regions; and local governments have a stake in the property on the basis of population on their territory. Generally speaking, ownership of property is passed down along with the transfer of ownership of the enterprises.

– Transfer of ownership is usually a key element in the reform of the utility sector at the beginning of the transformation process. Two models have usually been used: 1) assets are transferred together with the utility company, and 2) assets are transferred to local government. Later, in some countries, certain categories of assets (such as network infrastructure, water treatment plants, landfills, etc.) have been classified as an inherent Municipal property\(^3\) which is not possible to be alienated or encumbered in any way.

In Romania, this property is referred to as the "public good". In some cases, as in Hungary, separate companies owned by local self-governments have been established as the inalienable property holders. In other cases, assets are transferred to the ownership or given to the use of utility companies themselves. When a municipality keeps the property it is usually leased or rented to utility companies through long term contracts. In EU countries, such contracting is often done through tenders, depending on the sector.

\(^3\) In countries such as Hungary and Romania, which have adopted the French concept of "public good", the law provides that some parts of the public good are not alienable.
4.2 The Legal Structure of PUCs

4.2.1 Background

The Law on Public Enterprises and Activities of General Interest gives the right to local governments to establish public utilities. Law on Utility Services (Article 8) for some services, such as water supply and drainage and waste water treatment, as well as urban and suburban rail transport states that they can be provided only by PUCs, except in special cases. In most cases PUCs operate along the same lines as companies established under the Companies Act, for example joint stock companies or limited liability companies. But even though the municipality for certain services may enter into joint ventures with third party, they cannot share or fuse/merge the ownership of their PUC property, except with the consent of the Government of the RS.

4.2.2 Strategic Policies and Key Actions

4.2.2.1 Encouraging municipalities and the PUCs to change the status of the PUCs in commercial entity founded under the Companies Act, either as joint stock companies or limited liability companies.

Conversion of public companies in companies incorporated under the Company Law will contribute to defining the founding rights of municipalities in the capital of the PUC. This will help facilitate the regionalization and the private sector. Among the activities to be undertaken are:

- Amendment of the Law on Public Services in order to allow companies founded under the Company Law to provide services in the sectors of water supply, wastewater, district heating and railroads, and not within the exception, which provides Article 8 Paragraph 3 of the Utility Law ("performance of these activities in a particular area, when the establishment of a public company would not be rational given the workload and the number of users, the municipality may delegate to another company and/or an entrepreneur through a contract").

- Preliminary steps for the conversion to be taken by PUCs and the municipalities would involve preparation of financial statements in accordance with the International Accounting Standards and Contract (Agreement) between the founders and the PUC in accordance with the guidelines in Section 4.5.2.

- Preparation of a model of funding acts (statutes) for joint stock companies and limited liability companies which would be used by local governments when transforming the PUC.

- Consider the exact determination of the time (date) for the mandatory conversion of PUC in the status of a business company, founded in accordance with the Law on Business Enterprises.

4.2.3 Relevant Experience in Other Countries

- In Romania, the government has ordered that all "regia autonoma" in the water sector, the Romanian equivalent of the PUC, should be transformed into joint stock companies. This was done to allow regionalization of water management companies. Projects that were not “corporated” and regionalised did not receive any funding from the EU.
In general, the establishment of corporate entities preceded the reform of public utilities. The reform was a prerequisite for the conversion "Regia autonoma" in companies, although in Romania, for example, required to take certain steps, for example demanded the application of accounting standards prior to transformation.

Private sector participation in the countries in the region generally had a form of investment in public stock companies. In the water sector in Czech Republic private companies have gained stocks either by an auction or by buying them on the stock market. In several countries (Poland, Latvia) national legislation set a deadline for the transformation of municipal enterprises into joint stock companies by a certain date.

In the region, limited liability companies are more common than joint stock companies. The ratio in Hungary is approximately 75:25 and 57:43 in Slovakia in favour of limited liability companies. As a rule, local governments have retained 100% ownership of companies immediately after the transformation of their status into a company established under the Law on Enterprises.

4.3 Scope of PUC Services

4.3.1 Background

In larger cities there are special PUCs to provide all significant services, eg. 5 in Nis and 11 in Belgrade. In most cases, however, a PUC provides more than one service, eg. services of water supply and sanitation, and in some cases, especially in smaller municipalities, a PUC is responsible for managing a number of specific utilities that are defined by law. These PUCs provide more services and usually do not have the intersection of costs and revenues for specific services.

Many PUCs are providing services which are not related to the core activities of the PUC ("ancillary services"), for example hotels, nurseries, flower shops, etc. This phenomenon is inherited from the period when local governments managed a multitude of activities, many of which are unrelated to basic utility services. In others, they are branches of the core business, eg. vehicle repair, construction services, etc.

Consolidating services into a single company in small communities provides more efficiency (eg. if there is only one department working on common issues, its workers will be used throughout the working hours, who could otherwise only have a part-time jobs if they focused only on one type of service). But this also significantly reduces the transparency of costs of provided services and allows for spillover of funds, or profit in one sector, compensates for deficit in another sector and prevents setting up prices that reflect the actual cost of services provided.

Similarly, the incidental services sometimes operate as "profit centers" of a PUC and subsidize loss-making services. Nevertheless, ancillary services provided by PUC, reduce the focus on improvement of efficiency of core business. In many cases, "ancillary services" of PUC provide services for higher prices, which could be much cheaper if provided by private sector.
4.3.2 Strategic Policies and Key Actions

4.3.2.1 Multi sector PUCs should be required to account for all distinct services as separate business unit.

This will help to establish the actual costs of each service, ie:

- for revenue-generating services tariffs can be adjusted to reflect the true cost of service;
- for services that can potentially be tendered out to the private sector, this will establish a cost basis for comparison;

4.3.2.2 Local governments should be obliged to remove non-core services from PUC.

As mentioned above, such measures will help to determine the actual cost of basic services PUC. In addition, the PUC will help management to focus on their core services and to improve the efficiency of these services without the support of non-core services.

4.3.3 Relevant Experience in Other Countries

- There is no standard experience for utility companies which provide more services. In Vienna, for example, "Wiener Stadtwerke" is a holding company that provides virtually all municipal services in Vienna, from the water supply to the management of cemeteries. However, financial accounting (cost accounting) of these separate entities is strictly monitored and differentiated. A similar structure was recently introduced in Zagreb, where in Zagreb Holding company was founded, whose business units have separate accounting.
- In Poland, the national government has asked local governments to exempt public utilities from all non-core services and encourage them to set up entities that will have only one purpose. Recently, some local governments set up holding companies for their public services, but with strict separation of accounting for each business unit.

4.4 Regionalization and Inter-Municipal Cooperation

4.4.1 Background

Utilities in Serbia are almost always independently governed by the individual local governments. There are some exceptions in areas of water supply, where large-scale projects, such as larger (regional) water sources, were implemented on a regional basis, however, even in these cases, each local government keeps its PUC for the local water distribution and related services for drainage and wastewater treatment.

Waste management is slowly being regionalized through EU-funded projects, as well as through partnerships between public and private sectors. However, in general, utility services are provided by a PUC serving only one municipality. As a result, the advantage of economy of scale is not being used, especially in smaller municipalities. There is also inconsistency in relation to practices in Western Europe, as well as with regionalization models developed by the former socialist economies in countries that have recently become new members of the European Union.

The reasons for promoting the process of regionalization, particularly in the sectors of water supply and solid waste, include:
- **Economies of scale in management and service provision**: In public services, which require significant capital on a greater territory and with more users, one can operate with lower unit costs; in the sector of solid waste, it is estimated that a minimal number of residents to be served per landfill should be 200,000 people; the implementation of the Framework of EU directives for water supply and waste waters will probably also require the regionalization of companies in order for them to achieve their goals;

- **Specialization**: Consolidation would make regional companies become able to focus on a single basic service;

- **More effective investment planning and better access to external capital (eg. EU funds)**: Larger projects are more attractive to investors from the public and private sectors. It easily can happen that future EU directives in the sectors of water supply and wastewater introduce the regionalization criteria as a condition for financing from EU funds.

- **Facilitating private sector participation**: Potential private partners, as investors, prefer to invest in companies that deal with one service and have transparent accounting;

- **De-politicization**: It would be easier to control employment on the basis of political and personal connections when several municipalities concerned regionalized service delivery;

- **More effective management and control**: It would be easier to monitor and regulate a small number of companies than it is the case with multi-purpose PUC whose number is growing. However, control of ownership and control of large companies that have common ownership would require the development of new competencies of local governments.

Services such as public transport and green markets, street maintenance, parks and cemetery management, by their nature are public utilities that are performed in a local government unit (however, the involvement of private operators for these services may result in their regionalization). Similarly, district heating, though very strong economic sector, is essentially a communal/utility activity (one technical system operates on the territory of one urban area).

The present system of functioning and financing of local government offers very little incentive to the regionalization of municipal services. Local governments in Serbia are relatively large and have relatively little experience in establishing inter-municipal cooperation in this field. Similarly, there are currently no mechanisms in the system of financing local government that would encourage joint provision of services. As user charges are insufficient to cover the costs of investments required to expand the area of service provision and as there is no tradition of cooperation between municipalities, the PUCs are not interested in the regionalization of services under a contract. From this it clear that neither local governments nor PUCs are interested in joint coverage of border areas between several cities and municipalities or in joint construction of municipal infrastructure in border areas inhabited by residents of two or more municipalities. This resulted in limited experience in Serbia in connection with regionalisation of utilities:

**Water services**: Regionalisation in Serbia, for example in the water supply sector has so far included only cases in which a number of towns and municipalities are supplied from the same source of water supply that serves more municipalities through one distribution network. One example is the regional water supply system Rzav, in which a public state
company supplies several municipalities with water. Municipalities have their own representatives on the company’s Management Board.

**Solid Waste Management**: PUCs are responsible for waste collection and management of landfills in each of the individual cities and municipalities. For now, Serbia has no regional landfills operated by public companies, although it is expected that the two landfills, which were established as public enterprises, will be completed by 2011. Both projects are supported by the EU. Landfill which is located in Duboko (Uzice) will provide services for nine municipalities, including the major cities of Uzice and Cacak. Construction of the landfill is supported by an EBRD loan, while the construction of waste separation line at the same location is funded from an EU grant. Another project of a regional public sector landfill is located in Pirot and it will provide services for four municipalities. The strategy for management of solid waste defines the sites for construction of 29 landfills.

**Private sector participation**: There was a significant development of regional private sector projects in the waste sector. Management of one landfill is entrusted to one private company, three are under construction and several other landfills are planned to be constructed. Private companies have entered into agreements with joint stock companies owned by municipalities and are paid directly by municipalities for the use of landfills. For calculation of payment for the services, billing rates are used; whereas, the local governments pay the annual costs of landfill use to their private partners from their budget funds. These annual payments are used to compensate for the cost of building and running costs of the landfill.

4.4.2 Strategic Policies and Key Actions

4.4.2.1 Encourage regionalization of water, wastewater and solid waste PUCs

In addition to guaranteeing the economy of scale, regionalization of utility services may encourage professionalism and can attract quality manpower to the local administration, as well as more private investment. However, at the local government level there is resistance for the fear that the founders would lose control over the performance of utility services if the company does not report directly to them. In addition, the legal framework for the implementation of regional schemes has not been defined yet.

- Key measures for implementation of the Strategy, which fosters regionalisation can be realized through the following actions:
  1. Creation of legal, administrative, fiscal and financial incentives for strengthening inter-municipal cooperation and regionalization in the domain of utility services provision;
  2. Support to signing of inter-municipal cooperation agreements and establishment of regional utility companies;
  3. Strengthening of local capacities for cooperation through the preparation of model agreements, contracts and municipal decisions on the establishment of regional cooperation, management of the companies for the joint provision of services, recruitment and supervision of the companies in which the member municipalities commonly make all decisions related to management, with the assistance of relevant ministries.

- In the Solid Waste sector:
  1. The State should continue to provide intensive support to initiatives of local governments to organize regional sanitary landfill that would be operated by the public (inter-municipal) or private operator;
2. The state should condition the budget support of regional landfill construction by previous conclusion of inter-municipal agreements on the construction and maintenance of such landfills with establishment of regional systems for the transport of waste.

- In the *water and waste water* sector:
  1. Develop and implement a package of technical regulatory measures and financial incentives aimed at stimulation of voluntary association of municipal PUCs for production and distribution of water;
  2. Amend the Law on Water in order to authorize local governments to regionalize production and distribution of water and later adopt by-laws.

4.4.3 Relevant experience in other countries

*Water services*

In most new Member States (after 2004) of the European Union, utility companies for water supply typically serve a larger population agglomeration than one municipality.

- In Romania, companies for water supply are organized on a "district" level as decentralised level of government. With 41 counties, each of the "district" water supply companies (regional operating companies - ROC) serves several hundred thousand people. ROC is usually formed by merging smaller municipal enterprises for water supply within the biggest local company in the district. ROC signs a contract with each municipality, with different tariffs, with the expectation that in the end all tariffs will be adjusted. Regional operating companies are managed by an association of municipalities in which each municipality has one vote.

- In Bulgaria there are 51 company for water supply, most of which serve four to six municipalities with a population of several hundred thousand people. In addition, companies for water supply are always specialized just for this service, which in Serbia is not the case.

- In Slovakia, state companies for water supply were divided into seven regional companies for water supply, where the municipalities gained a share in the property on the basis of population number. EU funding was obtained only on condition that the companies would be regionalized.

- In the Czech Republic regional private companies for water supply provide the most of the water service (70%). In some cases, they make contracts with the regional public companies, in whose hands, the property of the infrastructure remains, while in other cases they make contracts directly with each municipality.

*Waste Management*

Regionalization of waste management is largely driven by the need for harmonization with European Council Directive 99/31/EC on waste landfills. In countries that have recently become members, the EU has supported the construction of regional landfills, and in each such case, several user municipalities had to oblige themselves to a common use of the landfill.

- In Romania, the government has prescribed establishment of one landfill per district (although geographical reasons may impose other solutions). Landfill construction is supported by the EU Cohesion Fund, but the private sector is responsible for billing and technical and operational functioning of the project.
In Slovakia, the Czech Republic and Hungary, private companies co-funded construction of regional landfills. In most cases they have taken over the collection and transportation of waste, which regionalized complete services and not just the landfill maintenance activities.

4.5 Corporate Management of PUCs and the Relationship with the Local Governments

4.5.1 Background

Management of the PUC operation is inefficient and politicized. Relationship of the PUC’s responsibility towards the founder, consumers as well as towards the service users is not established. PUC level of technical expertise goes beyond the level of expertise of the founders, which prevents the performance of external supervision of activities and technical and operational functioning of the enterprise. The situation must be improved by reforming the ways of PUC management and by establishment of such relations between the PUC and the founder, which will increase efficiency and improve quality of service delivery. In addition, the institutional capacity of municipalities must be improved in order to exercise a supervisory function over the conduct of public utility services, especially if participation of private operators increases.

Some key features of the relationship between the PUC and its founders are:

- The main acts governing the rights and obligations of the PUC in a certain utility activity are the City or Municipal Decision on how to carry out certain activities and the Decision on the Establishment of the PUC. Besides these two acts, which are brought by the founder, relations between the founders and the PUC are not regulated by additional agreements or contracts, although there are exceptions. As a result, the PUC operates without agreed criteria and guidelines for monitoring the quality of operations and improvement of service level or financial performance (other than a plan of work - as described below). The founder does not control financial operations of PUC if we exclude the requirement that their financial performance is to be balanced each year (in terms of level of income and expenditure). In addition to administrative price control, there is little or no incentive - positive or negative - to improve performance or efficiency of any services provided by utility companies directly to their citizens, such as garbage collection or water supply or services for which the municipality enters into an agreement with a utility company for services that are of general interest but are paid from the budget, such as street cleaning and park maintenance.

- Although according to the Law on Public Enterprises and performance of activities of general interest, PUCs (as all other public companies) are obliged to submit their annual business report to the founder, and although the law prescribes the mandatory content of this document, it usually does not contain essential information on business performance or important elements of strategic planning. These documents rarely look beyond the next year either concerning the capital investment or business performance. Moreover, the institutional capacities of municipalities able to analyze business plans are minimal because there is no profile of employees in the municipal administration able to carry out this task (this profile is mainly employed in the PUC or the Building Directorate). Building Directorates in certain cases only monitor the performance of the current activities of the PUC. Some larger local governments have
a Department of Municipal Utility Affairs, but in most cases, these departments are weak and their responsibilities are not adequately defined.

- PUC directors, and their Executive and Supervisory Boards, are usually organized on political grounds, and the managers are changing every time the political balance of forces in local government is changed.

- Discussion of income (the amount of the cost of municipal services), which are essential for optimal functioning of the PUC typically occur in at least three different levels. Utility companies are negotiating directly with the City Council i.e. the municipality on the tariffs, with the main assumption by both parties, that tariffs should cover only operating costs. At the same time, the PUC negotiate with the Directorate for Construction on the prices they will pay for the services provided to the municipality. Some of these services fall within their core competencies - such as sewer maintenance, and some do not - such as construction works.

- Investment Planning is usually done by the Directorate for Construction, while the financing of investment is determined in negotiations between the Department and relevant municipal authorities, often with little impact of the PUC on the process itself. Fragmented decision-making process (in multiple centers of decision-making) makes the process of making decisions about the priorities of utility infrastructure construction unpredictable and uncertain; the process itself is largely controlled by the Directorate for Construction, and breaks up the responsibility for monitoring the performance of PUC in several institutions.

- As it has already been noted, capital investment planning is done mainly by the Directorate for Construction and municipal authorities with a minimal contribution of the PUC. Partially, this is happening because almost full funding of the investments is done from the municipal budget. The reasons lie in the fact that the Directorate for Construction monopolized technical, professional and management capacities in the field of planning and implementation of investment projects. In that sense, it rarely sees the improvement of municipal services as its primary responsibility. This results in an effect that investment in municipal infrastructure (water supply, sewerage, solid waste management) is often a lower priority than investment in roads or other infrastructure, which requires less complicated planning and financing. This is why the PUC projects for which non-refundable financial support can be obtained (eg, IPA funds of the European Union) are still in the municipalities unprepared.

- PUCs mainly receive municipal projects as contractors for construction of facilities, often without organizing tendering procedures. This is justified by the fact that the PUCs have the equipment and work force which is always available and which would otherwise be idle or unused. In addition, the "profit" from construction projects is often used to cover losses in the main activities of the PUC.

- Financing capital investment depends on the PUC prioritization performed by the founder and depends on other municipal priorities, bearing in mind that the PUC depends on external sources (the municipal budget above all) when the financing of capital investments is in question and that due to political motivation of the founders the prices of the services for the citizens are artificially maintained at low level - while the tariffs for legal entities are held at much higher rates, especially in the sector of water supply.
Municipalities approve subsidized prices for certain categories of citizens, for example public transport for the elderly, but PUCs bear the costs of subsidies whereas the founder does not reimburse those costs to the utility company. PUCs do not receive any incentives to promote business nor to implement these changes of operation. At the same time, the founders do not have capacity to adequately monitor the operations of the PUC. The end result is the absence of improvement in the area of quality of services and quality of operational and financial management.

4.5.2 Strategic Policies and Key Activities

4.5.2.1 The relationships between municipalities and PUCs should be governed by service agreement

Specific and precise arrangement of relationships between municipalities and PUCs through concluding the Service Agreements will enable municipalities to set clear goals and tasks to a Director and a PUC Managing Board, and to clearly define what is expected from a PUC and what resources will be available to achieve the set goals. Service Agreements will also serve as a basis for agreements with private operators in the future.

- Service agreements will also include an obligation of PUCs to prepare business plans, in which there will be medium-term financial projections of revenues and expenses, including costs of capital investments. Technical Support of PUCs will focus on preparing the Model of annual plans, which will be offered to utility companies for review and approval.

- Service agreements should contain a clear calculation for determining the unit price of services, in accordance with the law and other regulations as well as indicators of quality of operations for:
  - Frequency of services
  - Continuity of services
  - Quality of services
  - Response time to quality problems
  - Customers service satisfaction.

The agreements should also specify realistic and measurable goals to improve key performance indicators and accountability for their failure. Salaries for directors and other members of managing board should be related to the implementation of these standards.

- When mutual relations regarding the disposal and use of public property are resolved, service agreements should also contain either conditions under which a PUC can lease the municipal property, or provisions for the management and possible disposal of public property in the event that the property is transferred to the PUC. Directorate for Construction Sites will not be the legal owner of property authorities. Assets in state ownership, which are currently listed as assets of the Directorate will be transferred either to the municipality or to the PUC. In some cases, special companies may be established, which will be the legal owners of property authorities, in order to facilitate the financing of the current infrastructure of the PUC.

- Service agreements should clearly state which rights PUCs have on which property, i.e. on which fixed assets, as well as ways to use them and possibly dispose of.
Detailed inventory lists should be made for a public property transferred to a PUC, where the land will be recorded separately stating the parcel information, including the market price of the land. Income from disposal of fixed assets should be used only for capital investments or for repaying the long-term loans for capital investments.

- When certain categories of citizens are granted lower prices in the form of subsidized prices of utilities, service agreements should specify which categories of citizens in social need are entitled to subsidies, the amount of subsidies, and the method of compensation of subsidized prices from the city or municipal budget.

4.5.2.2 PUC management should be professionalized and de-politicized

The relationship between a PUC and its founder must be established on the principles of maintaining the PUC’s business and operational independence. Director and other members of the management team must be selected on the basis of their professional qualifications, in order to respond to future challenges and improve enterprise efficiency. The management team of the PUC will also prepare municipalities for negotiations with potential investors. Municipalities need to adopt a new regulatory framework (acts) which will regulate the relations between a founder and a PUC management. Principles for the establishment of a new regulatory framework are:

- At least 50% of members of the managing board should be people with relevant professional experience, and representatives of political parties.
- The mandate of members of management and supervisory boards should be based on the principle according to which more than one third of their members cannot be relieved of duty in one year.
- PUC directors cannot be representatives of political parties. In case they are members of political parties at the moment of appointing, they must resign from all the party duties. When they are relieved of the position in a PUC, they cannot become a party functionary in the period of at least three years.
- PUC directors must have appropriate education and at least five years of work experience either in a relevant utility sector or in a corporate management/legal service/ or finance.
- PUC directors are appointed for a five-year period, and can be dismissed only if there is a reasonable suspicion (physical evidence) about the illegal operation or incompetence (including the failure to achieve planned business improvement).

4.5.2.3 Municipalities should develop the capacities to monitor PUCs and private operators.

If the principle of regulating the relations between a PUC and a founder through service agreements is accepted, municipalities must develop the ability to establish and monitor operations (impact) of a PUC. This need becomes even more pronounced with the increase of share of private operators in the sector.

- Municipalities with more than 50,000 inhabitants should establish a department of municipal administration which will be responsible for monitoring the public utilities and the development and oversight of a PUC. The training of staff in these departments will be coordinated by the line ministry and municipalities, along with the donor technical assistance (see Section 4.8.2.2).
These departments must be familiar with both technical and financial requirements that are placed before a PUC. In some cases, the institutional strengthening of municipalities to perform this function means that the municipality will take appropriate personnel who are trained for such work from the Directorate for Construction Sites.

4.5.2.4 PUCs and municipalities will separately plan and finance the capital investments

- PUCs will be responsible for planning their own capital investments and will prepare multi-year investment programmes, which come into operations in Annual business plans.
- Contracts between a PUC and a municipality in the area of construction of utility facilities and infrastructure will be organized with respect for the Law on Public Procurement. A Directorate for Construction Sites can offer technical assistance and monitoring of implementation, but only based on an agreement with a PUC.

4.5.2.5 Support for people in social need must not affect the financial performance of a PUC

Increase in utility prices will most affect citizens with low incomes. It may also affect the lack of financial implementation of a PUC, if it leads to increased financial indiscipline or more of delay in payment. Impact of price increases on the citizens with low incomes and measures for its alleviation should be carefully evaluated. There are many ways to get this issue resolved:

- Develop or strengthen existing proven mechanisms to support people in social need, funded by local governments and the state.
- Low tariffs should not be kept artificially, all in order to meet the needs of citizens with low incomes.
- If subsidized tariffs apply to the citizens with low incomes, a PUC should fully receive compensation from the budget for the lost revenue.

4.6 Improving Financial and Operational Results

4.6.1 Background

Public utility companies in Serbia are mostly characterized by inefficient operations, including redundancy, serious problems in billing and collection, inadequate response to customers’ needs, tariffs and allocations from municipal budgets most often cannot even cover the operational costs. Response of municipalities as the founders is limited to their own capacity or to the results of the assessment. The combined effect of these factors has led to a low level of collection services, and inefficient financial transactions.

Some of the key factors which limit improvements in their financial and business results are:

- Organizational management: Managing a PUC is based on a hierarchical approach, so that younger members of staff have very little impact on budgeting or decision making on how to reduce costs. As a result of this and other factors, management is focused more on improving the technical rather than on improving the financial performance.
- Human resources management: Very little attention is paid to the harmonization of qualification and age structure of employees with enterprise’s requirements. Formal training is insufficient. Most utility companies are substantially burdened by a surplus.
of employees. In the water sector there are almost twice as much compared to countries with similar level of development. PUCs have difficulties to retain qualified staff because of low salaries.

- **Management Information Systems:** Computer systems, where they exist, are used for certain purposes, but are generally not used for the management of utility companies or to analyze data on the achieved performance. Computerized billing systems are generally not updated.

- **Billing and collections:** The rate of collection is low in most public utility companies. In larger cities, the collection is often entrusted to external executors, municipal enterprises which provide services of collection, and therefore there is no direct contact between consumers and PUCs. That is why the forcible collection is difficult. Public institutions are among the largest debtors. Many households in the sector of water supply are illegally connected to water supply, increasing water consumption, and PUCs do not collect revenue from them.

- **Maintenance:** Costs of infrastructure maintenance are low due to low tariffs and lack of real insight into the existing property. Maintenance is more focused on emergency repairs than on preventive work. The lack of effective maintenance programs leads to a decline in service levels and increase of operational costs.

- **Lack of meaningful monitoring:** At both the local and the national level, monitoring the impact is limited, with insufficient emphasis on encouraging for the better results; instead, the status quo is maintained. Local authorities haven’t got the capacity to request effective reporting from their PUCs. That is why business plans contain only basic information, rather than long-term or strategic planning. At the national level, the Ministry of Finance focuses on tariffs and employment costs. Line ministries supervise the results in terms of compliance with relevant regulations, but do not address the financial and business efficiency.

### 4.6.2 Strategic Policies and Key Actions

Solving these problems will require from local governments and PUCs to take action, some of which are described in other parts of the Strategy: making a serious business plan that involves planning years in advance; service contracts which will list working objectives and incentives for the management to achieve these objectives, (see Sections 4.5.2.1-3), adoption of tariffs which allow cost recovery (4.8) and planning and financing the capital investments (4.9). In order to implement these measures the following policies and actions should be applied.

#### 4.6.2.1 State and municipalities should support PUCs initiatives for improvement of financial and operational results.

In order to address the above-mentioned problems, municipalities should make several changes in the way of their business. These initiatives would have to be supported by the Government in the form of technical assistance, in some cases through the reform of regulatory bodies, and municipalities themselves should approve the budget for these initiatives. Necessary initiatives are:
− Management: In accordance with the movement of performance indicators and adopted standards, a PUC management should move to a system whose main priorities will be to meet the set goals and to provide services to customers, and not just working within the budget. This means that ways should be identified to advance the productivity and efficiency, including the lowering of the decision-making levels. Besides, PUCs should develop capacities in human resources management, information technologies, and most importantly, finance management. In this context, the finance management does not only include the budget planning, but also the adequate assessment of activities and investments, in order to determine their financial profitability and to find ways to increase incomes and reduce expenses.

− Human Resources: The strategies applied in this area should adjust the number of employees with the appropriate standards of productivity and wages, on the level which is necessary to attract and keep the qualified staff. In the areas where certain work profiles are needed only temporarily, such work can be entrusted to external executors.

− Billing and Collection: PUCs and municipalities should establish effective mechanisms for defaulters, and if necessary, the laws should be changed in order to predict the use of these mechanisms. The state and other public institutions need to compensate for the debts of PUCs. The problem of illegal connection to water supply needs to be solved too. Where necessary, the IT systems should be improved in order to improve the performance of billing and collection.

− Maintenance and Investments: The maintenance which will be focused on problem prevention should be introduced (if financially justified) and foreseen in the budget. Investments should be analyzed from the financial and technical aspect. Primarily, the priority should be given to those investments which, in the end, reduce the expenses.

4.6.2.2 The state and local self-governments should implement a mandatory benchmarking of financial and operational performance

Benchmarking should be used as a tool for PUC reforms, because in this way information and knowledge of companies can be obtained. The obtained information will be useful when answering some questions, like for example: which PUC has most opportunities to improve its efficiency in work, which tariffs will enable the cost recovery, or how can an improved efficiency lead into reduction of number of staff in certain regions.

Benchmarking is an (1) efficient instrument not only for the national legal provisions on public utility companies, but also (2) important tool of the local authorities and PUC management to get organized more efficiently in providing services. The results of comparison with the most successful, i.e. indicators and their analyses are important for two reasons: 1) they provide feedback to PUCs, that these can use for internal purposes, such as planning and measuring the progress of their own reforms; and 2) indicators can be used within the monitoring process since they provide a better understanding of the functioning of the sector, trends and differences among PUCs.

− The government, in cooperation with municipalities, should establish a body responsible for data collection, and introduce the criteria to assess the financial and business performances for each of PUCs’ relevant services, on the basis of an experience in Serbia, and in accordance with international standards. The government should establish the time frame for achieving the said criteria.
The government should establish the criteria on the basis of key performance indicators for the distribution of subsidies for capital investments in the sector. By applying these criteria, the priority will be given to those investments whose goal is improvement of the financial and business results, as well as awarding those PUCs which achieve a better performance.

Local level activities:

- The identified standards should be entered into PUC’s business plans. The business plans should clearly identify the long-term financial resources necessary for achieving these goals.

- Some of these standards (or key performance indicators) and financial resources necessary for their achievement should be the main part of service agreements between municipalities and PUCs, as well as every contract between municipalities and private operators which provide services.

- The managerial contracts should be based on service agreements, and linked with a business plan and key performance indicators.

- PUCs should establish a management information system, which can provide the relevant financial and business data, and provide information for internal and external use.

The results of benchmarking will include:

- When PUC managers once gain knowledge about their results in relation to the aforementioned benchmarks, they can immediately begin to improve programs in their companies (greater efficiency, lower costs, better service). This is particularly noticeable in a transparent, open system of comparison with the most successful entities, and where consumers have access to performance data and can make a formal or informal pressure on a PUC.

- If comparison with the most successful entities helps in achieving greater efficiency before the private partners starts managing PUCs, then a large share of the profit will belong to municipalities or national governments rather than the future private partners.

- Monitoring the performance of the most successful under a PUC’s current leadership will help to determine whether the participation of private sector is the best option to improve performance, or, if management in the public sector is not able to achieve better performance, which will be determined by comparing the results, then it will be the reason for the introduction of the private sector. Acceptance of these parameters of success can become a key element of a contract to be concluded with the private sector partners.

- The strategic planning is essential, in which the Serbian PUCs do not have a long tradition. Planning requires a good assessment of the current situation and modern trends. Comparison with the most successful will bring useful inputs and a framework for thinking about this process.

- Key performance indicators will be used when new tariffs are proposed, and every year when new tariffs are proposed and approved.

- Decision-makers on the local level will have a better insight into municipal services and will be able to efficiently distribute insufficient resources and determine the goals for the future.
of their PUCs, which will be entered into their service agreements. Fees for PUCs’ management and the amount of profit for PUCs and private providers should be linked to achievements, i.e. accomplished business goals.

- Citizens will have a clearer picture of a PUC’s performance, and also whether the performance justifies for the higher tariffs or not.

4.7 Tariffs

4.7.1 Background

Functioning of PUCs in the water, wastewaters, district heating and solid waste sectors relay largely on tariffs (user charges) for their operations. Public transport companies rely on the combination of incomes from tickets and resources received from municipal budgets for their needs. Tariffs in these sectors are normally insufficient to provide services on a desired level, and to allow for maintenance investments and extension of existing infrastructure. Often, the incomes from tariffs complement other means of support, such as performing contracts or agreements for the provision of secondary services, those that do not represent core business. While many of the financial problems faced by PUCs are related to the inefficiency and poor management, inadequate pricing of services is a key part of the problem.

In general, municipalities are reluctant (with several recent exceptions in bigger cities in Serbia) to increase prices of utility services in order to cover the real expenses of PUCs. Reasons for that lie in the combination of the following factors:

- Current policy of increasing prices up to the inflation rate (by controlling fiscal transfers to municipalities);
- Reluctance to increase prices that citizens would not be able to bear;
- Concern that increase of prices would deteriorate problems related to collection;
- Current prices are based on an assumption that the collection rate will be achieved with 100%;
- Subsidizing of prices for these services for households through much higher tariffs for commercial customers.
- Problems arising from the current way of working are as follows:
  - Depletion of municipal budgets, which are forced to subsidize the work of PUCs through annual transfers;
  - Lack of cash to fund urgent investment requirements;
  - Distortions in the economic cost of services; conflict with the principle of user payment, which is fundamental to good fiscal management;
  - Cross-subsidization between user groups, i.e. the tariffs for commercial users are often much higher than the tariffs for households, which burdens the private sector's economic activities in an inappropriate way;
  - Inability to attract private capital into the sector, since a PUC is unable to make profit.

The combination of government policy and local pressure has led many PUCs not to be able to cover any actual expenses, let alone be able to fund maintenance or capital investment. In
addition, in many cases PUCs rely on revenues from non-core services, such as lucrative contracts awarded by the Municipal Directorate for Construction Sites, (see 4.5) in order to fund their core activities.

*Affordability:* Tariffs should be much higher than the current ones, but the tariff policy must take into account the solvency of the population, which may limit possibilities for the price increase of services. For example, the criteria for obtaining a grant from the EU explicitly recognize that the price increase is limited by economic acceptability. This view has been institutionalized in the funding of the project by establishing limits to the amount of capital cost recovery, expressed as a proportion of household income spent on basic services. Standard limits usually amount to 2% of average household income for waste management, 4% for water and sanitation, and 5-10% for heating.

Within these standard limits, there is plenty of room for increasing prices of PUC key services in Serbia. Numerous recent studies have estimated that the percentage of income spent on waste management ranges from 0.3% to 0.6% of average household income. "KfW" studies in eight medium-sized cities have estimated that the percentage of household income that is spent on water ranges between 0.6% and 1.2%. The tariffs could be increased from three to six times and still remain within the acceptable limits. This supports the thesis of increasing the prices in the sphere of PUC key services. Moreover, given the low prices participate with a small percentage in the total costs, even significant increase of prices will have little impact on overall inflation.

4.7.2 Strategic Policies and Key Actions

4.7.2.1 Municipalities and the state should adopt a tariff policy that will achieve the following objectives, even if it means increasing the tariffs:

- Provide the necessary resources for PUCs so that they could provide an acceptable level of service;
- Keep the prices on the level that is acceptable for most customers;
- Apply the principle "a consumer pays", which includes the payment of the full cost, so that capital investments would be covered through users' fees;
- Provide incentives for greater efficiency; and
- Attract investors from both public and private sector.

4.7.2.2 The tariff policy should reflect on the following elements:

- Tariffs should cover operational costs and capital investments that are to be paid from revenue (including the servicing of loans). The increase in costs for salaries and other expenses related to employees should be allowed only in cases the additional services are provided. Capital investment should be equal to the cost of depreciation per annum.
- Pricing structure should ensure that public enterprises and private operators in the utilities sector have adequate income; share of profit should result from greater efficiency; in the case of PUCs, profits should be used for capital investments.

- Predetermined price increase for investments as well as so-called maintenance fee shall be binding on the way to direct capital investments (including the servicing of the loans).

- Price differences between households and businesses will be eliminated over the next five years, unless the current situation is justified by the difference in quality or quantity of service delivery.

- Impact of increasing prices to consumers with low incomes should be assessed and alleviated by the budgetary allocations for PUCs (burden of subsidies to privileged users should fall on the budget of a local self-government, not on a public company). Protection should not be provided by a PUC in the form of lower prices.

4.8 Regulation of Tariffs and PUC's Performance

4.8.1 Background

Section 4.5 of the Strategy recommends the establishment of standards for business plans and requires that a PUC conducts its activities through a service agreement with municipalities. Section 4.6 describes how comparison with the most successful can be used in setting performance goals for a PUC, and the necessary steps to be taken to achieve them. Section 4.7 describes the strategy for the adoption of appropriate pricing policy in order to achieve better performance. Section 4.8 describes how and who will enact and regulate such a policy.

The need for regulation: Public enterprises that charge users for their services are considered "natural monopolies" and, as such, are subject to regulation, especially in terms of tariff determination by the state administration, both at the local and the national level. Services related to the water sector, waste management and district heating are the key services of PUCs in Serbia, and are considered natural monopolies.

The reason for the control of tariffs of private enterprises is not the same as in the case of public companies (which exist in most municipalities in Serbia). Tariff controls in the case of private enterprises aim to prevent abuse of monopoly position. Tariff regulation regarding PUCs in Serbia, on the contrary, should enable the financial viability of PUCs and compliance with the principle "consumer pays" even if it means increasing tariffs.

A key element in promoting private sector participation in these natural monopolies is the reliability of income and price, necessary to achieve profitable operations. Without a clear pricing regime, which must not be subject to political negotiations, the private sector will not be willing to invest. Since the private sector participation in municipal utility companies will play a key role in their transformation, the regulation will be necessary in the future for both private and public providers of these services.

Current regulation: Local authorities are currently responsible for determining the tariffs of PUCs in Serbia. Fearing that the increase in tariffs will only lead to a larger number of employees in the PUCs, the Government has adopted measures to limit the tariffs at the level of inflation rate. (However, the regulatory body responsible for energy has recently adopted
guidelines for the methodology of calculating the price of district heating that municipalities will begin to apply). Under the provisions of the Law on Public Enterprises and the Law on Performance Functions of Common Interest and the Regulation on the procedure to temporarily suspend the transfer of the transferring funds from the budget of Serbia to local authorities, the state has envisaged the possibility of temporary suspension of transfers to municipalities that allow the increased utility prices above the level of inflation anticipated by the Memorandum of the Budget, in order to implement its macroeconomic policy. Exceptions to the generally accepted policy are allowed in practice when the need for increasing the price is well-documented. Together with this process of price control, the state also receives the annual business plans of PUCs. Regardless of the business plans and the law-abiding contents and structures of these plans, they don't contain indicators of operations, and financial and operational performance. Where these indicators exist, they rarely change or compare with indicators from other municipalities ("benchmarking").

The effect of macroeconomic policies and other factors is reflected in the retention of prices on an artificially low level. Moreover, some municipalities do not even raise prices even to the extent permitted by the Memorandum on the Budget, and use the government's macroeconomic policies as an excuse to succumb to political pressure and keep the non-economic costs. Binding of price increases only to inflation means not taking into account the need to finance new investments, to improve services and to compensate for what is lost due to prices that are historically well below the level of simple reproduction. But, in order to ensure that the tariff increase is not without effect on increasing investment, it will be necessary to tie the setting of tariffs for the fulfilment of certain performance indicators and by implementation of effective business plans described in sections 4.5 and 4.6.

**Regulation tasks:** The cornerstone for the establishment of a regulatory regime that should enable the reform of the public utility sector is a mandatory business planning and comparison with the most successful business and financial results of other municipalities ("benchmarking"), as described in sections 4.5 and 4.6. The basic feature of the regulatory regime as practiced by the EU member states is the binding of price increases to realization of the goals of the business plan.

A business plan should contain:

- Capital expenditure plans and their justification;
- Financial plan that will determine which part of the investments will be financed from the PUC cash flow, and which from the budget subsidies and other sources;
- Measures to improve business results, which are presented by performance indicators and by their planned action to financial results.

Therefore, the key tasks of regulation are as follows:

- To determine the format of business plans, to examine and approve them;
- To determine the methodology for tariff setting and approval of tariff increases, which are in accordance with this methodology, as provided by business plans (for PUCs, as well as for private companies which provide utility services);
To identify and explain key performance indicators and targets of the comparison with the most successful entities, which should be included in business plans and services agreements.

**Options for regulation**: Potential bodies responsible for the mentioned task are:

- Municipalities;
- Relevant ministries;
- A state body specialized in regulating the public utility activities;
- An independent supervisory institution, a newly-established body or an extended role of an existing supervisory institution in the field of energy; or
- A non-governmental organization, e.g. the Standing Conference of Towns and Municipalities (SKGO).

Bearing in mind the requirements for reducing the number of employees in public administration at all levels, it is unlikely that a new regulatory body will be established, unless it would employ only those who are already employed in public administration. In this context, the capacities of municipalities to perform their function in the regulation and supervision should be critically reviewed.

### 4.8.2 Strategic Policies and Key Actions

#### 4.8.2.1 Regulate tariffs in key PUC sectors by law.

In both public and private companies, consistency and reliability of the method of determining the cost of municipal services is essential. It is equally important that the cost is high enough to enable companies to provide the quality services. This means that prices should be determined in accordance with the law which applies the best European experience and practice in establishing the cost of municipal services. The regulation of the water sector in Poland has used a similar model. In order to achieve this, the following steps are recommended:

- A working group composed of representatives from the Ministry of Finance and other relevant ministries, representatives of municipalities (including SKGO) and the regulatory body for energy will adopt a methodology or a formula for setting prices in key sectors: district heating, water and waste water, and solid waste management.
- The methodology will be harmonized with the tariff policies described in section 4.7.2.2 and will reflect the principles of full cost recovery.
- PUCs will be obliged to prepare proposals for price increases in their business plans and in accordance with the law.
- Municipalities will be responsible for assessing compliance with the law in the sectors of water supply and solid waste management, while this responsibility in the case of PUCs engaged in district heating will be taken over by bodies in charge of energy. If the proposed rates comply with the law, the municipalities will allow their application (the price list coming into force). Ministries and other interested parties will be entitled to repeal PUCs’ price lists, at a certain time frame, if they consider that they are not in accordance with the law.
- The technical assistance will be provided for working groups in developing tariff methodologies, as well as in enabling municipalities to control and approve the proposed tariffs.

- Until such a methodology is adopted, PUCs will be allowed to permit predetermined price increases only in order to finance capital investment without government influence (and without fear that their transfers will be suspended).

- Charges for other services, such as public transport and funeral services, will not be arranged by these methodologies. In the case of public transport, municipalities may establish payment for services, for example, based on mileage, rather than forcing transport companies to rely on revenue from tickets.

4.8.2.2 Municipalities, in cooperation with the state, should take a lead in improving of the Business Plans quality, establishing key performance indicators and benchmarking information

Municipalities should take responsibility for monitoring the impact of PUC performance. It is in their interest that their PUCs improve their financial and operating results, with the aim to provide quality services and achieve the lowest possible prices for citizens and businesses. In addition, they will have to be able to monitor the functioning of the utility sector, if they intend to successfully attract private operators. The national interest is also to ensure that the said business performances improve.

- In accordance with the recommendations of section 4.6.2.2, the Working Group, which will be established by the government and municipalities, with the assistance of relevant ministries, will establish model business plans for each of the core PUC sector, as well as key indicators of financial and business performance (as described in section 4.6), which will be incorporated into business plans. This can be done in phases, with most important sectors having priority. The model Business Plan will be based on guidelines already established by the Ministry of Finance for PUC Business Plans.

- In accordance with the law establishing the tariff methodology, municipalities and PUCs will utilize the Business Plan models to establish tariffs.

- In accordance with the recommendations of the working group, the government and local self-governments will create a body responsible for monitoring the performance of public utilities ("the Body"), as an inter-ministerial agency or as an independent body, with the main objective to collect and assemble information and analyses on the performance indicators included in the Business Plans. The government will mandate PUCs to report to "the Body" according to standardized information requirement to be developed, both with regard to financial and operational performance and assessment of business plans. Initially "the Body" should be an advisory body without executive duties. The relevant line ministries will provide staff for this body.

- The Body will be responsible for assembling the information and establishing benchmarks for performance that can be used by the state and municipalities to assess the performance of the PUCs. It will also be made public to citizens, so that they can assess the performance of their local service providers.

- Technical assistance will be mobilized to assist both the working group and the body to develop the necessary human resources in the municipalities and in the PUCs to
carry out these new responsibilities. It will develop training modules, provide training at the local level, and disseminate good practices.

- The government will use performance indicators in assessing priorities for capital investment funds.

4.8.3 Relevant Experience in Other Countries

*Tariff setting*: prices are usually determined by one of the following models:

- In Poland the prices in this sector are determined by the regulations which arrange which expenses are covered by tariffs. These include expenses like depreciation and amortization; costs of capital after the depreciation is calculated; profits and reserve for delayed claims. The municipalities are responsible for determining the compliance rates. Disagreements between PUCs and municipalities in terms of tariffs are decided in court.

- In Bulgaria the companies in the water sector are under the control of an independent oversight body which reviews and approves business plans and tariff proposals.

- In the water sector in the Czech Republic, the formula for pricing is based on the method of "cost-plus", which means that firms set prices based on a list of charges made by the government plus an agreed amount of profit. Ministry of Finance has supervisory authority. This formula, which is used in other countries too, is often criticized because it does not encourage greater efficiency, but actually rewards inefficiency because the profit is based on costs incurred.

- In most countries the differences in the formation of prices between different social groups of users have been abolished, although some systems allow for a "block fee", which means that there is a lower price, designed for a minimum consumption, and a higher price for those who spend above the minimum. It is intended to promote savings and lower consumption.

- The relevant requirements of EU: The EU Regulation 1370/2007, of 10 December 2009 requires concluding a contract of providing a public service in the sector of public transport. This means that in accordance with the EU regulations on state subsidies, all transportation companies owned by municipalities or the state (not including only companies that manage urban rail traffic due to lack of viable competition for fixed lines) that currently receive subsidies must sign an appropriately formulated agreement for the provision of public services with their owners. In short, a valid and complete contract should contain at least the principles of payments for completed work norms; payments and prices should be agreed with the generally-acceptable performance standards branch; the annual indexation of payments should be adopted, penalties and termination clauses on cooperation should also be required to ensure accountability. All payments should be based on the established formulas, which are contained in the Agreement on the provision of public services, or based on mileage (the advantage of risk demand), or on the basis of net cost.
4.9 Funding of Capital Investments

4.9.1 Background

Capital investments are crucial for the successful management of many PUC services. They not only provide capacities to expand services and serve additional customers, but also improve performance and respond to social and environmental requirements. In order that these objectives have been achieved in an efficient manner, they must be adequately planned to respond to real needs, and must fit in the capacities of municipalities and PUCs to identify funding.

**Capital investments needs:** One of the key issues that PUCs face and the services they provide is the chronic lack of investments in physical assets, both in terms of new investments to meet the existing needs, but also in terms of maintaining the existing infrastructure. The reason for that is mainly the lack of resources, but partially also a generally poor planning and an unclear implementation process. At the same time, it is expected that there will be significant demands for expansion of existing infrastructure to meet the future needs of citizens, as well as to meet the requirements concerning the protection of the environment and human health, as obliged by the Serbian government and the EU integration process. Estimates for some sectors, such as water and waste water exceed the sum of 1 billion Euro, with similar or less demands in other sectors, such as solid waste and construction and repair of local roads.

**Capital investment planning:** In many sectors, however, the problem is aggravated due to poor planning, which leads to an increase in "supply" rather than a decrease in demand, for example, construction of new sources of water supply instead of replacing pipes and reducing swelling, making a new landfill, instead of reducing waste. Regulations of Republic of Serbia require that the feasibility studies of projects are completed before approval and funding, but it is often only a "pro forma" in order to respect the law, and ignore the financial and practical reality. There is often a lack of coordination between municipalities, so as to duplicate an investment or, if there is a coordination, projects are made to meet political pressures, not to achieve maximum profitability. The law obliges the PUCs to adopt the annual business plans and they are expected to include plans for capital investments. But due to lack of regular funding, these plans are often either too grandiose or unrealistic, or short-term projects focused on “patching holes”.

**Capital investment funding:** Capital investments are financed from several sources, each limited, and even taken altogether, they do not provide the necessary resources to satisfy all the PUC sectors:

- **PUC own revenues:** Most PUCs have barely enough income to cover their operating costs, let alone capital investments, although some of the biggest among them generate cash flows that allow them to fund capital replacements.

- **PUC borrowing:** PUCs have taken some loans from commercial banks, but these are very small amounts and usually with short maturities and relatively high interest rates. Commercial banks take into consideration the cash flows of PUCs to determine their creditworthiness, and because of low tariffs and limited support from municipal budgets, only a few PUCs are creditworthy enough to attract commercial lenders. Municipalities are not allowed to be guarantors of indebtedness of PUCs. If we add the lack of precise provisions on the ownership of PUCs, indebtedness becomes a problem for utility companies; many companies do not even try to take out commercial loans, they rather rely on state or local self-governments' subsidies.
- **Municipal budgets:** This is generally the main source of capital investments. Most municipalities have space in their annual budgets to set aside 20-30% for capital investments. This money, however, must cover all sectors and is usually not sufficient to cover all the investments that utility companies require.

- **Municipal borrowing:** Municipalities have the right to borrow, but their credit capacities are limited by the Law on Public Debt and by their financial situation. On the basis of the Law on Public Debt, the amount of outstanding long-term borrowings for capital investments cannot exceed 50% of the total budget revenues of the previous year. The amount of principal and interest due in each year must not exceed 15% of the total budget revenues of the previous year. At the same time, municipalities must make surplus income, sufficient to convince creditors that they are able to repay debt. Large municipalities, which use their relatively high budget revenues (since 2005 fiscal reform) are now reaching their legal limits (impact of the recent financial crisis, including a reduction in government transfers, has significantly reduced the possibilities of borrowing). Smaller municipalities still have a substantial credit-worthiness. One study from 2007 shows that, excluding the four largest municipalities, the municipalities in Serbia may be indebted to a total of 500 million Euro. Many smaller municipalities, however, cannot count on long-term borrowing from commercial banks due to lack of confidence in their credit standing.

- **Government subsidies:** PUC service sectors are subsidized from many sources, of which the largest is the National Investment Plan (NIP). Other sectors receive funds from line ministries, for example, the Fund for Environmental Protection for projects related to solid waste; the Budgetary Fund for Waters of the Republic of Serbia for projects in water supply and sanitation. Continuous funding for many of these sources is questionable, this especially relates to the NIP, which is expected to win most of the funds from international financial institutions.

- **International grant/loan funding:** International donors, particularly the European Commission, have already funded significant PUC projects, and they are expected to be the main source of funding in the future. Other bilateral donors provide funds for individual projects, usually in the sectors of environmental protection and transport, but none on overall EU level. International financial institutions like the World Bank, EIB, KfW and EBRD provide funds for local PUC projects, but with the exception of the EBRD, such financing is either indirect - through the state as an intermediary, or with the state guarantee, and it usually goes along with the requirement for co-funding. EU-funded programs generally go along with the request to the national or local sources to finance at least 15% and in some cases 25%. In addition, EU donations, as well as others, can only be aimed directly at investments in the public sector, i.e. those investments which will be owned by enterprises in public ownership. EU regulations prohibit the transfer of these funds to the private sector prior to the expiration of at least five years and have strict requirements regarding the possible benefits that operators in the private sector could draw from grants allocated to the public sector.

- **Private investors financing:** Investments of the private sector in capital projects is relatively limited in many PUC sectors (See 4.10.1). One of the advantages of private sector investment is that it does not use the credit capacity of the municipality or the money from the budget. As such, they are often seen as additional limited resources for capital investments. Private sector investment is not free; private investors expect to eventually make profits from budgetary costs or from user fees. Besides being an
additional source of funding, the potential benefits of private sector investments are the faster implementation and greater profitability.

Implementation: Large number of capital investments in the public utility sector is managed by municipalities, especially in big cities, where Directorates for Construction Sites fund projects and manage them. At the same time, some PUCs have their own construction units dealing with construction, and which perform capital investment projects both for themselves and for others. Both these factors have potentially negative effects. In the case of Directorates for Construction Sites, which often rely on their own predetermined resources, they establish investment priorities independently of PUCs, which are responsible for providing services. PUCs with their construction units often make a part of profit from these services, which compensates for losses in other areas. But due to limited supply, this leads to inefficient construction costs.

4.9.2 Strategic Policies and Key Actions

4.9.2.1 PUCs should be responsible for planning of investments, with oversight and approval of municipalities as part of annual Business Plan approval process

- Proper investment planning is essential to ensure that limited resources are directed towards the most necessary projects, and those that generate the highest profits with minimum costs. At the government level, the focus is on new investments with a maximum of infrastructure components, such as landfills, water treatment plants, water reservoirs and plants for sewage treatment. These are the biggest investments that normally cannot be funded without grants from national or international sources. At the same time, other investments, such as facilities for recycling, replacement of pipes, pumps that provide energy efficiency, are of the same if not of the higher importance to achieve lower prices and better services.

- Business plans should include plans for long-term capital investment, with clearly identified priorities, which would enable the beginning of investments as soon as the funding is received.

4.9.2.2 PUCs should pay for at least a portion of their capital investment costs.

With the request that PUCs bear part of the investment costs, they are encouraged to take into account to a greater extent the feasibility of the investment and its proportions. In addition, there are numerous financial structures that can be used, and which will not use the credit capacity of municipalities. To achieve these objectives, additional measures should be adopted, including the following:

- Tariffs should cover at least part (20%) of total investment costs for those PUCs which create income. This may require a predetermined tariff for investments (which will persuade both the government and citizens that the increase of fees is intended for the improvement of services, and will also be a guarantee for creditors).

- Municipalities should be allowed to provide a guarantee for the debts of their PUCs, provided that the debt is not included in the legal limit (the Law on Public Debt), if the debt is repaid by the enterprise itself. Also, if the loans for capital investments taken out by the municipalities are financed by leasing, or PUCs pay rent, these debts should be exempt from the legal limit. If implemented, these guarantees should be monitored.

- As an alternative to providing guarantees for PUCs' loans, municipalities can use the "Support Agreements" which provide payment in the event that the tariffs are not increased enough to pay for PUC's debts. This will satisfy creditors that an adequate
financial support is provided, and reduce the political risk of being unable to increase tariffs when necessary, but will not pose a direct guarantee for the debts of PUCs.

4.9.2.3 **Capital grants should include a co-financing requirement from the municipality or the PUC**

- Grants are likely to continue to play a significant role in financing capital investments. It is important that these grants are distributed so as to encourage the most efficient planning. Providing grants should require users to find regional solutions if they are more effective. Requirement that local authorities are co-financiers will give greater assurance that the investments are really necessary, well-measured and planned to be implemented with minimum costs. By supporting investment planning which reduces demand, the costs of capital investments will be reduced.

- In addition to providing funding through donations, the government can help the PUC investments through grants, as well as encourage local financing through loan guarantees. This can be done using a special instrument of lending to municipalities, similar to the FLAG programme in Bulgaria, and through direct guarantees for loans by commercial banks (as KfW is currently doing - with government support).

- Similarly, municipalities can help financing of their PUCs through guarantees or other credit support mechanisms. An agreement can be made that the municipality, if rates do not rise enough to repay debts, pays the PUC directly an amount of tariff increase which is not implemented.

4.9.2.4 **Private sector financing of capital investments should be encouraged, ut should be carefully compared with public sector investments to ensure benefits.**

Private sector investments in capital represent an attractive alternative, particularly when public funding is limited. Given the huge capital requirements, it is important to establish the right framework for encouraging private sector capital investments in the local PUC service sectors. (Ref. Section 4.10) But experience elsewhere shows that PPPs have sometimes proved more expensive for customers than publicly-financed investments. Private investment should therefore not be viewed only as “filling a gap” in available funding, but must also demonstrate that it provides a lower-cost option than comparable public sector projects. Methodologies for assessing this comparison should be developed.

- Develop methodology for comparing cost benefits of private and public sector projects.

- For projects that are likely to be eligible for future EU grant funding, private sector investments should be carefully managed, so that they do not jeopardize potential EU grants which can only be provided to public sector investors.

4.9.2.5 **Procurement for PUC capital investment contracts should be competitive and open to private sector contractors and not managed internally.**

The practice of using construction contracts to offset losses in operations of many PUCs contributes to a lack of transparency. More importantly, it does not ensure that construction is carried out at the lowest price. Ending this practice may result in reduction of staff levels at PUCs, but these should be absorbed at private companies providing construction services.
4.9.3 Relevant Experiences in Other Countries

The problem of capital investments for utilities can be found in almost all countries: too little money, a lot of requests. Capital investments are still a combination of different sources. Some solutions include the following:

- Based on the “affermage” system in France in which assets are held by the local government and leased to private sector operators, many countries have implemented the use of “asset holding companies” which receive lease payments from operators and use these funds to borrow and finance capital investments, including replacement of existing assets. This borrowing is separate from that of the local government and generally not included in whatever statutory debt limits may exist in the country.

- Bulgaria has recently created its Fund for Local Authorities and Governments (FLAG) which has used an initial “seed” grant from the government to borrow additional funds which it uses to make loans to municipalities and municipal companies.

- In many countries in the region, PUCs, including water and district heating companies, if they are financially sound borrow directly from commercial banks. This debt, if structured properly is not included in general government debt calculations, either by Eurostat or by the IMF.

- In some cases, European Union regulations on State Aid have prevented district heating companies from getting major capital grants for expansion.

4.9 Encouraging Private Sector Participation

4.10.1 Background

Private sector participation (“PSP”) in services provided by municipalities can play a useful role in getting quality services and financing of capital investments. Advantages of private sector participation are:

- Specialized and professional management, thus achieving greater efficiency in service delivery. This is especially true in the case where a private sector partner is a strategic investor with experience in managing public services.

- Transfer knowledge and technology from the private sector.

- Financing of capital investments which does not use the limited financial capacity of the public sector.

- Faster and cheaper getting to capital investments.

- Creating competition in the public sector enterprises, which improves the efficiency in business in both public and private sectors.

Participation of private sector in providing municipal services in the municipalities in Serbia is relatively small.

- So far there has been no private sector participation in water supply and wastewater treatment, in part because of legal restrictions, although this was one of the first areas to develop cooperation between the private and public sectors in other countries in the region.
In the waste management sector, four large foreign strategic investors have entered into a partnership with a number of municipalities. Two of them have entered into contracts for the collection and transportation of waste. The other two have been contracted to build landfills and other equipment in accordance with EU regulations. All these projects involve contracting on a regional basis, not just one municipality. The structure of these private sector projects takes the form of joint ventures with municipalities, with the assumption of assets and personnel of the existing PUCs dealing with solid waste.

In the public transport sector, some municipalities have entered into contracts with private operators. In Belgrade, more than 30% of bus service contracts have been made with private operators. These services are usually contracted on the basis of mileage. The city retains the revenue from tickets and pays the agreed sum to a private operator.

There is little private sector participation in other PUC activities, e.g. in the construction and maintenance of roads, cleaning streets, maintaining parks and so on.

In the gas distribution sector, which officially does not belong to a utility, a joint venture agreement (not PUC) has been made in Sombor, with private investors.

Serbian legislation contains both opportunities and obstacles for private sector participation. The Law on public enterprises that operate activities of general interest clearly allows joint ventures and agreements with third parties for utility services, except in the sectors of water, waste water, district heating and rail transport.

The Law on concessions also allows private sector participation and partnership between public and private sector in providing utility services, including services that would otherwise be provided by PUCs. In places, the legal environment sets limits for public-private partnerships, for example:

- The Law on concessions does not promote private sector participation in providing utility services. In its current form, the Law on concessions contains provisions which may partially explain the absence of municipal concessions.

- The Law on Communal Activities stipulates that a change of ownership of state capital in public utilities may be exercised up to 49% of the total value of the state capital, in accordance with the regulations governing the legal position of public enterprises and regulations on the conditions, manner and procedure for change of ownership of the state capital. This limitation is unacceptable for the private sector, because it is difficult to suppose that the private investor will agree on minority participation in a PUC.

Although private companies are interested in participating in the provision of utility services, there have been no major investments in Serbia so far. The reasons are:

- The unclear legal environment;
- Unreliable mode of determining tariffs;
- General reluctance of local authorities to cooperate with the private sector;
- Current financial conditions that prevent the private sector to invest more.

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4 “On the structure of the partnership (public and private sector) waste management in Serbia”, www.misp-serbis.rs
The previous strategies have discussed options that have suggested the privatization of all public utility companies. This is no longer considered a realistic and sustainable policy. First of all, the willingness of the private sector to enter into PUC affairs is limited, especially in a situation of general economic uncertainty. Second, the process of forming a partnership is by nature a gradual and long lasting, it must be carefully and selectively planned and should mobilize the best advisory services, and the whole undertaking would be managed by the Government. In addition, different sectors require different approaches, since the participants and substances are different, as are the forms of contracting on private sector participation. Partnership of public and private sectors in the water sector is different from the waste management sector:

**In the water sector:**
- Large multinational companies are interested only in the largest water and sewerage companies in the country;
- Investments are very large, up to several hundred million Euro, sometimes more than one billion Euro;
- Contractual form of private sector participation is usually a concession or agreement under which the private sector builds an infrastructure project, manage it and eventually transferred ownership of the project to local authorities (Build - Operate - Transfer);
- The concession is usually limited to one (larger) municipality.

**In the waste sector:**
- Medium-sized enterprises dominate the conclusion of partnerships with municipalities and groups of municipalities;
- Investments are modest, typically ranging from one to ten million Euro;
- These partnerships tend to have regional coverage which includes several municipalities, rarely is it just one city (see chapter on regionalization), and
- Contractual form of partnership between public and private sector usually is a joint venture, not a concession.

While in the sectors of water supply and waste management the foreign strategic investors are likely candidates for a partnership of public and private sectors, in the field of non-core services local investors can expect a bigger role.

### 4.10.2 Strategic Policies and Key Actions

#### 4.10.2.1 Base PSP strategy on the supply of private sector interest, rather than the demand for capital.

- A key first step is to assess the market for PSP, with technical assistance, to determine the appetite among private investors for PSP and in what sectors.
- Canvas the market to determine what conditions need to be met, e.g., legal, regulatory, etc. in order to attract PSP.

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5 “National Program of Integration with the EU, October 2008, puts the partnership of public and private sectors in the center of the reform strategy in the field of the PUC. The report says that "the strategy suggests various options for privatization of PUCs, including a partnership of private and public sector, i.e. the interaction of two sectors, concessions, etc., in accordance with the practice in Europe".”
4.10.2.2 Adopt sector-specific strategies for attracting private sector participation.

- In the **water sector** limit the objective to major specialized (i.e. not multipurpose) water PUCs which may attract strategic investors.

- In the **waste management sector**, building on the positive experiences so far, encourage the further spread of regional PPPs and identify measures that will improve the business and legal environment for spread of PPPs.

- In **other services** (e.g. green markets, cemeteries, parking lots, etc.) distinction should be drawn between revenue generating activities and those that depend on budgetary payments from the municipality. Municipalities will be encouraged to privatize services that can operate on a commercial, with the objective of increasing efficiency and reducing public sector staff levels. For those non-revenue-generating services, such as street cleaning and road maintenance, municipalities should consider contracting out these services to private sector service providers.

4.10.2.3 Create the proper legal framework that will attract PSP.

- Using input from the private sector as well as IFI lenders, identify changes in legislation and regulations that would be helpful to implement the above strategy. These include amendments of the Concession Law which would facilitate the autonomous contracting for concessions by municipalities, and repeal of the restriction to a maximum 49% by private entities in PUCs. The Government should commission a comprehensive review of the legal environment for PSP participation, tasking it with recommendations to remove undue constraints on municipalities to engage PSP and to improve processes to facilitate PSP. Following the inter-ministerial approval process for such recommendations, the Government should introduce the requisite legislation to Parliament, and/or the decrees/regulations which can be implemented by the Government or the responsible Ministries.

4.10.2.4 Adopt an appropriate legal framework to attract private sector.

- In the **water sector**, the Government should, in consultation with the relevant municipalities (1) identify the PUC, possibly, may be suitable for private sector participation, (2) formulate an approach and measures for attracting strategic investors (3) engage, if necessary, credible international consultants, to assist the competent authorities of municipalities.

- In the **waste management sector**, Minimize central government interventions in municipally sponsored PPP projects, but identify measures and incentives that would further encourage the spread of PPPs. Some of the waste management PPPs has come under criticism for lack of transparency in the selection of the private partner and the subsequent contractual agreements between the private partner and the municipalities. Shortcomings in these areas should be corrected by municipalities engaging professional transaction advisors to support them in developing model contracts, tender documentation, and bid evaluation, and by strict adherence to rules of competitive procurement, and the Government should support such activities. The Government should exercise its legitimate role in seeing to it that the procedures of tendering and contracting conform to the requirements of the law; this role should also be exercised through disclosure requirements concerning contracts to a responsible Ministry or agency.

- In **other services**, the Government should first mandate the separate accounting for distinct activities in multipurpose PUCs (and/or the formation of separate PUCs or
PUC subsidiaries for peripheral activities) so that their financial status can be assessed. This will help the municipality determine whether contracting these services or selling the PUCs to the private sector will provide a cost benefit.

Simultaneously, the Government should establish incentive mechanisms and provide assistance to municipalities that are proposing to outsource commercially viable peripheral services.

4.10.3 Relevant Experiences in Other Countries

**Water Sector:** In the ex-socialist economies that have joined the EU since 2004, PSP in the water sector of these countries has taken the form of concessions, in some important cases to major French (as in Bucharest) and British (as in Sofia) water companies. In the water sector the main targets of the foreign investors were the biggest cities. In Bulgaria there is only one water concession - in Sofia; in Romania, Bucharest and two other major cities have concession. In Hungary as well, investor interest focused on Budapest and a few larger towns such as Szeged. In the Czech Republic 70% of the water sector is operated by private companies, although for the most part, municipalities retain responsibility for capital investments. While the experience with water concessions in Eastern Europe has been mixed, in each case the concessionaires contributed substantial investment to the modernization and improvement of the service.

**Waste Management:** In most EU countries, waste management is carried out both by municipal enterprises and by private companies. After the transition in 1989/90, a number of private companies made substantial investments in Eastern Europe. Unlike in the water sector, strategic investors targeted also medium sized municipalities, and the investments were much smaller than in the water sector, so that relatively small companies also participated in the process.

The predominant form of PSP in these countries was a joint venture. In Slovakia, Czech Republic and Hungary, a number of joint ventures between strategic investors and municipalities were in the forefront of modernization and regionalization of the service, and made substantial contribution to compliance with the EU’s landfill directive by financing EU conform landfills. However in some countries, for example in Bulgaria, foreign PSP was limited to the transport and collection of waste, not to investment in landfills, reflecting a poor business environment for long term investment.

The experience of Slovakia and the Czech Republic is an outstanding success story in PSP in waste management. In the early 1990s, the then Czechoslovakia introduced an innovative policy aiming at the replacement of some 5,000 unregulated dumps by modern regional landfills. The consequent legislation adopted a two pronged approach of (regulations to close most of the local landfills by administrative decree (2) financial incentives for the development of new landfills that met EU standards. This policy resulted in strong incentive for municipalities to enter into joint ventures with investors to modernize and take over the service. Slovakia and the Czech Republic achieved compliance with the EU’s landfill directive without any central budgetary support of landfill construction.

**District Heating:** There has been some PSP in the district heating sector in countries in the region, notably in Macedonia, the Czech Republic, Poland, and Lithuania, as well as in Ploesti in Romania. However, because of concerns about tariffs, the need for significant investment in rehabilitation, and the impact of fluctuating fuel prices, growth of PSP in recent years in the region has remained relatively small.
5 ACTION PLAN

After the recommendations contained in this strategy are adopted, it will be necessary to devise and implement an Action Plan in order to achieve the objectives of the strategy. Key elements of the Action Plan that should be developed are:

Legal reforms:
Identify and make draft changes to laws that are necessary to implement strategies;

- Transfer of ownership of PUC assets to local self-governments;
- Allowing conversion of PUCs into commercial companies;
- Allowing commercial companies to provide water, wastewater and district heating services;
- Mandating corporate governance requirements, including:
  - Appointment of management,
  - Preparation of Business Plans and Service Agreements,
  - Creation of municipal units to monitor PUCs;
- Mandating collection of Key Performance Indicators;
- Development of tariff-setting legislation;
- Develop income support programs for low-income households to deal with tariff increases;

Institutional reforms:
- Creation of municipal services for PUC monitoring;
- Creation of "task forces" for tariff setting and benchmarking initiatives;
- Creation or appointment of an body responsible for the implementation and monitoring of key performance indicators and benchmarking;

Expert assistance:
- Assisting “task forces” in tariff-setting and Key Performance Indicators;
- Assisting in Legislative drafting;
- Assessing private sector potential and identifying additional legal reforms;
- Assisting municipalities in capacity development for contracting and monitoring performance of PUCs;
- Advisory services to municipalities in pilot “PPP” projects, including identification of projects);
- Training of PUCs to implement performance improvement measures and to assume responsibility for capital investment planning, financing and implementation;