

**Guidelines for Performance-Based Contracts between
Municipalities and Water Utilities in Eastern Europe, Caucasus
and Central Asia (EECCA)**

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¹ EECCA stands for Eastern Europe, Caucasus and Central Asia. It is composed of 12 countries formerly known as the NIS (Newly Independent States of the former Soviet Union) that included Armenia, Azerbaijan, Belarus, Georgia, Moldova, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

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EXECUTIVE SUMMARY

In recent years, various countries in Eastern Europe, Caucasus, and Central Asia (EECCA) have attempted to improve their physically and financially distressed urban water supply and sanitation sector. One mechanism employed has been the use of contractual agreements between municipalities and water utilities. As contracting agreements constitute a relatively new approach in the EECCA region, there is potential for the EECCA urban water sector to derive further benefits from the use of such agreements.

One of the impediments to the success of commercially-oriented management of water utilities (be they managed and/or owned under a public or private framework) has been the sometimes intense and conflicting linkages between the utilities and the municipal leadership. In these cases, the absence of a clear definition of the roles of water utilities and those of the municipality hampers the independent management of utilities. Furthermore, the absence of a monitorable target level and quality of service and management does not assist utilities to maintain adequate and efficient performance. This problem was addressed in “The Guiding Principles for Reform of the Urban Water Supply and Sanitation Sector in the NIS”, adopted at the 2000 Ministerial Conference in Almaty, Kazakhstan, which emphasised the necessity of clear roles for the national authorities, local governments, water utilities (vodokanals), and the public.

In order to assist the urban water sector reform in EECCA, OECD/EAP Task Force developed the present Guidelines for Performance-Based Contracts. Generally, performance-based contracting consists of an instrument designed to help define sector development goals and resources, and lay out the roles that government institutions should play in order to reach them. In particular, these contracts impose strict time-bound performance targets to be achieved by the operators in exchange for increased autonomy of the operator. Performance targets include the level and quality of service, management and operational efficiency, financial and investment requirements, and institutional improvement. As with any agreement, this contract should be the outcome of a shared vision between the government and the utility of what these services should become, which in turn will define the resources and the financing needed to reach them. International aid agencies and donors can be instrumental in providing financial and technical assistance to help frame these agreements on solid principles and in sharing their broad experience with similar types of contracts in other countries and sectors.

Before undertaking an in-depth analysis of the key elements to be considered in relation with the development and implementation of a performance-based contracting scheme, this report will provide a brief overview of the different types of contractual options available for performance-based contracting. Such overview will be helpful to decision makers responsible for the urban water sector reform in the EECCA region because it analyses available performance-based contracting options in the context of regulatory, economic and social elements or issues that might be prevailing or arising with regard to a particular EECCA water utility. Issues such as responsibility for capital investment, political risk, financial status of the water utility, and critical problems experienced in connection with the available options will be addressed.

As the provision of water services to the population is such a fundamental and vital consideration for any society and consequently implies the input and intervention of numerous governmental and regulatory entities, these Guidelines will also consider important cross-sectoral issues which relate to the implementation of a performance-based contracting scheme.

Once the reader has familiarised itself with the different contract implementation options, the issues and obstacles relating therewith and the cross-sectoral issues to be considered in relation therewith, these Guidelines will address and analyse the key elements which need to be considered in connection with the preparation, negotiation, implementation and periodic revision of a successful performance-based contracting mechanism, namely:

Project Scope:

- Definition of clear contractual objectives and responsibilities following and pursuant to (i) a dialogue process to be put in place between the Contractor and the Contracting Authority and (ii) the conduct of an appropriate and adequate due diligence process, so as to allow the parties to be aware of any detail or information which might influence or affect the efficient development of the water utility;
- Clear identification of the service area to be covered by the Contractor in order to strike an appropriate balance between the revenues of the Contractor and the overall quality of the services provided to the population within such service area;
- The duration of a performance-based contract shall not be considered as a strict condition thereof but rather as a result of the objectives of the contractual arrangement to be entered into; and
- Early termination provisions to be included in a performance-based contract in order to ensure the timely and efficient development of the utility;

• **Legal and Institutional Framework:**

- Examination of the legal framework currently in place with regard to the operation of a water utility in order to implement a contractual mechanism which is appropriate in relation therewith or, alternatively, proceed to the modification of such legal framework in order to allow for the implementation of the desired contractual mechanism; and
- Analysis and possible modification of the institutional framework as the role of the Contracting Authority will no longer be one of a direct service provider but rather one of a monitoring entity for which sufficient and efficient regulating and monitoring capabilities will need to be set forth;

• **Performance Indicators:**

- Performance indicators to take account of the current condition of the water utility in order to set performance levels which are feasible and performance indicators focusing on the aspects which are the most essential to the utility's development and improvement;
- Examples of performance indicators; and
- Other elements to be considered in connection with performance indicators, such as the importance of an appropriate and efficient monitoring system, the inclusion of a revision mechanism in relation with such performance indicators and the modification or suspension of the required levels of performance;

• **Tariffs and Financial Obligations of the Contracting Authority:**

- The tariff-setting mechanism should be established with great care as in the vast majority of cases, tariffs constitute the most important source of revenue for the water utility. Tariff fixing is a delicate and complicated operation due to the fact that several issues are to be considered, such as the financial viability of the utility, social objectives of the utility and economic efficiency, and to be balanced against the fact that tariffs to be received by the Contractor should at least cover all operational costs of the utility in order to ensure that services are efficiently and adequately provided and that the value of fixed assets of the infrastructure is preserved;

- With regard to water utilities for which tariff systems are based on a cross-subsidy mechanism (allowing certain customers to pay well below the average tariff while other consumers pay above such average tariff in order to balance the total tariffs to be perceived by the utility), it will prove fundamental to consider such mechanism when negotiating and establishing a performance-based contractual arrangement;
 - The party bearing the risk of tariff collection should be allowed to adopt appropriate measures in order to obtain payment from consumers;
 - As for the performance levels to be achieved by the Contractor, the contractual provisions of a performance-based contract which relate to tariffs shall be subject to a revision mechanism in order to ensure that the utility at all times benefit from a level of tariffs which permits its adequate development; and
 - The Contracting Authority is sometimes responsible for the whole or part of the financing of capital investments relating to a water utility and clear contractual provisions should establish the Contracting Authority's obligations in relation therewith;
- **Financial Penalties and Bonuses and Incentives:**
 - Financial penalties in a performance-based agreement constitute an insurance policy regarding the satisfaction of the level of services to be achieved by the Contractor, but should be prudently used in connection with an agreement entered into in connection with an EECCA country water utility since such penalties risk to directly affect the general financial condition of the utility, and consequently the operational conditions thereof, which are most probably already in a precarious state;
 - Bonuses and incentives in a performance-based contract are complementary to penalties as they also aim to influence the performance of the Contractor. However, one should be very careful when setting forth bonuses and incentives as, if the utility is operated by a publicly-owned Contractor, such financial incentives should only be tied to the performance of the individuals exercising the management and operation of the utility;
- **Monitoring:**
 - Monitoring is an essential element to performance-based contracting as it will allow the parties to determine whether their respective obligations are fulfilled and evaluate their performance in achieving such obligations, allowing the parties to establish whether or not the performance-based contractual arrangement benefits to both of them as well as to the development of the utility;
- **Contract Enforcement/Conflict Resolution Mechanisms:**
 - Dispute resolution procedures should be included in the contractual arrangement as they entail a more efficient and cost effective determination of contractual disputes as an alternative to legal procedures. Whichever mechanism is chosen by the parties in order to resolve potential conflicts, such mechanism should always aim at resolving any conflict promptly, efficiently and impartially so as to create minimal interference with the operations of the utility which needs to carry on ensuring the provision of water supply to the population;
 - These guidelines will discuss the judicial, quasi-judicial or administrative, arbitral and non-binding dispute settlement mechanisms available to the parties to a performance-based contract for dispute settlement;

- **Risks:**
 - Risk allocation is a major component of any contract in the water sector: who will assume risks in the delivery of the service or in the construction/rehabilitation, operation and maintenance of water facilities is often a central question in a performance-based contract in the water sector, especially where the Contracting Authority is a public entity and thus subject to public scrutiny;
 - Logically, as the level of risk which is transferred from the Contracting Authority to the Contractor increases, the more financial reward the Contractor will demand;
 - These guidelines will analyse the following main risks to be considered in regard to performance-based contracts: operation and maintenance risks, political risks, regulatory risks, and revenue risks;
- **Costs:**
 - During the negotiation and drafting stage, the parties should always consider the actual and potential costs inherently and indirectly associated to performance contracting in the water sector as such costs are often unavoidable and various;
 - A government considering to reform a water utility and wishing to implement performance-based contracting as a means of achieving an improved and more efficient water network should consider hiring qualified technical, financial and legal consultants in order to conduct a thorough analysis of the network and possibly eliminate or at least mitigate future costs.

The requirements for performance-based contracts, as contemplated in these Guidelines, are provided as a starting point for further and improved contractual arrangements in the water sector in EECCA. These Guidelines are relevant for municipalities wishing to establish a contractual relationship with a public or a private utility. In using and interpreting these Guidelines, it is important to remember that drafting contracts is not an exact science and, depending on particular contents, may require carving out what is judged to be unnecessary and adapting what is thought to be important. Countries in EECCA have identified the need for better water treatment facilities and have expressed their willingness to find resources to fulfil this need. This willingness, together with the assistance of experienced and qualified professionals in the water sector that can draw from international best practices, should provide the EECCA region with the necessary capabilities to establish working and performing contracts which will improve their respective water utilities and will ensure an environment which could attract private investment.

1. INTRODUCTION

The demise of the Soviet Union and the social and economic changes which followed have greatly influenced the EECCA region – for better or for worse. With such social and economic reform usually comes a transition period, which in turn often leaves many issues in a state of uncertainty. Although these reforms (mostly modelled after the western world, i.e., Western Europe and North America) theoretically now afford the EECCA region with countless new opportunities by which it can solve any economic and social deficiencies, the EECCA region still faces certain barriers to entry, including: (i) a growing anti-westernisation sentiment and (ii) lack of know-how necessary to implement new technical, legal and economic/financial concepts.

This is the case, for instance, for the water sector in the EECCA region. The aging infrastructure and inefficient water utilities, combined with the concept of “universal service²” and insufficient municipal budgets, have caused the municipal governments to consider new alternatives to improve efficiency and rehabilitate the water utilities (whether privately or publicly owned/managed), including Performance-based Contracts.

Compared with the traditional administrative regulatory approach, these contractual agreements seek to clarify the respective roles of municipalities and water utilities, improve accountability for fulfilling the expected outputs as defined in the contracts, and provide incentives for operational efficiency and effective investments. Contracting agreements in the urban water sector constitute a relatively new approach in the EECCA region and limited experiences to date demonstrate that there is room for improvement in order to fully realise from the potential benefits of these contracts.

It is in this context that these guidelines for performance-based contracts for urban water sector in EECCA have been developed. The guidelines are intended to serve as a reference for municipalities and water utilities in the region that are considering developing performance-based contract arrangements in their efforts to improve the sector performance but lacking adequate know-how. These guidelines are developed based on lessons learned from some of the preliminary case studies within and outside the EECCA region.

2. PERFORMANCE –BASED CONTRACTS

Since the early 1990s, performance contracts have emerged as an innovative tool to improve public sector accountability and performance in many countries.³ Such interest in performance-based contracts is based on governments’ increasing focus on bottom-line results and a general shift toward more decentralized management.

Performance-based contracting arrangements are intended to promote savings, efficiency, and responsiveness that are expressed in terms of performance expectations linked to budgets, service, and management.⁴ These contracts spell out clearly overall targets to be achieved by the contractor but the specific manner employed to achieve such results is left to the contractor’s discretion. Thus, this results-oriented contract differs from those previous contracts that focused principally on inputs and procedures. The contracts also contain a mutually agreed set of monitorable performance targets with financial incentives and penalties. As the contractors’ remuneration is tied to their ability to meet the targets, such agreements provides an incentive for the contractor to improve its performance and efficiency.

² The universal service obligation (USO) is the obligation placed on water utilities (and governments) to ensure that water is reasonably accessible to all people on an equitable basis, wherever they reside.

³ OECD, “Performance Contracting: Lessons from Performance Contracting Case Studies & A Framework for Public Sector Performance Contracting”, 1999.

⁴ OECD, “Performance Contracting: Lessons from Performance Contracting Case Studies & A Framework for Public Sector Performance Contracting”, 1999.

Performance-based contracts have been used at the national and local government levels, ranging from internal managerial agreements to contracting out arrangements. Types of performance-based contracts used in the public sectors include⁵:

- Organisational agreements between a minister and an agency head;
- Agreements between an agency head and a lower level line manager within the same organisation;
- Partnership-style agreements between two independent agencies, and arrangements for the supply of goods and services between different agencies;
- Agreement or understanding between the central government and a sub-national government;
- Contracts between a public agency and a private or non-profit organisation for the supply of good and services.

Agreements between public sector entities are generally “quasi-contractual” agreements and are not legally enforceable. An OECD study⁶ on the use of performance contracting shows that legally enforceable contracts are generally not effective and efficient for relationships between public sector entities partly due to the fact that many public sector agencies are not separate legal entities and thus, they cannot pursue claims against each other in the courts. However, the same study concludes that legally enforceable agreements are desirable in the following rather limited circumstances including:

1. Relationship with a fully commercial state enterprise for the delivery of non-commercial outputs to the government, where an arm’s-length contractual relationship may be appropriate.
2. Arrangements for the supply of commercial services between different state-owned enterprises.
3. Relationship between an enterprise and the government for the supply of goods or services.

The urban water supply and sanitation sector can be categorised either as category 1 (publicly run utilities) or category 3 (public-private partnerships or public-public partnerships) listed above and thus, legally enforceable contracts can be employed as a mechanism to improve its performance. However, in the cases under category 1, the levels of enforceability would vary depending on the utility’s degree of independence from the municipality.

Around the world, formal, multi-year performance-based contracts have been agreed between a number of municipalities and water utilities. The involvement of the private sector in some countries through PPP/PFI (public private partnership/private finance initiative) has also contributed to the wider use of contractual agreements with performance targets in the urban water sector.

Many argue that PPP/PFI are best suited to solve the shortfalls of the EECCA water sector, as private investors are supposedly better equipped to assist the government, both financially and technically, in improving efficiency of water supply and overall cost effectiveness. Although this may be true, there remains underlying fundamentals which must be considered and cured before PPP/PFI can be envisaged. Such fundamentals include a sound social, economic, institutional/regulatory and legal framework which will ensure the bankability of the PPP project and thus attract reputable private investors (and perhaps international investors). In the interim, however, contracts between the municipal government which regulates the water sector and the utility in charge of operation and

⁵ Petrie, Murray. A Framework for Public Sector Performance Contracting, OECD 2002.

⁶ *Ibid.*

maintenance of the water and wastewater supply⁷ can be entered into, and performance-based contracting can be used. Such contracts can serve as a precursor to PPP/PFI initiatives and should include performance indicators which can be monitored and which are linked to performance incentives.

⁷ As used in this paper, the term government can be a local, regional or central body that owns the utility. In turn, a utility is a public agency or department in charge of the provision of water services.

3. CONTRACTING ARRANGEMENTS IN THE URBAN WATER SECTOR IN EECCA

3.1 Overview

In the EECCA region, the reform of urban water sector began in the late 1990s. The reforms introduced included the decentralisation, which shifted some responsibilities of the central governments to municipalities. The reforms transformed the majority of water utilities into communal enterprises and others into joint stock companies or corporations owned by the local governments. However, the process generally took place without adequately supporting legal and institutional framework and without clarifying the rights and responsibilities of various actors involved so as to enable water utilities to function as commercial entities. As a result, the reform process has largely not been effective and the condition of the water supply and sanitation infrastructures continue to deteriorate, threatening peoples' health and further economic development. Although the level of connection to water supply services is generally high in most EECCA countries, the sector is facing serious challenges that require urgent actions including the needs to:

- Reduce its high operational costs
- Improve cost-recovery level
- Reduce unaccounted-for water level
- Improve the service quality

While municipalities have developed performance agreements with water utilities on numerous occasions, the results have been disappointing as these agreements often did not clearly define all the rights and obligations of the parties and lacked clarity on financial and technical performance objectives⁸.

In order to improve the vicious cycle of “low tariffs, low efficiency and high costs, inadequate resources, low service quality, and loss of community support”⁹, some municipalities in EECCA have entered into contractual relationship with water utilities in the recent years. The involvement of the private sector through PPP/PFI has also provided an opportunity to introduce formal contracting arrangements in the water sector. Defining municipality-utility relationships by using contractual agreements is a rather new approach in the EECCA region. As the case studies below show, contracts developed in the region to date still have room for improvement.

3.2 Case studies

This section reviews case studies of contractual agreements between municipalities and urban water utilities in selected cities of Russia and Ukraine. The review will provide summaries of each case study and identify obstacles encountered. How to overcome these obstacles and deficiencies in the contracts will be addressed in the succeeding chapter on Guidelines for Performance-Based Contracts. One should keep in mind that many of these agreements cannot be characterised as “performance-based” contracts as they represent preliminary, limited experiences in contractual arrangements that are still at initial stage of development in EECCA.

⁸ Environmental Resources Management, *Obstacles and Opportunities to Commercialising Urban Water Services in the New Independent States (NIS): Final Report* – Vol. 1, June 2000.

⁹ Yepes, Guillermo, “Consideration for the Design of Performance Agreements with Public Utilities in the Water Supply Sector”, OECD 2002 (Annex 3).

CASE STUDY 1: RUSSIA¹⁰

OVERVIEW

The Russian federal law, On General Principles of Local Self-Governance in the Russian Federation, stipulates that the organisation, maintenance, and development of municipal water supply and sanitation are under the competence of local governments. Although there are a few cases where the state owns water supply and sanitation systems (including the cities of Moscow and St. Petersburg as well as in the water scarce regions of Primorye, Stavropol, and Krasnodar), in general, municipalities own water supply and sanitation properties and operate them as municipal unitary enterprises.

In the past decade, there have been a few limited cases where water supply and sanitation enterprises were privatised and thereafter entered into contractual relationships with municipalities (including the cities of Otradny and Nefteyugansk). These cases are the first signs of interest in establishing public-private partnerships in the Russian urban water sector. Some of the common characteristics of these contract agreements are as follows:

- The water supply and sanitation infrastructures remained under the municipality ownership.
- All contracts are based on the Russian legislation.
- When lease contracts are agreed, an independent expert must provide the evaluation of the property leased.
- When trust management contracts are agreed, it is necessary to conduct property inventory, review an asset and liability balance, and provide independent auditor's report on the structure and value of enterprise assets.
- The private company operates and maintains the assets.
- The municipality administration controls and assesses the quality of operation and maintenance; however, this is not fully exercised in practice.
- Based on the Russian Federation Government Resolution No. 239, tariffs for all infrastructure companies except for municipally-owned enterprises are regulated by the Russian Federation. That is, once the utility becomes private, municipalities are not allowed to regulate and revise tariffs for the private operator's sake.

In early 2000s, municipalities of Syzran, Otradny, and Nefteyugansk decided to save the financially bankrupt water enterprises that are municipally owned and established private utilities based on contractual agreements. In all of the three cases, trust management contracts were agreed between the municipalities and the private water operators. On the other hand, a lease contract was agreed in Perm with a newly created private company.

Syzran

In the city of Syzran, private operator Syzran vodokanal was founded in 2001 by local business society including industrial enterprises that were major consumers of water supply and sewerage service. A trust management contract was agreed between the municipality and the Syzran vodokanal for a term of five years. During its first year of operation, the private operator invested more than US\$100,000 in the water supply and sewerage systems, which improved the financial situation of the

¹⁰ Sivaev, Sergei, "Formation of Contractual Relationship between Municipalities and Private Companies in the Water and Wastewater Sector in the Russian Federation", 2003 (Annex 1).

utility to some extent. However, the contract does not provide description of the specific properties transferred from the municipality to the private operator. In addition, due to the lack of funds, the required assessment of the transferred property was not undertaken. The contract sets the operator's remuneration at a fixed rate and does not provide an incentive for better performance. Also, the contract does not impose targets that are time-bound. In addition, the contract does not describe conditions and procedures for tariff revision.

Otradny

In Otradny, joint stock company UK ZhKKh of Otradny was established in 2000, with the city owning 33.3% of the shares and the rest owned by two private organisations. The municipality and the company signed a trust management contract for five years. The contractual arrangement has resulted in some positive outcomes. The number of staff employed in the water supply and sewerage services declined, which reduced the share of wage expenses out of total operational costs from 57% in 2000 to 36% after the new operation started. In addition, the number of customer complaints regarding the service quality declined. However, as in the case of Syzran, the contract did not clearly specify the property and value transferred from the municipality to the operator. The contract does not provide clear time-bound performance targets to be met by the operator and the operator's remuneration is not tied to its quality of performance. Also, the contract does not clearly specify the operator's responsibility. The contract does not define the scope of financing for operation and maintenance nor for tariffs. The trust management contract is currently going through revision to correct the deficiencies detected and is expected to convert the contract into a lease agreement for 15 years with investment obligations by the operator.

Nefteyugansk

In Nefteyugansk, in 2001, the municipality and a private operator, Yuganskvodokanal, signed a trust management agreement for 12 months. The Municipal Property Management Committee was the sole founder of the newly created operator, which means that the operator is under the municipality's control and has little autonomy. The contract provides rather limited clarifications on the rights and obligations of the parties concerned in terms of the property use, tariff setting, and penalty for non-compliance. The term of the contract is too short to implement investment programmes and the contract has no provision on its extension after the expiry. As in the previous two cases, the contract does not contain time-bound performance targets to be achieved by the operator that are tied to remuneration.

Perm

The case of Perm shows a rather different context for public-private partnership in the water sector. In 2003, a conclusion of a lease contract was agreed between the municipality and joint-stock company Sovremenny Gorod for a period of 49 years, with the latter responsible for operation and capital investments. The objective was to improve the quality of the utility administration and to renew fixed assets of the water utility. The newly created company is owned by a large financial company. It should be noted that the newly created company and its owner have no previous operational experience in the utility sector although they do have strategic interests in Perm. The contract clarifies the property ownership more clearly than the previous three cases. Also, the contract has certain time-bound targets to be performed by the operator with respect to service quality. Although the contract defines US\$199 million to be invested in network, the contract does not specify investment programme. Furthermore, the contract does not clearly describe the tariff policy. The contract has no description of the property lease to the utility. The investor's rights are better protected in the contract than that of the municipality.

CASE STUDY 2: UKRAINE¹¹

OVERVIEW

Since 1991, the previously state-owned utilities have been going through a process of decentralisation whereby utilities have transformed into communal-property enterprises and the utilities' assets have been handed over to municipalities (territorial gromadas)¹². By 1998, the central government had eliminated the budget subsidies to utilities. As of 2002, municipalities owned 61 utilities while the central government owned four water utilities. At the same time, local governments have been empowered to approve tariffs for utility services provided by municipal enterprises. In August 2001, Ukraine introduced unified Tariff-Setting Rules for Centralised Water Services for all utilities, which established the procedures for the formation of base tariffs, the list of costs to be incorporated in tariffs, the process of tariff approval, and indexation, and tariff regulation. The development of Ukrainian legislation and its harmonisation with the European Union standards have significantly affected the reform process of its housing and utility sector. The Law on Enterprises in Ukraine created the necessary conditions for transforming the water and sewerage departments of city councils into autonomous commercially-oriented business entities. Also, a provision in the company law states that if the approved tariffs did not enable utilities to operate with profit, the tariff-setting authorities are obliged to reimburse the differences between the approved tariffs and actual costs. However, this provision has not been practiced in reality.

As the deterioration of water supply and sanitation facilities gives rise to the need for significant capital investment, private sector involvement into the water sector has been seriously considered in the recent years. Over the last several years, the Ukrainian legislation has been developed in order to accommodate opportunities for private sector involvement in the operation of utilities. The legislation on concession and leasing has been adopted and also the new Civil Code has been enacted to introduce asset management. However, Ukrainian laws prohibit the privatisation of engineering infrastructure and urban utilities, thereby those facilities remain municipal property even if there is private sector involvement. So far, 14 cities have entered into lease contract with former utilities as open joint stock companies or limited liability companies. Also, there have been a few cases of service contracts developed between municipalities and water utilities in Ukraine.¹³ Such contracts, however, have largely been more political than contractual in nature, often did not meet the requirements of legislation, and did not specify production and financial benchmarks or quality parameters. Performance-based contracting is a new type of approach that has so far been introduced selectively in the cities including Kijmelnytsky, Lutsk, and Lviv. Recognising the importance of measurable service and quality level benchmarks, Ukraine is currently developing the Concept of Water and Sewerage Sector Regulation to address performance-based service contracts.

Lutsk

In 2002, a water and sewerage service contract was agreed between the City of Lutsk and Lutskvodokanal for the duration until 2006, creating an enterprise 100% owned by the municipality (territorial gromada). Positive results of this contract agreement include an establishment of an Advisory Committee, comprising representatives of local utilities, the Executive Board, and public organisations in the city, which is intended to adopt decisions on key contractual performance matters and other strategic issues. Also, work is underway to develop and approve local laws to create a revolving energy conservation fund in the city's utility sector. Although the contract lists 18 performance indicators, it does not provide specific measures or monitoring procedures, which reduces

¹¹ Svyatotska, Valentyna, "Case Studies of Contracts in the Urban Water Sector in Ukraine", 2004 (Annex 2).

¹² In reality, the joint property still remains a controversial issue; some utility companies remained in state ownership and are still run by district or regional authorities despite the current legislation listing gromadas as lawful holders of communal property.

¹³ According to informal sources, contracts have been made between municipalities and utilities in cities including Sevastopol, Kremenchug, Zolotonosha, Odessa, and Lviv.

the practical use of these indicators. Other major elements missing in the contract include: insurance provisions, provisions regarding staff recruitment and training, technical parameters of service provision, remuneration system tied to performance, annual reporting, guarantees, arbitration, financial penalties, provision regarding service continuity, assets transfer, and investment settlement at the end of the contract.

Lviv

In 2000, the City of Lviv and the municipal communal enterprise Lvivvodokanal entered into a service contract for the water and sewerage service for five years. The newly established company is a communal enterprise owned 100% by the municipality. Financial sources for investments in equipment modernisation included the World Bank loan, the city budget, the company's own resources, and state fund. The contract lists two sets of performance indicators: one for the utility and the other for the municipality, both of which provide detailed targets for each year until 2006. The company submits its performance indicators to the City Executive Board on a quarterly basis. As a positive outcome of this contract agreement, water service to 140,000 consumers has increased from 6 hours a day to 12 hours a day. However, similar to the case in Lutsk, the contract is lacking major elements including: insurance provision, provisions related to staff matters, remuneration system tied to performance, guarantees, arbitration, financial penalties, provision regarding service continuity, assets transfer, and investment settlement at the end of the contract.

Zaporizhzhya

In 2003, the City of Zaporizhzhya and the Zaporizhzhya vodokanal signed a service contract for an indefinite period of time. As in the cases of Lutsk and Lviv, the newly created company is a communal enterprise owned solely by the municipality. The company designed a tariff methodology (approved by the Executive Board of the City Council and endorsed by the EBRD before the enactment of the unified Tariff-Setting Rules) which provides for regular tariff revisions twice a year in order to adjust costs in line with the operations and customer interests. Also, the City Council undertakes the responsibility to rehabilitate the company in the event of bankruptcy (Resolution No. 35). Unlike the other two cases above, this contract does not include performance indicators. Other major elements missing in the contract include: insurance obligation, work distribution between the parties regarding maintenance and replacement work as well as capital investment, remuneration tied to performance, annual reporting, financial penalties, and provision regarding service continuity, assets transfer, and investment settlement at the end of the contract.

Donetsk

In 1997, the City of Donetsk and the Joint Stock Company Donuglevodokanal and the Donetsk Regional Branch of the State Property Fund concluded a lease contract for the state property, which subsequently became communal property of the territorial gromada of Donetsk. In 2001, Donuglevodokanal and the City of Donetsk concluded a contract for technical operation of communal property for a term of five years, with possible extension for another five years with the parties' consent. This type of privatisation typically ignored the principles of corporate participation of shareholders, virtually remaining under the control of municipal authorities. Some major elements missing in the contract include: time-bound performance indicators tied to remuneration, insurance provisions, guarantees and sanctions, and annual reporting.

Table 1 below provides an overview of issues encountered in above mentioned contractual agreements in the urban water sector in Russia and Ukraine.

Table 1. Issues Encountered in Contractual Agreements in Russia and Ukraine

<i>Categories</i>	<i>Description</i>	<i>Case Examples</i>
Duration	The contract does not provide terms and procedures for extension of the duration.	Lutsk, Ukraine Lviv, Ukraine
Monitoring	Municipalities do not fully exercise their responsibility to control and assess the quality of utilities' operation and maintenance.	Syzran, Russia Otradny, Russia Nefteyugansk, Russia Perm, Russia
Autonomy/competition	Municipality is the sole founder of the operator and thus the operator has limited autonomy. There is no competition in operator selection process.	Nefteyugansk, Russia Lutsk, Ukraine Lviv, Ukraine Zaporizhzhya, Ukraine
Property ownership/assets	Contracts do not provide description of the properties transferred from the municipalities to operators.	Syzran, Russia Otradny, Russia Nefteyugansk, Russia Perm, Russia
	The required state registration and assessment of the transferred property have not been completed properly.	Syzran, Russia Otradny, Russia Nefteyugansk, Russia Perm, Russia
	Contracts do not clearly provide operators' rights and limits of use and repair of the property.	Nefteyugansk, Russia
Financial penalties	Contracts provide limited descriptions on the rights and obligations of the parties in terms of non-compliance.	Otradny, Russia Nefteyugansk, Russia Lutsk, Ukraine Lviv, Ukraine Zaporizhzhya, Ukraine Donetsk, Ukraine
Financing/investment	Contracts do not have investment plans and financing plans for the operation and maintenance costs.	Russia all
Remuneration incentives	Operators' remuneration is not tied to their performance.	Syzran, Russia Otradny, Russia Nefteyugansk, Russia Lutsk, Ukraine Lviv, Ukraine Zaporizhzhya, Ukraine Donetsk, Ukraine
Performance targets	Contracts do not describe time-bound performance targets to be achieved by the operators.	Syzran, Russia Otradny, Russia Nefteyugansk, Russia Lutsk, Ukraine Zaporizhzhya, Ukraine Donetsk, Ukraine
<i>Categories</i>	<i>Description</i>	<i>Case Examples</i>
Insurance obligation	Contracts do not contain insurance provisions.	Lutsk, Ukraine Lviv, Ukraine Zaporizhzhya, Ukraine Donetsk, Ukraine
Service operation	Contracts do not provide technical parameters of service provision.	Lutsk, Ukraine
Guarantees and sanctions	Contracts do not specify issues on guarantees, arbitration, financial penalties, and emergency measures.	Lutsk, Ukraine Lviv, Ukraine Donetsk, Ukraine
End of contract	Contracts do not specify service continuity, assets transfer, and investment settlement at the end of contract.	Lutsk, Ukraine Lviv, Ukraine Zaporizhzhya, Ukraine

4. GUIDELINES FOR PERFORMANCE-BASED CONTRACTS IN EECCA

4.1. Background information for these Guidelines

Performance-based contracts in the water sector are a realistic approach to curing immediate deficiencies, but the contract models currently available and the means used to implement such contracts in the EECCA are few and often inadequate. The best available contract models can be found in PPP/PFI initiatives which have often been successfully implemented throughout the world. Such models are based on international best practices and necessarily include private investors, but the concept contained therein can easily be transferred to a smaller-scale performance-based contract (carving out the inapplicable or unnecessary elements) which would apply to a public utility and involve no private investment. It also follows that these models are more forceful, as the terms and conditions used to contractually define PPP/PFI projects are usually more comprehensive – but this situation should not be seen as deterrent, but rather as incentive to ultimately achieving a robust performance-based contract. By using the comprehensive PPP/PFI contract models as benchmarks, we are forced to consider and assess the various issues which can arise in connection with a performance-based contract in the water sector.

These Guidelines, which are based on PPP/PFI models, are designed to serve as a basis for performance-based contracting, and to a certain extent, as a foundation to future private sector participation. Performance-based contracts do not necessarily require a privatised water utility, but such contracts could be used to attract private investors at a later stage. Consequently, it is important to fully understand the various private-sector-participation options available. The following section consists of: (i) a brief overview of the different private-sector-participation options and (ii) the cross-sectoral issues to be considered.

(i) Private Sector Participation (PSP): Various Options¹⁴

In many countries, PSP is a key requirement for meeting growing demands for water supply services. The private sector is an important source of new investment capital that is relatively scarce for many economies. It also brings management expertise and, in the case of foreign private investment, technologies and know-how which may not be presently available.

The range of PSP options is quite broad. PSP in the water sector involves a continuum of options ranging from options with a relatively low level of PSP to those with a high level of PSP.

These are:

- Service contracts;
- Management contracts;
- Leasing – affermage;
- BOT type contracts;
- Concessions; and
- Divestiture under license, or new entry of private sector participants through build-own-operate (BOO) arrangements.

The World Bank (1994)¹⁵ discusses these approaches and variations on them in some depth. It identifies service and management contracts with the private sector as potentially useful precursors to more

¹⁴ This section is taken from “*Developing Best Practices for Promoting Private Sector Investment In Infrastructure - Water Supply*” – Asian Development Bank (ADB)/2001

¹⁵ World Bank (1994), World Development Report — Infrastructure for Development Washington DC: World Bank.

comprehensive PSP. Porter (1996)¹⁶ provides detailed analyses of all of these approaches with particular reference to international experience in the water and sanitation sectors. The following subsections present a brief summary of the principal techniques.

Service Contracts

Service contracts include supply and civil works contracts, technical assistance contracts, plus sub-contracting or contracting out aspects of the water supply service. These contracts involve a water utility contracting with a private contractor for the provision of specific services such as design, construction, tunnelling, information technology, tariff collection, operations and maintenance. In its simplest form, the private contractor provides agreed services to the public authority under the public authority's general control and supervision.

Service contracts are a potentially beneficial form of PSP where there is strong political or community opposition to wider involvement of the private sector and if there is opposition to water tariff increases which are generally required for many of the other forms of PSP (e.g., lease contract).

Management Contracts

A management contract is a more comprehensive form of service contract, under which the public authority appoints a private contractor to manage all or part of its operations. Under such contracts, the bulk of the commercial risk and all the capital and investment risks remain with the government.

These contracts are useful if the core objective is to increase a utility's technical efficiency for performance of specific tasks. If management contracts include clauses which link the contract payments to utility performance, they come closer to the lease and concession arrangements discussed below¹⁷.

Like service contracts, management contracts can lead to improvements in service for those customers who are connected to the network but they provide little potential for improved access by those potential customers who are not connected to the network.

Management contracts are a potentially beneficial form of PSP when there is strong political or public reluctance to water tariff rises or there is concern about handing over more control to the private sector. Management contracts may also be the preferred approach if potential private sector investors consider that the risks associated with a higher level of private involvement are currently too high. If this course is followed, the government can seek to address some of the risk factors over the duration of the contract. For example, the government may implement changes in tariff and regulatory structures to facilitate a greater preparedness for private sector risk taking in the future.

Lease Contracts

Under a lease contract, a water utility leases the full operation and maintenance of its facilities within an agreed geographic area to a private operator for a period of time, say, ten years. The contract grants the operator the right to invoice and collect charges from customers within that area. The public utility would own the assets and remain responsible for major extensions and upgrades. The operator would be consulted on all major works, especially when the continuity of service is involved, and may participate in tender evaluation or submit its own tender.

Under a best practice lease contract, the private operator would take the full commercial risk on all operations within its lease area, with its remuneration directly linked to the charges it collects from

¹⁶ Porter, M G. (1996), 'The Urbanisation Context' in Volume Three of the Proceedings of a Regional Consultation Workshop Towards Effective Water Policy in the Asian and Pacific Region W.L Arriens, J. Bird, J, Berkoff and Paul Mosley (eds), Manila: Asian Development Bank.

¹⁷ Guislain, Pierre (1997), *The Privatization Challenge: A Strategic, Legal and Institutional Analysis of International Experience* Washington DC: The World Bank.

customers. From these charges, it would pay the public utility a rental fee intended to cover the public utility's capital costs in extending or upgrading the facilities.

Under a lease contract, the operator is usually required to finance the renewal of plant and equipment. At the termination of the contract, the government would compensate the operator for the works it had financed that had not yet been fully amortised. The management of such works (preparation, procurement, and supervision) would be the operator's full responsibility. Best practice lease contracts have built-in incentives that encourage the private operators to:

- Update customer files and implement efficient collection procedures to improve the collection ratio from customers (including government agencies);
- Implement an aggressive commercial policy aimed at servicing more customers to increase the revenue base;
- Reduce operating costs to maximise profits;
- Carry out regular maintenance to increase the reliability of plant and equipment and postpone their renewal; and
- Make decisions, not only on day-to-day management issues, but also on improvement of the facilities for which the operator is responsible.

BOT Type Contracts

Build-own-operate-transfer (BOOT, a.k.a. BOT or ROT) schemes are an adaptation of leasing contracts specifically designed for greenfield water projects or investments in water infrastructure which require extensive rehabilitation. The nature of these contracts makes them particularly amenable to water sector projects. Under these arrangements, the private sector typically designs, constructs and operates facilities, and provides services to municipal or government owned water utilities. Generally, any existing underlying assets are leased for a limited period, often 15 to 30 years. Contracts should be designed to allocate risks between the private operator and the public utility, preferably according to capacity to manage and minimise risk.

In contrast with lease contracts, BOT type contracts allocate much more of the commercial risk for specific projects to private parties rather than governments. They can also provide a relatively quick method for mobilising project based non-recourse finance for new capital investment in developing countries, particularly where capital markets are poorly developed.

Because BOTs are associated with greenfield investments in the water sector, they have generally been production or bulk supply focused. Such bulk supply investments cannot deal with the major problems of high unaccounted-for-losses in water distribution systems. Nor do they allow private operators to seek out new customers and expand their operations where it is commercially viable. In general, BOTs are not likely to remedy a utility's faulty (leaking) distribution system or its poor collection processes.

BOT schemes, because they do not involve management of distribution systems down to the household or business meter, are easier to implement than more comprehensive private sector models such as retail concessions, which require more extensive negotiation of contracts. In economies with poorly defined regulatory and legal structures and emerging capital markets, BOT schemes can be implemented relatively quickly and provide a building block for subsequent PSP in the rest of the distribution system. Effective implementation of BOT/ROT type contracts requires careful attention to the design of tender documents and can involve a relatively lengthy bidding process. Experience with some BOTs shows that they have achieved some savings in capital construction costs and have facilitated more rapid investment in infrastructure. However, they can also have a downside in that they can be an expensive way of substituting private debt for public debt, if there is an expensive take-or-pay contract for sale of bulk water to the retail utility. Many BOTs have failed to deliver optimal outcomes for government or consumers. This is because the government's agency responsible for negotiating allowed too much of the

risk to remain with government - especially where (foreign exchange) guarantees on commercial risks are provided or where take or pay contracts are signed. On the other hand, private operators will not submit bids for BOTs if they feel that the government has attempted to transfer too much risk to the private sector.

Concern about the effectiveness of BOT type contracts has seen a number of governments ban or at least put restrictions on their use. For example, the Government of Malaysia has decided that it will no longer use this form of PSP. Similarly, in 1993 the PRC (People's Republic of China) Government imposed a freeze on rates of return for BOT contracts. This effectively halted foreign projects for over two years. These controls have now been eased and BOTs are to be considered on a case by case basis.

Concession Contracts

Concession contracts combine elements of operation leases for existing assets and BOT contracts for greenfields or ROT contracts for major rehabilitation investments. Under concession contracts, a private operator is given a contractual right to use existing infrastructure assets to supply customers. However, the concession contract also includes obligations to finance extensions and upgrades to the existing water supply. This tends to result in concession contracts being of longer duration than lease contracts to enable the operator to recover its capital and financing costs. Management of all capital extensions and upgrades, as well as normal maintenance, is often entirely the responsibility of the operator. Procurement, in particular, could follow acceptable commercial practices that are often different from those required of public agencies. The Concession example below presents details of two concession contracts awarded in Manila.

In comparison to single project BOT type schemes, concessions leave greater flexibility in the hands of the operator in determining the nature and timing of the investments they make to achieve contractual supply obligations. Typically, under a concession agreement, the constructor and operators also are given the right to supply retail services direct to customers.

For some water supply networks, for example those spanning an entire state or large city; it may also be possible to have a number of concessions operating at the one time. This would have the potential advantage of enabling government to compare the performance of concessionaires, to assess the price and quality of their services, and to evaluate the adequacy of investment programs for meeting community needs. There may also be potential to allow some level of competition between concessionaires, say, for large commercial customers using third party access arrangements.

The rights to provide services under concession arrangements can be awarded through a process of competitive tendering for the concession contract or through direct negotiation. An advantage of competitive bidding for concession contracts is that it limits the scope for monopoly pricing, and thereby avoids the requirement for heavy-handed industry regulation. However, there can be trade-offs when the competitive bidding process determines the successful tender with reference to the lowest supply price to consumers. This is because low prices are not always conducive to efficient demand management of the water resource. If the competitive bidding process involves a range of quantitative variables, such as reductions in unaccounted-for-water or increased use of meters, the selection process becomes more complicated as these qualitative variables are likely to differ between bids.

Thorough preparation and negotiation of scopes of works are required for all concessions to prevent experienced concessionaires extracting advantageous terms. Again, as in BOT contracts, care must be taken not to transfer too much risk to the private sector or they will not bid. In all cases, the regulatory framework for the concession will be important in determining its success.

Divestiture and Build Own Operate

PSP in infrastructure can also be achieved through the direct sale of infrastructure assets to the private sector. Private ownership of assets may be achieved through either 100 percent private ownership or JVs with public sector corporations. In either case, government retains the regulatory role.

Divestiture can be by way of sale of assets, sale of shares or management buy-out. Like divestiture, BOO contracts require removal of constraints to private sector entry in the water sector and the introduction of competitive market structures or regulation by government.

In a full divestiture or BOO arrangement, the private sector has full responsibility for operations, maintenance, and investment in a utility. In contrast to a concession, these arrangements transfer assets to, or permit greenfields water supply investments by, the private sector. In a concession, the government continues to own the utility's assets and is therefore responsible for ensuring that the assets are used efficiently and, in particular, returned to the government in the appropriate condition at the end of the concession period. Furthermore, the government needs to ensure customers are protected from poor service and monopolistic pricing. Under divestiture or BOO, it should be the private company's concern to operate, design and maintain the asset base. The government, on the other hand, would concern itself with the regulation of the water utility, which commonly involves a license to operate a water supply system.

Although the private company has ownership of the water supply assets, these arrangements do not necessarily mean permanence. Typically, the government only allows the right to supply water under an operating license.¹⁸ This license can include a clause that permits its revocation or a not to renew clause. In England and Wales for example, the Government may terminate the privatised water utilities' licenses after twenty five years with ten years notice. Thus, certain experts claim that the difference between a traditional fixed term concession and indefinite divestiture with a license may not be as significant as it might first appear. ¹⁹

The following two tables (Tables 2 and 3) allow comparison of the institutional arrangements under each type of PSP and highlight the potential benefits of each form of PSP.

¹⁸ Guislain, Pierre (1997) *The Privatization Challenge: A Strategic, Legal and Institutional Analysis of International Experience* Washington DC: The World Bank.

¹⁹ Guislain, Pierre (1997) *The Privatization Challenge: A Strategic, Legal and Institutional Analysis of International Experience* Washington DC: The World Bank.

Table 2: Key Features of Different PSP Options:

PSP Option	Description	Key Features				
		Capital Investment	Remuneration of private operator	Operations and maintenance	Asset ownership	Contract duration
Service Contract	Private companies contracted for specific tasks (e.g. vehicle maintenance)	Municipality / Government	Utility pays private company for services	Public and Private	Public	1-2 years
Management Contract	Private operator manages the utility, but does not provide financing	Municipality / Government	Public owner pays operator a fixed fee	Private	Public	3-5 years
Lease	Private operator manages the utility, and finances operations and maintenance expenditure	Municipality / Government	Private operator collects revenues and pays public owner a fixed fee	Private	Public	8-15 years
Concession	Private operator manages the utility, and finances new investment as well as operations and maintenance expenditure	Private operator	Private operator collects utility revenues and may pay a concession fee to the public owner	Private	Public	20-30 years
Build Operate Transfer	Private operator builds a new capital facility, operates it for a fixed period then transfers it to public ownership	Private operator and Municipality / Government	Public utility pays private operator for services provided by the new facility	Private	Private and Public	20-30 years
Divestiture	Private owner buys assets from the public owner	Private owner	Utility revenues	Private	Private	

Table 3: Key Factors in Selecting a PSP Option

Option	Critical problem	Regulatory and legal environment	Utility company issues	Financial status	Political risk
Management contract	Unproductive labour, poor management	Legal and regulatory framework not well developed	Redundant labour but strong union preventing further privatisation	Assuming no investment, this option should reduce or limit tariff growth	High risk of interference in utility management; lack of trust in private sector
Lease	Poor operations, maintenance, and collections performance	Requires definition of quality standards and basic regulatory frameworks to be in place	Asset condition and performance standards need clarifying before moving to concession	'Pay as you go' capital investment by public sector may be feasible without major tariff increases	Co-ordination with public investment program can be difficult; high dispute potential
Concession	Same as lease; lack of access to capital for service expansion	Requires complex regulatory framework and a developed judiciary	Need to evaluate asset condition and set realistic performance standards prior to award	Depends on magnitude and pace of investment program	Private sector perception of likely political interference is critical
BOT	Lack of access to capital for bulk investment; inadequate construction and contract management	Requires complex regulatory framework and a developed judiciary	Requires least interaction with existing utility	Depends on magnitude of investments; contractor likely to look for guarantees / take or pay arrangements	Contractor's and lenders' perception of likely political interference is critical to project funding
Divestiture	As with concession	Quality standards and price monitoring controls well defined	Asset condition well documented	Trade off of price control vs. required investments determines service quality	Best option to remove direct political interference

(ii) Cross-Sectoral Issues to be Considered

There are a number of cross-sectoral issues relating to performance-based contracting and ultimately to promoting private sector investment in water projects, which must also be considered, including:

- (1) Government should specialise in planning, structuring, and regulation while the private sector should specialise in management, investment, construction, and financing;
- (2) The transfer of responsibility to the private sector should be accomplished through deregulation and open competition or well-established contractual arrangements including management contracts, capital leases, concessions, sale of assets and rights to operate;
- (3) Economic regulation should be applied where there is insufficient competition but it should be transparent and predictable while still accommodating the concerns of the affected parties;
- (4) Long-term domestic financing sources must be developed; and
- (5) Commercial risks should be assigned to the private sector but other risks should be assigned according to which party is able to mitigate the risks.

The cross-sectoral issues are discussed in more detail below.

The Need for Reform and Role of Government

Performance-based contracting in the water sector still requires the government to play a key role in planning, policy, and regulation. The reason why water utilities have remained so long in the public sector is that they have components that are natural monopolies; e.g., the costs are lower with only one provider and the service is essential (water). These utilities also typically have a relatively high proportion of capital costs, have long-lived assets with low unit variable costs, and exhibit significant economies of scale. It had been a common judgment that state ownership of such utilities, rather than state regulation of privately owned assets, was likely to deliver the best outcomes.

These utilities have also had a considerable competitive advantage over potential new entrants, because of the relatively long time required to construct expensive new networks and to build up the market for their services. The scarcity of land, rights-of-way and airspace suitable for development of the network also act as an additional barrier to competition. Another common argument for retaining these industries within the public sector was that they must provide common (or universal) access to their services and that subsidies are required.

It turns out that public ownership and management is neither necessary, nor the best way to ensure universal access. Subsidies can easily be a requirement of a competitive tender or can be directly financed by government. A key advantage of having the private sector provide public services is that it allows public administrators to concentrate on planning, policy and regulation. The private sector, in turn, is empowered to do what it does best: (i) invest capital; (ii) manage the businesses; (iii) manage and create appropriate incentives for staff and management; (iv) deal with customers; and (v) improve the efficiency and quality of service; more recently, under the spur of benchmark competition — competition by comparison.

Governments should allow the private sector to provide infrastructure services to the maximum extent possible, with governments concentrating on planning, policy and regulation, and with the private sector on efficiently investing capital and improving the efficiency and quality of such services.

INSTITUTIONAL REFORM

The organisation of the infrastructure sectors (i.e., ministries, regulatory agencies, and utilities) has remained largely unchanged with the introduction of performance-based contracting and ultimately

PSP. With financial transactions being the primary mechanism for transferring infrastructure services to the private sector, insufficient attention has been given to the broader issue of institutional reforms. It has been implicitly assumed that the introduction of private management into the ownership or operation of specific assets would obviate the need for such reforms. Instead, the weaknesses of existing institutional structures have limited the effectiveness of the private sector initiatives. In most countries, the piecemeal transfer of infrastructure components has proceeded slowly and the controlling bureaucracies that add overhead costs and often limit improvements in infrastructure performance, have remained relatively unaffected. The currency crisis has emphasised the importance of institutional reforms but government bureaucracies rarely reform themselves. Governments should carefully review the structure, size and responsibilities of state-owned utilities and other entities in the infrastructure sector and establish special reform units reporting directly to top level ministers to spearhead the necessary reforms.

Strategic Planning

The Governments' contemplation of performance-based contracting and future acceptance of private sector investment in infrastructure is mostly due, in part, to their failure to anticipate future bottlenecks and make timely strategic investments to prevent shortages in capacity. The increased role of the utility/private sector in developing the water sector has caused many governments to neglect their responsibility for sector planning. Instead, governments have offered assets and public services to the utility/private sector in an ad hoc manner, often failing to ensure that individual investments were complementary. In certain circumstances, unsolicited proposals have been used as a surrogate for planning. For its part, the private sector has selected projects that had already been identified in government plans, giving preference to those which offered the highest rate of return, the lowest risk or the greatest short-term benefit. The private sector has had neither the interest nor the capacity to consider the network implications of its proposals. Governments have failed to subject these proposals to rigorous financial analysis to determine their sustainability in the absence of major increases in user charges or government guarantees. Governments have also often overlooked the complementary investment required from the public sector to make the private investments successful. The results have been unsolicited proposals that involved little commercial risk (government guarantees, provisions, transfer of existing assets, granting select rights of way) or politically generated proposals. Governments should maintain and strengthen their role in strategic planning of the water sector and in the process identify where and how performance contracting should be encouraged and the level of complementary support that should be provided.

Legal and Regulatory Framework

The effectiveness of performance contracting is contingent upon having adequate regulatory structures to control both technical and economic performance. Regulation of tariffs and other economic factors is particularly undeveloped in most countries seeking PSP or performance-based alternatives. The basic objectives of autonomy, accountability, transparency and predictability have been difficult to achieve. More importantly, the mechanism for consultation between the public and private sector and for dispute resolution between the providers and users of the network has not been fully developed. A further problem has been the failure to separate regulation from administration in order to avoid conflicts of interest. Most countries have been slow to establish autonomous regulatory agencies with independent funding and professional staff.

Unbundling the network into competitive and monopolistic components can significantly reduce the need for regulation. The competitive components can be transferred to the private sector in a way that promotes competition and allows deregulation. The monopolistic components can then be transferred to the private sector once an effective regulatory framework has been established. This regulation should create a situation where the businesses derive their profits from increased efficiency and the attraction of additional demand.

Effective economic regulation covers also deterrence of anti-competitive practices. Most of the developing countries lack laws or agencies for dealing with anti-competitive practices. Economic

activity continues to be concentrated in large conglomerates. The currency crisis has provided new impetus for breaking up the monopolies and introducing anti-monopoly laws.

The lack of established legal and regulatory procedures applies to contract law as well. The means for enforcement of contracts and the resolution of disputes are not well established. Political interference in the award of contracts has also been a problem.

Performance-based contracting or PSP without a well-developed legal and regulatory framework increases the level of risk to investors. It also encourages investors to rely on special situations and political relationships rather than their merits as a means for securing and implementing contracts. The transfer of infrastructure services to the private sector should not lead to privileged deals or profits secured by government guarantees. They should be businesses with regulated income streams which derive their profits from increased efficiency and the attraction of additional demand. These income streams should be capable of securing substantial private sector funding, both because their semi-regulated nature makes them much like a government bond, and because the essential and often monopoly nature of the service lowers demand risk. Such assets are also long-lived and thus attractive to pension and similar long-term funds.

Risk and Risk Mitigation

In order to reach an agreement with the utility, governments often accept commercial risks that should be assigned to the utility/private sector. Because governments have had limited contract-related knowledge or experience, the private parties have been frequently able to convince them to assume some of the commercial risks. Also, because governments have often not been able to engage suitable legal, technical and financial experts to assist during negotiations, they have been at a disadvantage in arguing with proponents (often foreign) concerning international practices such as take-or-pay contracts, or with international lenders concerning guarantees to protect their loans. Bureaucrats who have gone through a long, often contentious bidding process have been willing to accept some commercial risks during negotiations rather than to face re-bidding. Alternatively, private parties frustrated with drawn-out negotiations and the continuing renegotiating of clauses have accepted risks that should have been borne by the government.

Governments should build up capacity to negotiate and deal with the private sector. As a governing principal, commercial risks should be assigned to the private sector and other risks should be assigned to the party best able to mitigate them.

4.2 Key Elements in Performance-Based Contracts

A. Project Scope

In order to clearly define and establish contractually what the scope of a project is, the parties need to be mindful of the necessary elements to achieve successful partnerships in the general infrastructure arena. It is therefore important to recognise that a partnership is an agreement (whether we are talking about a lease agreement, an operation and management agreement, a concession agreement or other type of contractual relationship) between two or more parties to work together towards a common goal.

i. Recommended Approach and International Practice

(i) Definition of Clear Contractual Objectives and Responsibilities

In order to achieve such common goal, the contractual arrangement of the parties will need to clearly:

- focus on precise objectives to be achieved;
- establish the rights, obligations and responsibilities of each party to the agreement, as well as joint responsibilities; and

- establish a clear, reliable and efficient mechanism allowing the parties to quickly and efficiently respond to any problem or new circumstance that might arise.

A performance-based agreement should be the product of a meeting of the minds of the Contracting Authority²⁰ and the Contractor²¹ regarding the achievement of the aforementioned goals and not, although it is necessary to a minimal extent, an imposition of methods by the Contracting Authority. Such a dialogue process will help reinforce the commitment of both parties to reach desired outcomes. The dialogue between the parties should be as honest and as transparent as possible. The parties should consequently divulge as much information as possible to each other in order to allow each party to be aware of any detail or information which might influence or affect the efficient development of the utility, and therefore be able to collectively set forth strategic planning concerning the operation, maintenance and development of the utility. Such transparency and honesty of the parties from the very beginning of the negotiation process will also highly facilitate such process and create a positive environment for the development of the utility.

In order to be able to establish a clear and, most importantly, appropriate and efficient definition of the project scope in their contractual arrangement, both the Contracting Authority and the Contractor will need to invest time in an information gathering process to be conducted before the actual execution of a performance-based agreement (such process usually being referred to as “Due Diligence”). The Due Diligence will allow the parties to make a realistic assessment of the general condition of the water supply and sewerage utility and accordingly develop objectives for the improvement of such general condition, the whole within a realistic timeframe and manner. Also and most importantly for the parties, the Due Diligence will allow each party to familiarise itself with various aspects of the project with which it can be less familiar with and thus permit the establishment of an appropriate balance of responsibilities and risks between the parties in relation with the achievement of the developed objectives. Such aspects include, among others (the following list is intentionally directed towards “general” aspects and does not intend to be a complete list of due diligence issues, which will of course vary both in numbers and subjects depending on the circumstances relating to each case):

- financial condition of the utility;
- condition of the infrastructure forming part of the utility;
- technical overview of such infrastructure;
- current legal and regulatory framework governing the activities of the utility;
- estimation of replacement cost and capital expenditure requirements;
- human resources requirements;
- mechanism for tariffs determination;
- environmental considerations; and
- risks associated with the project.

For example in the Syzran case study, the agreement contains no precise description of the infrastructure transferred for trust management as well as no technical specification related to the functioning of water supply and sewerage systems.

The scope of the Syzran Agreement is not sufficiently defined and precise due to the fact that the terms employed to do so are too broad. Although it might be difficult for parties to clearly and precisely establish their intentions in connection with a performance-based agreement to be entered into, the scope of the Syzran Agreement should have been more clearly precise. Also, the Syzran

²⁰ For the purposes of these Guidelines, “Contracting Authority” shall be understood as being the governmental entity which will be entering into the contract.

²¹ For the purpose of these Guidelines, “Contractor” shall be understood as being the water utility (whether or not it has been privatized).

Agreement does not contain any description of the assets transferred to the Contractor for trust management and, in addition, it does not establish any technical specifications in connection with the operation of a water supply and sewerage system.

Unfortunately, governments and/or other competent authorities often tend to think that the Due Diligence process is too long and might cause them to miss a window of opportunity for the conclusion of an agreement. In connection therewith, we need to remind that the execution of a performance-based agreement is not the ultimate goal of the exercise, but rather a means for the improvement of the general performance and condition of the water and sanitation utility. Needless to say, proper preparation and strategic planning is essential to ensure that this end is achieved and sustained. In the event of an urgent need for action ruling out sufficient preparation, adopting a short-term arrangement might be wisest in order to allow for full preparation to take place before entering into the definitive agreement. Furthermore, the inconvenience of the time-consuming process involved in a complete and adequate Due Diligence needs to be seen as a sound investment, as it will significantly reduce the risk of divergence between the resulting contractual arrangement and the original intentions of the parties.

Once a proper Due Diligence is completed, the parties will be able to conclude a performance-based agreement which covers all the relevant and necessary issues, sets forth adequate provisions for the achievement of the identified contractual goals and objectives, takes into account all considerations which are relevant to the operation of the utility (such as the social considerations relating to the universal service of the population located in the service area of the utility) and adequately allocates responsibilities to each party in accordance therewith.

Once the objectives to be achieved via the performance-based agreement are clearly defined and assessed by each party, the process will then need to focus on allocating responsibilities to each party. Responsibilities (or rights and obligations of the parties) should be split between the parties in accordance with the legal, regulatory, institutional and circumstantial framework applying to the utility as well as in a the manner which the parties determine to be the most appropriate for the satisfaction of the performance indicators set forth in the agreement (such indicators constituting determined and quantified means for the achievement of the contractual objectives). Evidently, the Contractor usually bears the vast majority of “pure” obligations set forth in the agreement as the debtor of the principal consideration: the operation and maintenance of the water supply and sewerage system; while the Contracting Authority usually bears obligations resulting therefrom such as: general assistance to the Contractor, tariffs revision in accordance with the terms of the agreement and applicable legislation, and compensation for subsidies and preferential treatment of certain categories of consumers. Also, in certain cases, it is possible to attribute performance indicators to certain obligations of the Contracting Authority. A clear example of such possibility is the provision of indicators in the Lviv Agreement in relation with municipal investments (see Annex 2 thereof).

Not only should a performance-based agreement correctly distribute rights and obligations among the parties, it should also do so very clearly and as specifically possible. The agreement needs to clearly answer the following questions: what is the responsibility?; which party should have the obligation to satisfy the responsibility?; how should such responsibility be carried out (detailed performance indicators)?; and what is the consequence of any default concerning the performance of the responsibility? More specifically, the greatest possible level of precision should be used when drafting performance-based agreements for EECCA countries because to the contrary of more developed countries such as France, such countries have not yet developed a wide body of case law concerning such type of contracts in which the local courts would have interpreted and defined the key provisions and principles.

At the same time (i.e. even when the greatest level of precision is used), a well drafted performance-based agreement should, since most EECCA countries water utilities are in a desperate need of an increase in their efficiency level, financial condition, technical condition and overall condition, also set forth one or more mechanisms allowing the parties to conduct a revision of the provisions of the agreement concerning the project scope in order to ensure that the emphasis is really aimed at helping the utility in the achievement of its objectives rather than maintaining the parties in a situation which is counter productive.

(ii) Service Area

An integral part of the precision of the scope of the project is the identification of the service area to be covered by the Contractor. It is essential to clearly identify such service area very early in the process and preferably before the conduct of the Due Diligence because the extent of the service area to be covered will have a direct impact on the costs and expenses of the Contractor as well as on its revenues, an evaluation of which is necessary in order to determine and establish adequate contractual objectives and consequent performance indicators. For example, the service area will affect, among others, the human resources requirements for adequate and quality service, the tariffs to be charged (extent of the coverage of the service area as well as categories of consumers included therein) and the estimation of replacement costs and capital expenditure requirements (as elements of the infrastructure located outside the service area will likely not be considered for such purposes).

The easiest and most efficient method for clearly identifying the service area to be serviced by the Contractor is certainly the inclusion of a geographical map of such area in the agreement itself or as an annex thereto.

Also, a performance-based agreement should set forth the right of the Contracting Authority to modify the service area to be covered by the Contractor. However, such modification should be subject to an adjustment of the tariffs to be received by the Contractor and of the level of performance required from the Contractor in connection with the affected indicators, the whole in order to maintain the balance of the agreement.

(iii) Duration of the Agreement

What is the appropriate duration for a performance-based agreement?

Contracts concerning utilities come with widely varying terms. Usually, general management and operation contracts tend to be the shortest ones with a duration varying from three (3) to ten (10) years, while leases (10-15 years) and various types of concessions (usually 15 to 30 years) are generally concluded for a longer period of time.

However, one should be careful and take care not to systematically and conclusively consider that the duration of an agreement should always be determined based on the name of such agreement as there are no absolute rules and guidelines concerning the determination of the duration of an agreement. An operation and management agreement could be concluded for a period of more than ten (10) years while a lease agreement could be concluded for a period of five (5) years. For example, the concession contracts concluded with private operators for the provision of bulk water to the City of Casablanca and for the provision of water and sewerage services to the City of Bucharest have, respectively, terms of fifty (50) years and thirty-seven (37) years. Some agreements can even be, although this is not recommended unless the agreement contains strict and clear early termination provisions in favour of the Contracting Authority (especially if dealing with a private operator), concluded without the establishment of a fixed term, as it is the case with concessions in the power sectors in Chile.

The determination of the duration of a performance-based agreement should rather be carefully assessed based on the time period needed to correctly and adequately implement the objectives of the agreement and to ensure a fair profit to the private partner. Therefore, the main objectives of an agreement and their repercussions should be the primary, if not only, factors to consider when making a decision regarding the duration of a performance-based agreement. For example, a concession agreement with a private operator will usually tend to be of a duration of at least twenty (20) years in order to allow such operator to make profits from its operation following the time period which is necessary to repay the debt incurred to satisfy its capital expenditures obligations, striking a balance between the interests of the utility (for example, construction of new infrastructure) and the interests of the operator. Another example could be the one of a municipality which wants to conclude an agreement for the operation and maintenance of its water utility with a publicly owned Contractor with the goal of rendering the utility financially and generally attractive to private Contractors. Such municipality should not, even if the condition of the utility could continue to be improved under the

operation of the public Contractor, set forth a term which is longer than the period of time necessary in order to make the utility attractive to the private sector.

The term of a performance-based agreement should be considered more as a result of the contractual arrangement to be entered into rather than as a strict condition thereof, since the term should reflect both parties' needs as well as implement a reasonable time frame for the achievement of the objectives of the agreement.

(iv) Early Termination

Once the determination of an appropriate term has been made for a performance-based agreement, the focus should be aimed at determining adequate motives allowing a party, most importantly the Contracting Authority, to proceed to the termination of an agreement before the expiry of its term. Detailed provisions concerning early termination should be included in performance-based agreements between municipalities and water utilities in EECCA countries in order to ensure that the utility benefits from such contract. Also, the inclusion of specific early termination motives will also result, although the importance of such aspect is greater when private interests are at stake, in a reinforcement of the Contractor's incentive to perform well.

The following constitute usual reasons of early termination:

- mutual agreement of both parties for termination of the agreement;
- bankruptcy, liquidation or dissolution of the Contractor;
- suspension of operation for a defined period of time;
- failure by the Contractor to meet its obligations as set forth in the agreement, whether general obligations or specific performance levels;
- destruction of the infrastructure;
- property is not kept in good condition by the Contractor;
- inappropriate use of the property by the Contractor;
- privatisation of the municipal enterprise;
- pledge or transfer of public property by the Contractor; and
- failure by the Contracting Authority to perform its obligations in accordance with the agreement.

Evidently, the elements mentioned above constitute "classic" reasons for early termination. It is obvious that it is in the best interest of each party to include other more case-specific motives for early termination if they deem such motives to be necessary.

Also, certain agreements will, in addition to contractually established early termination motives, indirectly include legislative early termination motives. For example, French law gives a right to the Contracting Authority to terminate the agreement before its expiration for the "general interest", even in instances where the Contractor is duly meeting its obligations. Such a general interest termination right can also be included in the agreement. Evidently, a Contracting Authority exercising such rights, whether by law or contract, will be required to compensate the Contractor for losses, including loss of profits caused by such termination in the public interest.

B. Legal and Institutional Framework and Autonomy of Contractor

As a starting point, it is obvious that performance-based agreements to be entered into between municipalities and water utilities in EECCA countries must be tailored in accordance with the laws and regulations governing the utility sector in connection with which they are concluded, which can be difficult since, as we have seen from the case studies, property and ownership rights are frequently deficient in EECCA countries. These laws and regulations evidently vary from one country to another

(as we can see in the case studies concerning Russia and Ukraine in Annex 1 and 2) and a specific study thereof is requisite before entering into a performance-based agreement, not only to ensure that the provisions of the agreement are not in conflict with any applicable law or regulation, but also to make sure that such provisions constitute the best available solution to satisfy the needs of the parties among the eventual variety of solutions set forth by the legal regime. Such study should normally take place as part of the Due Diligence process discussed previously.

i. Recommended Approach and International Practice

(i) Legal Framework Examination

In order to conduct a proper study of the applicable legal framework, all relevant laws and regulations and other legal aspects, such as the following, of a country and/or region will need to be studied and assessed:

- the Constitution of the country;
- legislative division of responsibility for service among national, regional and local governments;
- arrangements between all relevant levels of jurisdiction (relevant when the country uses a decentralised model, as more fully described hereinafter);
- water resources management law;
- contract law;
- employment law;
- public sector borrowing rules;
- access and right of usage rules;
- health and safety laws and regulations and environmental laws and regulations; and
- social policy matters, such as the provision of subsidies.

Once all relevant elements have been analysed, the Contracting Authority will be capable of establishing, based on the applicable legal framework, what is the best contractual model to put in place. The type of contract to be selected shall ideally be the best possible answer to the needs of the utility while at the same time making the best possible use of the legal framework.

Accordingly, it is essential for governments to establish and develop clear legal and regulatory formats that identify the various steps in the process, together with rights and obligations of all involved. Such need for precision and clarity might possibly involve the promulgation of new laws and regulations (and should most certainly where property and ownership rights are deficient) or the establishment of new authorities that must oversee and directly be responsible for regulating the implementation of any new legislation in accordance with its terms. The development of such authorities is not an automatic source of success, but it will at least organise the government's involvement in the sector, help develop an appropriate expertise based on the relevant circumstances and encourage consistent policy decisions.

In regard to the case studies, we note that the complete (and not only partial as it is the case in Otradny) transfer of the enterprise of the water supply and sewerage services in Perm to a privately-owned Contractor, which itself is not a major consumer of the utility as it was the case in Syzran, represents a clear improvement in relation with the autonomy of the Contractor, its protection against eventual pressure from the Contracting Authority and the avoidance of any conflict of interests in the provision of water to the population.

(ii) Institutional Framework

Effective legal, regulatory and contractual conditions are crucial to the success of a contractual arrangement between a municipality and a water utility but can only exist if supported by an efficient institutional structure which both facilitates the development of such contractual arrangements in a country and provides for a clear set of rules and guidelines to protect the interest of all parties involved.

For most EECCA countries which intend to be involved in the development of partnerships between Contracting Authorities and Contractors by the use of performance-based contracting schemes (whether under the form of a lease agreement, operation and maintenance agreement, concession

agreement or a total private divestiture arrangement, whether or not the private sector is involved), such process will require a major analysis and possible modification of the institutional framework as the role of the Contracting Authority will no longer be the one of a direct service provider. Regulating and monitoring capabilities will need to be set forth in order to allow for a convenient and adequate assessment of the satisfaction of the contractual obligations of the Contractor.

In addition to their regulating and monitoring activities, the institutional units and the public sector in general have a key role to play in connection with the development of effective and sustainable partnerships by establishing an effective balance between political priorities, institutional requirements and the development of utilities, and also by encouraging the open exchange of information, the respect of each party's objectives and even allow non-conflictual dispute resolutions.

Depending (i) on the regulatory tasks that are essential to the envisaged contractual arrangement, (ii) on how existing laws deal with the assignment of such tasks and (iii) on the determination to be made concerning who is best able to carry out the remaining essential tasks (and at what level of government, i.e. national, regional or local), the regulatory power can be exercised in different manners. For example, it could be, as adopted in France, decentralised and exercised by multiple ministries or state agencies which are already responsible for monitoring particular aspects of the utilities (such as budget matters, health requirements and standards, environmental matters, etc.). Also, all aspects of institutional responsibility could be, as in the U.K., centralised and exercised by a sector-specific independent agency especially created for this purpose. Again, the decision concerning the type of regulatory authority to be established primarily resides in the current situation of the legal and institutional framework of each country/region/municipality.

Although, based on the above, the type of regulatory power and the manner of its exercise will certainly vary from country to country, the most important concern that should be addressed in each country is that the regulator (whether using the centralised or decentralised model) should be given a sufficient level of independence. The major motive justifying that a great deal of attention be directed toward the establishment of an independent regulator is the need to create a fair and just balance between the interests of the Conceding Authority, of the Contractor and of those of the consumers.

The necessity of establishing an independent regulator is principally justified by the need to have a regulator that is conducting its activities at an arm's length distance from the Contracting Authority. Such distance from the Contracting Authority is necessary due to the fact that the provision of water is a service that is viewed as an essential one by the population and accordingly, can be utilised by governments in the pursuit of short-term political objectives. The improvement of the general condition, financial condition and quality of the services of the water utilities in EECCA countries should be the most important goals of the implementation of performance-based contracting schemes in the water sector, and such objectives should not be at risk of opportunistic political decisions. For example, a justified tariff increase should not be refused by a government in order to enhance its position in the public eye since such decision will directly affect the operational capacity of the utility, and therefore lower the quality of service. For such reason, it is highly risky to confer regulatory authority directly to the government because short-term political considerations are likely to heavily affect the regulatory decision-making, such situation being even worse in the cases where the state remains the owner of utility enterprises as in most of the examples we have examined in the cases studies.

In order to address this problem, numerous countries have established independent regulatory authority with a serious level, although not complete, of autonomy from political authorities. Even if such regulators remain part of the government, they are established based on a scheme that protects them from undue political pressure. Various measures can be taken in order to confer adequate protection to the regulator, such as:

- clearly defining by law the mandate of the regulator in order to protect it from direction of other government authorities;
- set forth a system of appointment in connection with high management positions to be filled within the regulating authority and provide security of tenure for the appointees; and

- allowing the regulatory agency to have separate means of financing itself, such as the imposition of fees on the regulated industry (for example, the Concession Contract relating to the provision of water and sewerage services to the City of Bucharest establishes that the Contractor shall collect from its consumers on behalf of the regulatory authority a levy covering the operation costs of such authority).

Furthermore, as private interests will be easier to attract if the regulatory system provides comfort to eventual private investors in connection with the in-place regulatory regime, the concept of the establishment of an independent regulatory authority should also be pursued by countries that do not already have independent regulators in the context of eventual private parties' participation in the operation of water utilities. For example, independent regulators have been developed in numerous countries, including Argentina, Hungary and Mexico due to the trend toward privatisation and reform.

The scope and extent of the regulatory tasks and powers to be assigned to a regulator will vary depending on the circumstances and on the type of contractual arrangement which the Contracting Authority decides to put in place. For example, regulatory tasks will be less for service contracts and simple management contracts where they can be limited to ensuring that the Contractor fulfils its contractual obligations; while they should be further extended for longer term contracts such as leases and concessions in order to ensure that the Contractor has incentives to act efficiently, that tariffs are increased as required, and that regulators can adequately respond to changes that will inevitably occur during the terms of such contracts.

Apart from the tasks resulting from the contractual arrangement implemented in connection with the operation of a water utility, general tasks of a regulatory authority will usually include the following:

- award of licenses or concessions;
- administration of the rules included in licenses or concessions (an obvious example being tariff matters);
- settlement of disputes between the Contracting Authority and the Contractor, between consumers and Contractors, and between different Contractors (another obvious element arguing in favour of giving the regulatory authority the greatest possible level of independency);
- monitoring of compliance with regulatory norms and standards; and
- prosecution for non-compliance with the terms of the agreements entered into.

C. Performance Indicators²²

What are the main reasons for imposing performance targets? Most often, the main reason is to force a Contractor to act differently than it would under the original or underlying incentive scheme put in place by the general price regime and the sharing of responsibilities between the parties. One example is the imposition of quality standards which operators would not otherwise maintain. Another example is the imposition of coverage ratios which operators would not meet under the current price regime.²³ In the context of EECCA countries, it will be important, when setting forth the basis for performance-based contracting, to mention and stress that performance indicators will be put in place as a means to ensure the proper development of the utility rather than as a monitoring tool for the Contracting Authority, since such issue can at times be sensitive given the former planned economy.

i. Recommended Approach and International Practice

(i) Establishment of Performance Indicators

²² The OECD is currently conducting a separate and extensive study on the issues of "Performance Indicators" and a report should be available by late 2004/early 2005. For further information, contact the OECD EAP Task Force.

²³ The World Bank, Concessions for infrastructure, a guide to their design and award, World Bank Technical Paper no. 399 under the direction of Michael Klein, p.72.

Before determining any performance indicator to be observed by the Contractor pursuant to a performance-based contract, the parties will need to proceed to an initial evaluation of the condition of the water supply and sewage utility so as to be capable of fully assessing its current performance. Such an evaluation will allow the parties to agree on performance indicators which will be feasible based on the current condition of the utility. For example, the parties will need to strike an adequate balance between the extent of the performance level required from the Contractor and the level of investments to be made in the infrastructure throughout the term of an agreement (i.e., the satisfaction by the Contractor of a performance level which necessitates certain improvements to the infrastructure should not be required from the Contractor before such improvements are made to the infrastructure).

Furthermore, not only the indicators themselves need to be feasible (for example, improvement of the unaccounted for water level is not going to be feasible if the utility does not have that equipment allowing the installation of water meters or if the utility does not have the financial capacity of paying for the installation of such meters without greatly affecting its financial objectives), but the timeframe set forth in relation with each such indicator needs to be realistic. The timeframe for the satisfaction of the level of performance required in relation to a performance indicator should be established based on the evolution of the technical, financial and general capacities of the utility throughout the term of the agreement (so as to ensure that the Contractor will have the requisite tools to achieve the performance level) and at the same time not require a level of performance which might adversely affect the satisfaction of other performance indicators. As a general rule, uncertainties and risks in relation to the condition of the utility or other relevant circumstances work against long timeframes due to the inherent difficulties in setting distant goals and assessing the resources to meet them and a short timeframe may prove inadequate to reach desired goals, particularly if service conditions are in a precarious situation and deep sector reforms are needed.

A basic evaluation of the water utility (to ideally be conducted as part of the Due Diligence process described in connection with the determination of the scope of the agreement) will need to focus, among others, on the following matters:

- the utility's current and proposed service area;
- current characteristics of service (quantities supplied, metered and paid for);
- basic inventory of the assets of the utility as well as of their condition;
- if any, current performance standards and the record of achievement thereof;
- human resources;
- tariffs (level and structure, subsidy arrangements and disconnection arrangements); and
- general financial performance.

The evaluation of the condition of the utility is likely to result in the identification of a large number of issues in connection with which performance indicators should or could be established. However, while trying to establish clear and precise performance indicators, the parties need to keep in mind that they should not set forth too many indicators in the agreement in order to focus on the priorities to be pursued in connection with the operation of the utility. As a starting point, only the indicators which relate to the aspects which are the most essential to the utility's improvement should be included in the agreement. This will allow the Contracting Authority to ensure that the efforts of the Contractor are aimed at the correction of the utility's biggest weaknesses and also to ensure the putting in place of an adequate and cost effective monitoring process in regard to the achievement of the requested performance levels, as the regulatory authority will be able to focus on the aspects which are the most essential to the utility's improvement. Such approach will evidently prove to be especially desirable for the establishment of performance indicators when a Contracting Authority is considering the entering into of a first performance-based agreement in relation with a certain utility, since the major motive to do so is usually the urgent attention to be directed toward the improvement of the poor financial and general condition of water utilities.

The cases studies in Ukraine indicate that contracts between local authorities and municipality-run utilities have existed in a handful of cities but that such contracts were far from being exhaustive and did not specify the productions and financial benchmarks, the targets service levels and quality parameters or assets managements requirements. In order to address this issue, the government of Ukraine is currently working on the concept of water and sewerage sector regulations that will address the questions of performance-based service contracts using measurable and controllable service/management level and quality benchmarks. The performance indicator mechanism set-forth by the Lviv Agreement is a big step forward performance based contracting enhancement in comparison of the rest of the contract we have examined in connection with the case studies as it identifies precise, clear and relevant performance indicators that are adjusted throughout the term of the contract. However, this mechanism is not perfect and should have included a procedure for the revision and modification of the evaluation figures of these performance indicators due to special circumstances that the parties might encounter during the term of the Lviv Agreement.

(ii) Examples of Performance Indicators

The following, which obviously does not intend to be a comprehensive list or to fully apply to all water utilities, is a suggested list of performance indicators which may be set forth in a performance-based agreement²⁴:

- Financial Performance
 - operating ratio (operational expenses including or not depreciation/operational revenues);
 - accounts receivable;
 - collection efficiency;
 - salary or energy costs as a percentage of total operating costs;
 - annual income;
 - total profitability level current ratio (current assets/current liabilities); and
 - debt service coverage ratio (relevant in cases where the utility's activities are financed by the proceeds of a loan).
- Efficiency of Operations:
 - number of staff (measured against an indicator such as number of person served, area, pieces of equipment, etc.);
 - unaccounted for water;
 - pipe breaks (measured against an indicator such as time period and/or length of the pipe system);
 - reduction of consumer's complaints (billing error, meter malfunctioning, quality of service, etc.);
 - type of consumers' complaints;
 - response time to consumer's complaints; and
 - metering coverage and metering effectiveness.
- Operating Performance:

²⁴ See Annex 3, Guillermo Yepes

- average hours of service;
- population served;
- average water production;
- average water consumption;
- average pressure in the distribution system and water quality; and
- water quality indicators.

(iii) Other Considerations Concerning Performance Indicators

One of the most important aspects to be considered in connection with the inclusion of performance indicators in an agreement is to make sure that an appropriate and efficient monitoring system is in existence and that the procedure relating to such system is clearly set forth in the agreement. This question needs to be seriously addressed before deciding to conclude a performance-based agreement due to the fact that performance targets will deliver the expected results only if the behaviour of the Contractor can be adequately monitored and if the targets can be effectively enforced. In the event no such monitoring system is in existence at the time of the execution of a performance-based agreement, the parties will need to make sure to create an appropriate monitoring system in the agreement in order to make sure that sufficient information is available regarding the selected indicators. A utility in connection with which only limited monitoring and enforcement capabilities are to be available should seriously consider if the imposition of performance targets is appropriate in the instance, since it will prove very difficult to evaluate the Contractor's performance level (See Section F – Monitoring).

Another aspect to be considered in relation with the establishment of a performance-based contractual relationship is that the agreement should provide for a revision mechanism in connection with the selected performance indicators. As the main objective of performance indicators should be to emphasise the development of certain specific aspects of the utility, a performance-based agreement should include a revision mechanism allowing the modification of the performance indicator itself as well as of the level of performance required in connection with each such performance targets. This is essential when an agreement is entered into for a long period of time as the passage of time might render some indicators or the level of performance required in connection therewith irrelevant. In such instances, the performance targets revision provision can in the end turn out to be even more important than the initial performance indicators themselves, as it will allow the agreement to, at all times throughout the duration of the agreement, reflect the current situation and capacities of the utility.

Evidently, the agreement should also provide that the performance indicators should be modified, or that the level of performance required thereby should be suspended, to the extent it is necessary to do so due to a change in any applicable law, a breach by the Contracting Authority of its contractual obligations which affects the ability of the Contractor to achieve the required performance level, an event of force majeure or other circumstances based on which the parties might decide to do so (such a regime is set forth in the Concession Contract relating to the provision of water and sewerage services to the City of Bucharest).

D. Tariffs and Contracting Authority's Financial Obligations

This part of these Guidelines will examine the most important (in the vast majority of cases) source of revenue for the utility, i.e. the tariffs to be charged to consumers. When establishing a tariff policy, it is important to keep in mind that the tariffs to be received by the Contractor should at least cover all operational costs of the utility, including adequate maintenance of the infrastructure, in order to ensure that services are efficiently and adequately provided and that the value of fixed assets of the infrastructure is preserved.²⁵

²⁵ See Annex 3, Guillermo Yepes

i. Recommended Approach and International Practice

(i) Tariff Setting

The exercise of tariff fixing is a delicate and complicated operation due to the fact that several issues are to be considered, such as the financial viability of the utility, social objectives of the utility and economic efficiency. All these considerations need to be balanced against each other in order to establish a tariff policy which creates a viable and predictable financial situation for the utility, while at the same time allowing the utility to distribute water to the public at reasonable costs, such reasonable costs diminishing the risks of non-payment by consumers significantly and therefore improving the financial situation of the utility. The ideal tariffs structure should meet the following criteria: 26

- the level of tariffs to be received by the utility should be determined in accordance with clear criteria which are set forth in the agreement (either included directly therein or by clear reference to national, regional and/or local instruments governing tariffs fixing) in order to allow the Contractor to have a precise idea of the tariffs which can be perceived at any moment throughout the term of the agreement;

- the structure should include (i) an automatic tariffs revision procedure addressing inflation and (ii) an extraordinary tariffs revision procedure for other circumstances that might arise throughout the term of the agreement and in connection with which the parties feel that a tariff revision is desirable; and

- finally, the structure should contain an incentive increase mechanism based on the achievement of the level of services demanded in connection with the performance indicators (note that such mechanism is not absolutely necessary but that it will most probably significantly increase the satisfaction of the performance levels to be achieved).

The tariffs setting regime set forth in an agreement should be coordinated with any short-term programme and long-term programme to be observed by the Contractor throughout the term of an agreement (production and investment programmes) and should contain an obligation for the Contracting Authority to set or ensure the setting of tariffs which are adequate in relation with the costs for the implementation of such eventual programmes. This is fundamental to performance-based contracting, as the Contractor will not be able to satisfy the required level of performance set forth in an agreement if it does not benefit from the requisite tools or circumstances to do so, the tariffs to be received being one, if not the major, such tool.

The Otradny case study describes the Contractor's remuneration as a percentage of the volume of work done and services rendered. Unfortunately, the contract does not seem to provide methods for the evaluation of the work that has been done and of the services that have been rendered. Obviously, for the sake of clarity, the contract should have included provisions permitting to clearly establish the Contractor's remuneration.

As to the tariffs, the Otradny Agreement provides that the city administration shall revise tariffs on water supply and sewerage services at regular interval. However, the contract does not establish any set tariffs or methods for adopting such tariffs. Furthermore, it should be noted that this contractual provision is in contradiction with the effective RF legislation pursuant to which all tariffs to be charged by businesses to consumers shall be regulated by the RF, except for tariffs to be levied by companies owned by municipal governments. Consequently, the city administration will legally be forced to non-compliance with its obligation regarding tariffs setting. No description of tariffs revision mechanism is included to the agreement.

Also, the Otradny Agreement establishes that the operation of the property shall be financed from consumers' payments, budgetary subsidies and attracted investments. According to the contract, the managing company has no obligations to invest funds in the water supply and sewerage systems.

²⁶ See Annex 3, Guillermo Yepes

Again, this example serves to illustrate that the models used in the case studies are deficient in many respect.

(ii) Cross-Subsidy Mechanism

Also as regard to tariffs, it is important to mention that in many EECCA countries, the tariff system is based on a cross-subsidy mechanism in accordance with which certain customers (most often residential consumers) pay well below the average tariff while other consumers pay above such average tariff in order to balance the total tariffs to be perceived by the utility.²⁷ Such system is usually in place as a social measure allowing low-earning households to receive water.

In order to implement such mechanism in a contractual arrangement, the parties will need to identify that portion of the utility financing which is going to be obtained from tariffs collection as opposed to that portion deriving from grants, direct subsidies, loans from development banks or agencies. Then, based on the economic needs of the utility for viable functioning thereof and on the customers' capacity to pay, the utility must establish a tariff policy which sets forth tariffs levels based on categories of users, such as commercial users, industrial users, public entities, residential customers, and low income users.

As a general rule, higher tariffs are generally set for commercial users and industrial users while lower tariffs are set for residential customers. However, the parties will need to be careful in establishing higher tariffs for commercial and industrial users. Such tariffs, while being higher than the ones collected from residential users, should not at the same time be objectively too high and discourage commercial and industrial users from using the services of the water utility, as the development of alternative sources of water production and supply by these enterprises needs to be avoided in order for the utility to improve its financial standing as much as possible.

However socially desirable these cross-subsidy mechanisms can be, they are very dangerous in connection with the improvement of the level of services offered to the customers, because the Contractor will obviously be less committed to provide a good service to its low-paying customers and will also be discouraged from pursuing efficiency measures in connection with such households since the additional revenues to be generated by these measures are often not of interest when compared to the costs associated with the implementation of the measures. A good solution to these problems might be rather the establishment of a special government social programme directed at low-earning households allowing the utility to earn a regular tariff from such households.

Furthermore, another problem with cross-subsidy schemes is that international experience shows that in the developing world subsidising infrastructure services cannot, normally, be defended on the basis that it truly helps the low income households since such households typically have no access to the services.²⁸ Price subsidisation instead often results in lack of revenue to finance the extensions required to link the poorest communities to infrastructure networks or lack of incentives for the Contractors to extend coverage to those communities. As a result of such non-linkage, low income households eventually end up paying a higher price for water either by self-provision or from the informal sector.²⁹

In a situation where a cross-subsidy scheme is considered to be absolutely necessary, it should be designed based on the following considerations: 30

- the subsidies should be affordable given the current budget;

²⁷ See Annex 3, Guillermo Yepes

²⁸ The World Bank, Concessions for infrastructure, a guide to their design and award, World Bank Technical Paper no. 399 under the direction of Michael Klein, p.58.

²⁹ Oxford Analytica. 1996. Latin America Daily Brief "Ecuador: Water Provision." August 21. Petrei, A. Humberto. 1987. El Gasto Publico Social y sus Efectos Distributivos. Rio de Janeiro: Estudios Conjuntos de Integracao Economica da America Latina.

³⁰ The World Bank, Concessions for infrastructure, a guide to their design and award, World Bank Technical Paper no. 399 under the direction of Michael Klein, p.58.

- the subsidies should be precisely targeted to households with the biggest needs thereof;
- the subsidies should minimise distortion in resource use;
- the subsidies should not affect or compromise the inclusion of incentives for production efficiency in the contractual arrangement; and
- the subsidies should be implemented in a transparent manner so that the direction and magnitude of subsidies can be kept under close scrutiny

International experience provides us with a number of solutions in order to address such issue, the best approach certainly being to finance carefully-targeted subsidies through the national/regional/municipal budget and administer them as part of a cross-sectoral scheme, since pursuant to this approach “subsidies thus become an integral part of the welfare system rather than the responsibility of infrastructure providers, and are therefore more transparent”. In addition, to maintain incentives for the Contractor to be efficient in its operation of the utility, budget payments can be made only for the services actually provided. The most well-known international example of such approach is probably the one established in Chile, where a subsidy covers a certain percentage of the charges of a household for water consumption, such subsidy being directly paid to Contractors by the municipalities on the basis of the provided services (based on the bills actually sent to the consumers by the Contractor), and being cancelled if a given household fails to pay its share of the bill.³¹ This model is being followed by other countries, such as Hungary, but we have to keep in mind that such a system requires a strong local administrative capacity coupled with a high government commitment and might therefore not be easily transferable in countries where such assets are lacking.

(iii) Tariffs Collection

Another matter to be addressed in connection with the customers’ capacity to pay the tariffs is that in order to permit the financial viability of the utility in accordance with the financial planning made in connection therewith (resulting in the establishment of an appropriate level of tariffs), Contracting Authorities need to allow Contractors to adopt appropriate measures to obtain payment from consumers when the Contractor bears the risks of tariffs collection (i.e. when the Contracting Authority does not guarantee to the Contractor the payment of differences between the actual maintenance and operating costs and the tariffs collected (as mentioned earlier tariffs should at all time at least cover such costs)). Such measures could include the following: ³²

(i) - with respect to private consumers:

- promoting self-policing in the community (as adopted in the electricity sector in Argentina where neighbourhoods where consumption levels indicated large-scale thefts are disconnected, therefore given incentive to users in the area to prevent such acts);
- disconnection in case of non-payment (although it is very unlikely to be an option for the Contracting Authority due to the very sensible political nature of such act); and
- public awareness campaigns; and

(ii) - with respect to public consumers:

- payments to be made by central budget authorities which are usually in a better position to require and obtain payments from other public users;
- disconnection of non-essential services; and
- separate accounts for different government departments so as to make it easier to identify and disconnect individual non-payers;

³¹ Rivera, Daniel. 1996. Private Sector Participation in the Water Supply and Wastewater Sector—Lessons from Six Developing Countries. Washington, D.C.: World Bank.

³² Kerf, Michel, and Warrick Smith. 1996. Privatizing Africa's Infrastructure: Promise and Challenge. Technical Paper 337. Washington D.C.: World Bank.

(iv) **Tariffs adjustment**

As previously mentioned in these Guidelines, much is likely to change throughout the term of a performance-based agreement, especially if the parties intend to enter into an agreement for a long period of time (such as the term of fifty (50) years set forth in the Perm Agreement). Practically and even with the parties best intentions, it is almost impossible to predict the changes in circumstances that might affect the utility throughout the term of an agreement.

Accordingly, the ideal performance-based agreement should allow for tariffs to be adjusted over time, both in connection with issues which are identifiable at the moment of the signature of the agreement as well as for those which are unpredictable when entering into the agreement.

Generally speaking, three (3) types of tariffs adjustments can be distinguished:

- adjustment in connection with indexation;
- periodic adjustment of the basic tariffs and of the indexation rules themselves; and
- tariffs adjustment to be made in response to unforeseen events.

The main reason to include tariffs revision provisions in the agreement to be entered into is the need to ensure that the Contractor will continue to face pressure to seek efficiency, but will also at the same time be able to continue to earn a reasonable rate of return for the improvement of the utility. As we can see from the motives for adjustments mentioned above, the basic principle of price adjustment mechanism is the fact that it is closely linked to the allocation of risks, as the adjustments will normally be made in relation to events or motives that are outside the control of the Contractor.

Concerning tariffs adjustments to be made in connection with indexation or in a periodic manner, the parties basically need to ensure that, respectively, the tariffs will be indexed throughout the term of the agreement in order to reflect any increase in the costs incurred by the Contractor in relation to the operation of the utility and that the tariffs will be revised at specific moments during the term of the agreement so as to constantly be at a level permitting the proper operation of the utility based on all contractual considerations (for example, a specific performance indicator might imply additional costs at a particular moment during the term of the contract, such as an indicator requiring the Contractor to proceed to large scale metering installation during a specific contract year or period) and other applicable circumstances.

Tariffs revision for unforeseen events will need to take place for events such as acts of God (natural disasters, wars, civil wars and major economic crisis), general policy decisions of the authorities or specific decisions thereof directed at the Contractor, taxation regime changes, environmental regime modifications, extension of the service area, etc., which affect the financial balance of the agreement by rendering the execution of the contract more difficult or expensive for the Contractor.

In order to deal with those unforeseen events, a performance-based agreement could include mechanisms such as:³³

- specific provisions in the agreement governing a possible renegotiation process between the parties to be conducted in a good faith manner;
- conferring the power to modify the agreement to a third party; or
- a right of the Contracting Authority to unilaterally modify the agreement in order to address unforeseen changes while at the same time committing to safeguard the financial interests of the Contractor (similar to the "Fait du Prince" theory developed in France).

A performance based contract to be entered into in connection with the operation of a water utility in an EECCA country should preferably adopt the first above-mentioned solution in connection with

³³ Myers, James J. 1996. "Developing Methods for Resolving Disputes in World-Wide Infrastructure Projects." *Journal of International Arbitration* 13(4): 101. p.110-111

revision of the tariffs due to unforeseen events. The agreement should establish an obligation for the parties to proceed to a good faith renegotiation of the terms of the agreement upon the occurrence of such events in order to allow the utility to receive tariffs which are adequate to the continuation of its development in accordance with the objectives set forth in the agreement. Such solution allows both parties to present their arguments and find a compromise which will be suitable for both parties as well as for the utility itself.

The inclusion of a possible mechanism of modification of the tariffs by a third party should be addressed with great care since to be effective, it requires a distinct independent regulator with a sufficient level of discretion in order to avoid any conflict of interest where the Contracting Authority will at the same time be both judge and party to a procedure concerning tariffs revision. For the sake of the overall condition of the utility, serious efforts should be put in determining if an adequate regulator is in place before adopting such mechanism. The unilateral approach is not recommended in countries which do not have a long and proven tradition of administrative law quality and independence.

(v) Financial obligations of the Contracting Authority

This sub-section addresses briefly the financial obligation of Contracting Authorities as they are sometimes (e.g., leasing agreement scheme), responsible for whole (or part) of the financing of capital investments relating to the utility.³⁴ Since such capital investments have a direct influence on the operations, it will also affect the performance and revenues of the utility. The investment obligations of the Contracting Authority should always be set forth in the agreement in precise terms establishing the amount of such investments, the application of the proceeds of such investments as well as the timeframe for such investments, all in accordance with the infrastructure maintenance and development programme.

A performance-based agreement setting forth investment obligations on the part of the Contracting Authority should also at a minimum draw a clear line between maintenance works (cleaning, repairs, etc.) and replacement works (equipment to be acquired) since, unless we are considering a concession agreement or total private divestiture scheme, the Contractor will be responsible for maintenance works as they directly relate to the operation of the utility and the Contracting Authority will be responsible for replacement works, as such constitutes capital investments.

In order to clearly distinguish what type of work constitutes either maintenance works or replacement works, the agreement should set forth clear parameters thereof in order to clarify as much as possible the investment obligations of the Contracting Authority. For example, the management contract concluded with a private operator in Antalya (Turkey) defined maintenance expenses as those falling below a certain expenditure level or a physical parameter such as the replacement of less than a given length of pipes per event, capital costs being those exceeding the prescribed limits.³⁵

(vi) Example: City of Perm case study

The tariff policy is unclearly described by the Perm Agreement, probably due to the fact that a complete description thereof would be of minimal utility since the city administration bears no responsibility to revise the tariffs given that the legislation provides that it is the regional administration (RF entity) that regulates tariffs for all businesses except for municipally-owned enterprises, which the Contractor is not. The Perm Agreement specifies that the Contractor is not authorised to claim for tariffs rise going beyond the inflation index except in special circumstances (such as the decision of the tariff-setting authorities to lower the tariffs for a specific user groups, growth in electric power tariffs and introduction of modifications in the tax legislation) when it is necessary for covering reasonable additional costs of the Contractor.

³⁴ See Annex 3, Guillermo Yepes

³⁵ See Annexe 3, Guillermo Yepes.

The major difference between the Perm Agreement and the other Russian case studies is the investment obligation of the Contractor. The Contractor undertakes to invest in US\$100,000,000 in developing and renovating the municipal network, at least US\$20,000,000 of which must be invested during the first five (5) years of the contract period. Following analysis of the Perm Agreement, it is clear that the major part of the mentioned amount refers to depreciation charges already included in tariffs rather to the newly-invested funds (the result of which means that the Contractor's obligation is actually of no more than US\$30,000,000 over the 49-year period of the lease, such funds being defined in the contract as "additional investments"). However, no investment goal or programme is set forth in the agreement in relation with these funds, the agreement does not establish on what terms and conditions the Contractor will attract investments and the agreement gives no clear motivation for the investment of the mentioned amount, which all together makes it almost impossible to make a determination in respect of the sufficiency or insufficiency of the funds attracted by the Contractor and thus, of the fulfillment of the Contractor's obligations.

As regard to the rental fee to be paid by the Contractor for the use of the property, the Perm Agreement provides that such payment shall be the equivalent of the Contractor's obligation to make capital investments in the water works at an amount equal to depreciation costs. Such provision is interesting as it renders this contract similar to a concession agreement due to the fact that the responsibility for the state of the fixed assets actually lies with the Contractor and not with the Contracting Authority.

Another interesting element that renders the Perm Agreement similar to a concession agreement and is also a direct consequence of the Contractor's investment obligations, are the provisions relating to compensation upon termination of the contract. According to such provisions, as it is the case with the "classical" scheme of compensation set for in concession agreements, the Contracting Authority will receive free of charge the results of the capital investments when the contract validity expires or in case of a early cancellation of the contract by the Contractor and the Contractor has the right to receive compensation for the value of its additional investments in the property in case of a termination of the contract pursuant to the Contracting Authority's initiative.

E. Financial Penalties and Bonuses and Incentives

We will now examine penalties and bonuses and incentives which might be set forth in a performance-based agreement as regards the Contractor's performance of its obligation thereunder in order to improve the overall performance of a utility. As the reader will see from this Part and although such penalties and bonuses and incentives might prove to be very helpful in certain circumstances, the application thereof to an EECCA country water utility should be made very carefully since such application, if not made properly, could result in important set-backs in the development of the utility.

This element was not used in the case studies, except that the Syzran case study did provide that "the Trust Manager shall pay penalty (fine) as provided by the trust management contract" in the event the Contracting Authority unilaterally terminates the agreement. This is unclear as the agreement seems to use the term "penalty" in relation with compensation to be paid upon termination and the usual indemnification mechanisms, which should both not be considered as penalties but distinct contractual provisions. The following section will address the issues to be considered.

i. Recommended Approach and International Practice

(i) Role of Financial Penalties

Performance penalties in a performance based agreement constitute an "insurance policy" regarding the satisfaction of the level of services to be achieved in connection with such indicators. These penalties incite the achievement of the level of services as their goal is to directly impose on the utility a consequence for its failure to achieve the required level.

(ii) Prudent Application of Financial Penalties to EECCA Performance-Based Contracting

Performance penalties should not be used in a performance based agreement aiming at the improvement of an EECCA country water utility, unless such utility is operated by a private Contractor. Such penalties risk directly affecting the general financial condition of the utility, and consequently the operational condition, which is most probably already in desperate need of rehabilitation and improvement. The imposition of any penalty would therefore directly affect the ability of the utility to meet the performance levels specified in a contract.

Performance penalties should only be imposed when it has been clearly established that changes in the overall allocation of responsibility and in the general pricing regime would not constitute a better solution for the achievement of the expected results. The imposition of an additional burden on the utility itself should not, generally, be included in a performance-based agreement concerning a water utility located in the EECCA since such utilities are most often in a precarious financial and operational condition. The imposition of such additional burden will result in a complete negation of the object of the performance-based agreement entered into with the utility: the improvement of the general condition of such utility. Instead, as the sanctioning of financial penalties will likely result in set-backs in the development of the utility, the parties should rather focus on providing for an appropriate revision mechanism in relation to the scope of the agreement as well as in relation to the level of performance required by the performance indicators in order to allow the utility to gradually improve its financial and operational condition at the rhythm which is permitted by the general circumstances.

Furthermore, the Contracting Authority would, by imposing financial penalties on the utility, penalise itself since, as mentioned previously, the entities operating the water utilities are often not separate from the Contracting Authority itself.

(iii) Role of Bonuses and Incentives and Application thereof

Bonuses and incentives in a performance-based agreement are complementary to penalties as they constitute another tool to influence the performance of the Contractor. Such bonuses and incentives, if established and applied in a proper manner, will usually prove to be fundamental in achieving the level of services to be performed by the Contractor.

Incentives linked to the Contractor's performance of its contractual obligations can be provided in many forms. For example:

(1) Financial incentive to Contractor:

- (i) Increase in tariffs linked to customer service improvements;
- (ii) Increase in tariff (subsidies) linked to efficiency or coverage; or
- (iii) Bonuses for achieving certain financial ratios;

(2) Financial incentive to Contractor's staff (salary increase and bonuses):

- (i) Distribution of surplus to certain employees if performance targets achieved; or
- (ii) Salary adjustment (or bonuses) linked to productivity gains; or

(3) Non-monetary incentives (eg, rankings):

- (i) Employee of the month; or
- (ii) Weekly productivity and efficiency memoranda which ranks the performance of the Contractor (using previous data as benchmark).

However, when the utility is operated by a publicly-owned Contractor, such financial incentives should only be tied in to the performance of the individuals exercising the management and operation of the utility. A publicly-owned Contractor is not a corporate entity which is constituted or incorporated for the purpose of generating profit and benefiting individuals (as is the case of a private company, a corporation or a private partnership); therefore, the use of financial incentives to be given directly to the utility, will prove to be ineffective since no individual will directly benefit from the higher performance level or higher profits of the utility.

As mentioned before, bonuses and incentives linked to the performance of the staff of the utility might prove to be very helpful in the development of the utility as it will constitute an effective means of attracting qualified personnel and improve the performance of such personnel. However, one should be very careful when setting forth bonuses and incentives regarding the utility's staff in a performance-based contract and keep in mind the following prior and major considerations:

- firstly, the parties will need to establish if bonuses and incentives to be linked to the productivity of the water utility can be legally set forth in a performance-based agreement in the EECCA country in which they wish to do so, since such bonuses and incentives are not allowed in certain countries (as in Latin America);³⁶ and
- bonuses and incentives should reflect and be synchronised with the productivity gains of the utility (regular and constant productivity gains of the utility should be the first concern of the parties and bonuses and incentives to be paid and/or provided to the utility's staff should not affect such).

F. Monitoring

An essential element of a performance-contract is to (i) determine whether the parties are fulfilling their respective obligations and (ii) evaluate their performance in achieving such obligations. Ultimately, this is how the parties will know whether the project is successful. In a conventional infrastructure project, monitoring involves direct sampling, analysis and compliance determination by the Contracting Authority. However, these quality management processes can be performed by the Contractor and it can be expected to provide for performance monitoring and quality management as part of its role. The Contracting Authority will then be entitled to independently verify the information produced by these systems as considered necessary.

The role of the Contracting Authority will therefore be to audit these systems, with planned and random spot checks, to ensure that performance is being measured and reported reliably, accurately and comprehensively. Capital investments may be required to ensure that a quality assurance system is in place which will enable proper performance monitoring. In any event, it is in the interest of the Contracting Authority to ensure a robust and high quality facility to minimise the risk of operational problems later.

This is another shortfall of the case studies. As noted previously, the contracts do not provide any performance-based incentives and therefore the need for a robust monitoring structure may not have been necessary. Generally, the monitoring provisions in the contracts refer to the relevant water sector legal regulations and specifications, and do not oblige the Contractor to monitor its operations nor afford the Contracting Authority with the opportunity to monitor/audit the Contractor's operations to ensure compliance or efficiency in the treatment of water.

i. Recommended approach and international practice

Performance-based contracts will specify certain performance targets and a tariff rule and then rely on incentives to compel the Contractor to find the most efficient way - through technological, operational and commercial innovation—of meeting the performance targets. Their central aim is to pass to the Contractor the responsibility for working out how best to meet objectives (customer service, quality,

³⁶

See Annex 3, Guillermo Yepes

efficiency, quantity, etc.). Monitoring provisions should therefore focus on the Contractor's success in meeting the targets specified in the agreement rather than on how it meets those targets. Whether realistic performance targets can be established will depend on the quality of information about the system available at the time the Contractor takes it over. As a first step toward greater private sector involvement, monitoring and regulatory capacity may be very limited at the beginning of the contract period. A government facing such capacity constraints could contract part of the monitoring task to an auditing company ("regulator") and reconfigure its task as monitoring the auditor.

The more activities the agreement covers, and the more sophisticated its incentives for efficient performance by the Contractor, the more regulatory sophistication will be required.

The agreement should establish performance indicators and provide for paying bonuses/increasing tariff to the Contractor if it meets or exceeds the performance targets (as explained above in Section E). Therefore, such indicators must be readily measured and largely indisputable—that is, their measurement should not provoke debates, and poor performance should not provoke debates about who is at fault. For example, if unaccounted-for water is used as an indicator, disputes may arise both about how it is to be measured (especially if metering is incomplete or inadequate) and about whether poor performance stems from inadequate investment by the government in rehabilitating the system, or from substandard performance by the Contractor.

Proper monitoring of water or wastewater treatment will often require capital investments if the necessary metering instruments are not integrated in the system and should always be considered in light of the design and technical specifications of the facilities. This issue should be reviewed in conjunction with technical experts who can advise on the different ways to monitor the services.

The following consists of certain requirements for provision of information to the regulator or Contracting Authority which should be considered in the performance-based contract: 37

- Will the Contractor provide information as may be reasonably required by the regulator or Contracting Authority? What is the definition of reasonable?
- What are the mechanisms for independent verification of financial data, data on the condition of assets, and the achievement of performance targets?
- What is the goal of contract information requirements?
- What access will the regulator or Contracting Authority—or agent of the regulator or Contracting Authority—have to assets and records?
- Who will pay for independent financial auditors and technical auditors (reporters), and who will be responsible for their selection and training?
- What are the "ring-fencing" provisions, transfer pricing checks, and market-testing arrangements (where the Contractor is a diversified company)?
- What are the provisions for submission of regulatory accounts and programme performance data and for desegregated accounts to aid comparative competition?
- What are the requirements for publication of financial information and performance standards?
- What reports will be used to verify the tariff rate?
- Will the regulator require audits by an independent auditor? What auditing procedures will be used to confirm the tariff cost components?

³⁷ The World Bank. Tool kits for private sector participation in water and sanitation. Washington, 1997

- What customer relations and complaint procedures need to be in place? How will such data be complied?
- What payment options and debt collection procedures need to be in place?
- Are any subsidies or cross-subsidies required?
- How will unpredicted costs be dealt with?
- Who is responsible for the monitoring and oversight of new construction?
- What technical information will the Contractor be required to report? Typical requirements include:
 - Volumes (forecasts, production, distribution, amounts sold and bought, the number and types of customers);
 - New works and major maintenance completed and new connections;
 - Emergency repairs made;
 - New installations;
 - Meters installed and repaired and the allocation of the costs between the Contractor and users; and
 - The results of laboratory tests of water and wastewater samples.
- What financial information will the Contractor be required to report? Some typical requirements:
 - Accounting for the expenditures listed above;
 - Income from water sales and sewage treatment (tariff income, bulk sales, or both) and revenues from major customers;
 - Historical and projected income trend analysis;
 - Overdue and delinquent payments, by type of customer—residential (single and multifamily), commercial, industrial; and
 - Annual financial statements—profit and loss and income statements and a balance sheet in the format required by the regulatory body.

In essence, the Performance-based contract must ensure that for each performance indicator included in the contract, there is a reliable monitoring system relating thereto that will allow both parties to determine whether or not the objective is achieved.

G. Contract enforcement/conflict resolution mechanisms

Performance-based contracts in the water sector should preferably include formal dispute resolution procedures which entail a more efficient and cost effective determination of contractual disputes as an alternative to legal procedures. The public nature of water procurement is a fundamental reason prompting the parties to resolve matters in dialogue and discussion wherever possible and to avoid comprising or interfering with the operations which ensure essential water supply. If this fails, then formal dispute resolution procedures are required and invoked (such as conciliation, arbitration and litigation), and the parties should thus include comprehensive dispute resolution mechanisms in the agreement.

Essential questions to consider in connection with contract enforcement:

- Are the judgments of the chosen forum enforceable against all the parties (does the government have sovereign immunity)?
- What is the appropriate method for resolving disputes—arbitration, court proceedings, appointment of experts, or alternative dispute resolution?
- If arbitration is chosen, which international rules should apply—those proposed by the International Center for Settlement of Investment Disputes (ICSID), the International Chamber of Commerce (ICC), or the United Nations Commission on International Trade Law (UNCITRAL), or other rules?
- What are the local legal provisions in the countries in which the parties are resident regarding enforcement of such awards?
- Are all the parties from countries that are signatories of the New York Convention on the Enforcement of Arbitral Awards, which provides for reciprocal enforcement of international arbitration awards?

In the Russia case studies, the City of Otradny attempts to reconcile any differences through an arbitration mechanism. Article 10.2 of the contract provides that: “Both Parties undertake to do their best to settle all disputes by mutual agreement. Unsettled disputes and differences arising from the implementation of this contract shall be referred to the Arbitrage”. It seems that the parties would agree to submit disputes to arbitration, but the mechanism and its application, in practice, would be questionable.

The Ukrainian case studies, also, are rather limited on the issue of dispute resolutions. Albeit, the City of Zaporizhzhya considers alternative dispute resolution – but, again, it falls short of international standards. There is no special body envisaged to monitor the performance of contractual obligations or resolve disputes. However, the contract provides that the parties shall endeavor to resolve disagreements by way of negotiation and if they fail to resolve such dispute, then the parties may refer the case to the Business (Arbitration) Court of the Zaporizhzhya Region.

i. Recommended approach and international practice

Very few projects will operate in the long run without disagreements arising at some point between parties to the agreement or with other players, and thus the parties should think in advance about dispute settlement. There are a number of contractual techniques designed to help resolve conflicts, including: judicial, quasi-judicial, administrative, arbitral, and nonbinding alternative dispute resolution techniques. Regardless of which mechanism is chosen, it should always aim to resolve any conflict promptly, efficiently and impartially.

In contemplating the available dispute resolution mechanisms, the parties to a performance-based contract in the water sector should consider the following factors:

- Conflicts may involve entities outside the contract. A performance-based contract between the Contracting Authority and the Contractor may involve other players whose interactions can give rise to conflicts. For example, disputes can arise between the Contractor or the Contracting Authority and the relevant regulator, for example regarding tariff increases or its customers.

What does this mean for dispute settlement?

Because of the sheer number of disputes that can arise, and the potentially high costs associated with them, and because these disputes can involve public and private parties, as well as domestic and foreign parties, the contract will want to ensure that it has access to reliable, neutral, and non-corrupt forums for dispute resolution.

- Long term – disputes are unavoidable. A performance-based contract may last 5 to 15 years (e.g., leasing agreement) and, like any long term contractual relationship disputes are bound to arise. Notwithstanding current or past disputes, however, the parties will

need to maintain a working relationship over many years. The dispute resolution mechanism should therefore help the parties stay on good terms.

- Water is an essential natural resource. Another characteristic that sets these water projects apart from other types of projects is the public nature of the services. There is a need to avoid interruptions in the provision of public services. If disputes arise regarding disconnection rules (for example, in the case of non-payment), or in general if a dispute leads to a threat of interruption of service, a decision must be made quickly. Also, if Contractors provide the service directly to private customers, many parties may be interested and involved in the dispute and will want a voice in the process. These factors require the adoption of dispute resolution techniques that are able to offer a resolution quickly and are open and inclusive.
- Complexity and sophistication of projects. The contract may include intricate webs of legal arrangements for the operation specific to water and wastewater management. In terms of dispute resolution, this implies a need for expertise in dealing with complex commercial, legal, and technical issues.

There are several mechanisms available to the parties to a performance-based contract which enables a resolution of disputes, including: (i) judicial, (ii) quasi-judicial or administrative, (iii) arbitral, and (iv) nonbinding dispute settlement. In light of the abovementioned issues, the parties will need to evaluate each mechanism and choose which would solve the dispute most effectively.

(i) Judicial

- In general, any disputes arising from or in connection with an agreement are subject to the jurisdiction of the courts in which the subject matter of the dispute is located. In the case of a performance-based contract in the water sector, this will be the jurisdiction in which the utility is located.
- The following issues should be considered before submitting a dispute to the courts: 38
- The court system may be too cumbersome, slow, and expensive;
- The adversarial nature of the proceedings may damage the long-term relationship of the parties;
- The courts may lack sufficient technical expertise for the type of dispute in question;
- The courts may not be completely neutral arbiters of disputes involving private and public parties or domestic and foreign parties; and
- The courts may open to corruption.
- If the judicial system is underdeveloped and because of the concerns listed above, the parties may wish to include a dispute resolution mechanism in the agreement that will permit them to avoid the jurisdiction of the courts. Jurisdiction of the courts should be the last resort of the parties. However, certain issues cannot be excluded for the court's jurisdiction, including disputes arising from contracts with local employees, banks, suppliers, and customers.

³⁸ The World Bank. Tool kits for private sector participation in water and sanitation. Washington, 1997

(ii) Quasi-Judicial (or administrative)

Quasi-judicial or administrative bodies, such as independent regulatory agencies, may serve as an alternative to resolve some of the disputes arising from performance-based contracts. However, not all disputes can be referred to quasi-judicial or administrative bodies and often only disputes having the following characteristics will be appropriate: 39

- Must have strong public policy component. For example, this would be the case for disputes arising from regulatory decisions that required that broad discretion be applied in the public interest. We typically see this with the application of anti-trust rules.
- Requires timely resolution and disputes are likely to be recurrent. For example, an independent regulator may be best placed to resolve disputes regarding access conditions to a network.
- Requires technical expertise for their resolution. Infrastructure regulators are often appointed on the basis of their expertise in areas relevant to their functions.
- Involves many players. An independent regulator can often provide an open and inclusive forum in which customers, providers, and governmental actors can interact to resolve disputes.

This mechanism can also promote the sustainability of the parties' relationship by offering a less confrontational approach to dispute resolution. However, the disadvantages of this method of dispute resolution are often linked to the independence and accountability of the quasi-judicial or administrative bodies themselves.

(iii) Arbitration

Arbitration is a technique for dispute resolution under which the parties agree to submit some or all of their disputes to an arbitral tribunal that is empowered to render decisions (ie, "awards") that are binding on the parties⁴⁰. The arbitration panel is usually comprised of three or five members which are chosen by the parties based on their expertise.

Arbitration is usually the preferred dispute resolution mechanism in contracts that include a foreign private entity. This issue will surely be addressed at the Due Diligence phase and any legal impediments to this form of dispute resolution should be carefully considered by the relevant government body and cured at latest before the effective date of the contract. The advantages usually claimed in favour of arbitration are: 41

- Confidentiality: for example, as it relates to commercial secrets;
- Expertise: parties can choose arbitrators on the basis of their technical expertise;
- Neutrality: arbitrators can be chosen from among individuals unrelated to the parties in dispute; and
- Integrity: arbitrators can be chosen from among individuals of high moral repute.

³⁹ The World Bank. Tool kits for private sector participation in water and sanitation. Washington, 1997

⁴⁰ The World Bank. Tool kits for private sector participation in water and sanitation. Washington, 1997

⁴¹ The World Bank. Tool kits for private sector participation in water and sanitation. Washington, 1997

(iv) **Non-binding Dispute Resolution**

An efficient resolution mechanism does not necessarily require it to be binding and confrontational. Simple advice, conciliation or mediation which enlightens the parties on a proper settlement and are designed to be purely advisory, may prove to be quicker, more practical and less expensive. Non-binding mechanisms can also be coupled with “binding and confrontational” mechanisms (such as those listed above) if the parties are unable to settle the dispute amicably. Examples of such non-binding dispute resolution mechanisms include: 42

- Informal dispute resolution mechanisms: The contract can provide that the parties have regularly scheduled consultation meetings (in the presence of technical advisers with powers to recommend a settlement) and hence prompt the parties to discuss at an early stage any potential dispute; and
- Conciliation and mediation: A third party trying to help resolve a dispute. The mediator recommends to the parties how they can settle their disagreements. Conciliators do not make such recommendations.

The benefits associated to these non-binding dispute resolution mechanisms include the following:43

- Control: the parties control the negotiations and can decide to discontinue them at any time if they are unproductive;
- Flexibility: the third party assists in exploring alternative and creative solutions in order to meet the needs of the parties;
- Speed: a session can be scheduled quickly and requires relatively little preparation time; and
- Economy: some cases can be resolved within a few hours.

(v) **Arbitration – the preferred alternative**

Given the technical (water specifications), legal (contractual interpretation, relevant laws and regulations) and financial (tariffs and financial performance incentives), the complexity of a performance-based contracts in the water sector usually require comprehensive provisions relating to dispute settlement. However, the availability and appropriateness of any particular dispute settlement mechanism will require a close analysis of the relevant applicable laws.

There are two main forms of arbitration proceedings: institutional and ad-hoc arbitration. Institutional arbitration implies the existence of a permanent institution that administers arbitration procedures, for example, by supporting the nomination of arbitrators and administering the proceedings⁴⁴. Ad hoc arbitrations, on the other hand, are intended to be self-executing⁴⁵, that is, the arbitration clause or agreement itself is intended to provide all the rules for the arbitration.

Some countries have constitutional and policy impediments to international arbitration. For example, the constitution may state that the Supreme Court has exclusive jurisdiction over certain disputes

⁴² Folsom, Ralph, and Minan. 1991. "The Chinese Legal System: Reform and Conflict Since the Cultural Revolution." In Ralph H. Folsom, Michael W. Gordon, and John A. Spanogle, Jr. eds., *International Business Transactions*. St. Paul: West Publishing Co.

⁴³ Myers, James J. 1996. "Developing Methods for Resolving Disputes in World-Wide Infrastructure Projects." *Journal of International Arbitration* 13(4): 105.

⁴⁴ Paulsson, Jaul. 1996. "Dispute Resolution." In Robert Pritchard, ed., *Economic Development, Foreign Investment and the Law: Issues of Private Sector Involvement, Foreign Investment and the Rule of Law in a New Era*. International Bar Association Series. Boston: Kluwer Law

International and International Bar Association.

⁴⁵ Paulsson, Jaul. 1996. "Dispute Resolution." In Robert Pritchard, ed., *Economic Development, Foreign Investment and the Law: Issues of Private Sector Involvement, Foreign Investment and the Rule of Law in a New Era*. International Bar Association Series. Boston: Kluwer Law

International and International Bar Association.

involving the executive branch. In addition, there may be explicit constitutional or other legal provisions restricting the state from submitting to international arbitration.⁴⁶

Provided the legal framework allows international arbitration, the parties must then consent to such submission. The most common and easiest form of consent is to include an arbitration clause in the contract.

In order to be workable, an arbitration clause should include, at a minimum, a clear choice of the arbitration mechanism that will apply and a clear definition of the scope of the disputes to be arbitrated⁴⁷. The parties may also wish to include in the clause a choice of: the law to be applied to the merits of the dispute (that is, the law that applies to the interpretation and application of the contract itself); the place of arbitration; the number of arbitrators and other requirements regarding nationalities and qualifications of arbitrators; and mandatory prior recourse to conciliation or mediation⁴⁸.

The following is an example of a clause providing for arbitration, which is found in the UNCITRAL Arbitration Rules, based on the model text published with those Rules:

[The Parties agree] that any dispute, controversy or claim arising out of or relating to this contract, or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as present in force. Parties may wish to consider adding: (a) The appointing authority shall be _____ (name of institution or person); (b) The number of arbitrators shall be _____ (one or three); (c) The place of arbitration shall be _____ (town or country); (d) The language(s) to be used in the arbitral proceedings shall be _____.

Finally, even if the parties agree to arbitration and the applicable laws permits this, it is also important to determine how the host country will treat an arbitral award, ie, will the courts recognise the arbitral award / can a party enforce such award in the country? The New York Convention is the main international treaty dealing with the recognition and enforcement of arbitral awards. This Convention also provides certain limited reason (including incapacity, denial of a fair hearing, and violation of public policy), which allow a court to refuse the recognition and enforcement of an arbitral award.

In a country where government influence over courts is high or where corruption of judges is possible, the "public policy" exception is often invoked by the local judge to avoid execution of an arbitral award and to reopen a substantive analysis of such award. This risk is further enhanced by the highly political and emotional nature of water. The Due Diligence phase should clearly identify the relevant public policy rules that might be applicable to a performance based contract. Despite this, a significant risk will remain in such jurisdictions that an award would be refused on those or other grounds.

H. Risks

A major component of any contract in the water sector is risk allocation. Who will assume risks in the delivery of the service or in the construction/rehabilitation, operation and maintenance of water facilities is often the central question in a performance-based contract in the water sector, especially where the Contracting Authority is a public entity (and thus subject to public scrutiny). If the Contracting Authority wishes to attract private investors, it should attempt to reduce risks but it should also be aware that risks are inherent in most projects and servicing initiatives.

⁴⁶ The World Bank. Tool kits for private sector participation in water and sanitation. Washington, 1997

⁴⁷ Paulsson, Jaul. 1996. "Dispute Resolution." In Robert Pritchard, ed., Economic Development, Foreign Investment and the Law: Issues of Private Sector Involvement, Foreign Investment and the Rule of Law in a New Era. International Bar Association Series. Boston: Kluwer Law International and International Bar Association.

⁴⁸ Paulsson, Jaul. 1996. "Dispute Resolution." In Robert Pritchard, ed., Economic Development, Foreign Investment and the Law: Issues of Private Sector Involvement, Foreign Investment and the Rule of Law in a New Era. International Bar Association Series. Boston: Kluwer Law International and International Bar Association.

There is some debate as to how much risk should be transferred from the Contracting Authority to the Contractor. Logically, the higher the risk, the higher the return; therefore, the more risk transferred to the Contractor, the more financial reward the Contractor will demand.

There are a number of risks which may arise from water projects that need to be analysed and understood by both parties. Examples include:

Fire, flood, etc.	employment practices and changes in labour legislation
changes in financing costs	performance monitoring
reduced demand for service or failure of demand to increase as projected	technology issues (failure of existing technology, inappropriate choice of technology)
design errors	<i>force majeure</i> (that is, dealing with major change arising beyond the control of either party, including acts of God, natural disasters, court orders, war)
construction-related problems, including failure to meet the schedule and/or quality issues	insolvency of private sector partner
environmental liability	inflation/currency strength
non-compliance with regulations and permits, or changes in regulations non-compliance with regulations and permits, or changes in regulations	
value of assets at end of partnership, change of ownership	

In the context of performance-based contracts (before full-out privatisation), however, the main risks which should be considered are: operation and maintenance risks, political risks, regulatory risks and revenue risks. There are, of course, other important risks that can be considered, such as force majeure risks, insurance risks and environmental risks, and if foreign private investors are required to fund the capital expenditures, design and development risks, financial risks and constructions risks will also need to be taken into account.

i. Recommended approach and international practice

As with most projects in the water sector, especially if a private investor is involved, the element of “risks” is a key factor in weighing whether the project is viable and bankable. The allocation of key risks in water projects should be carefully considered when drafting a performance-based contract and the question of how such key risks are managed is monumental.

The goal is to provide a fair balance in allocating risk between the parties. Any long-term contractual relationships involve risks and many of those risks can be reduced through careful drafting. The remaining risks should be allocated as far as possible to the party best able to handle those risks. The aim is to ensure that the party with the ability to reduce risks has incentives to do so and that remaining risks are borne by the party for which it is least costly.

Operation and Maintenance Risks

- *Who will distinguish between routine maintenance expenditures and capital expenditures?*
- *What sanctions and penalties would the Contractor face for non-compliance with environmental and other regulations?*
- *What methodology will be used to measure and monitor productivity improvements?*

Under a leasing agreement, the Contractor is provided with the right to the pre-existing infrastructure systems and is responsible for routine maintenance expenditures. On the other hand, because the

assets remain under the ownership of the Contracting Authority, such Authority bears the risks associated with the assets and it is thus responsible for capital expenditures. Although this principle appears clear, it ultimately poses the risk question as to who will distinguish between routine maintenance expenditures and capital expenditures. Also, while seemingly attractive, this mechanism can be costly for the Contractor if the facilities it inherits have unknown structural faults. This issue can take on new dimensions if the Contracting Authority's failure to recognise or admit responsibility impacts the Contractor's ability to perform its obligations and achieve its performance targets. The risk of encountering unpleasant surprises can be minimised when thorough and well documented inspections of the facilities to be transferred are completed before performance-based contracts are formalised (i.e., at the due diligence phase). Alternatively, the contract can provide for a post-signing Due Diligence phase, where infrastructure is inspected and a complete list of the state of the assets is established at that time. In either case, it is advisable to set out clear technical or financially parameters in the contract allowing the parties to determine what is maintenance expenditure or capital expenditure. If, however, the parties fail to settle the matter, an alternative nonbinding dispute resolution should be the first recourse put in place (i.e., referral to an expert).

Furthermore, the Contractor and Contracting Authority will need to ensure that operations are performed in compliance with the applicable laws and regulations. In the event of non-compliance, however, the allocation of risks will need to be provided within the agreement. To what extent will the Contractor be responsible for non-compliance of, inter alia, environmental regulations? What sanctions and penalties would the Contractor face for non-compliance with environmental and other regulations? The risks should be allocated as far as possible to the party best able to handle those risks. In a leasing agreement, if the assets remain under the control of the Contracting Authority and non-compliance originates from such assets, it will follow that the Contracting Authority will assume the risks arising from such non-compliance.

It is often the case that the public utility was historically operating in non-compliance with existing environmental laws but was not challenged by its "sister" public environmental protection authority. One should expect that this arrival of a private operator result in immediate application of previously unapplied law. Although the private operator will be expected (and obliged in the agreement) to comply with such laws, a "grace period" should be provided to allow the private operator to gradually achieve compliance. This should also be contained with a clear rule that preexisting environmental problems are the responsibility of the public utility and ultimately the State.

Revenue risk

- *How secure is the cash flow?*
- *Are the tariffs reasonable?*
- *If the government provides support for the project, what form will that support take (subsidies)?*
- *What are the legal and administrative mechanisms required for the government to provide this additional support?*
- *Are the government guarantee provisions in the contract enforceable, or will a special legal opinion be required to assure that contract clauses are enforceable under the country's law and under international law?*
- *Will the government provide other revenue sources to secure debt besides tariffs? What reassurances will investors require in the contract that the additional government revenues will be available for timely debt service payments by the Contractor?*
- *Will the government provide a guarantee for a minimum amount of new works per year, including any additional government revenue sources that are required to complete these works?*

- *Who will be responsible for paying penalties for non-compliance with environmental regulations in the event of deterioration in the quality of wastewater influent?*
- *What failures by the Contractor to meet its obligations will lead to possible sanctions? Non-compliance with standards for water quality, quantities, and pressure? Disruptions in supply? Non-compliance with environmental regulations? Failure to submit technical and financial reports?*
- *How are penalties set? What are the payment terms for Contractor penalties? Is there a grace period for payment? Are there interest penalties for payments more than 30 days late? Under what conditions may the regulator waive or delay payment?*
- *Will the Contracting Authority require the Contractor to provide special tariff rates for water exports to large customers and other public agencies?*
- *How will the use of subsidies be monitored? If the government provides subsidies for operations, how will the regulator ensure that the subsidies are used for their intended purpose? Will the regulator require that the Contractor establish a separate subsidy account, and if so, who will manage this account? Will disbursements from the account occur only upon proof that the customers intended to benefit from the subsidy have received the service? How will this proof be verified?*
- *Will the contract require business interruption insurance (to provide coverage in the event that the project is shut down and no revenues are generated), and is this type of insurance available in the local or international market?*
- *Will the government guarantee the cost of inputs controlled by government entities, such as electricity and water supply?*
- *Has a willingness-to-pay study been conducted? Are consumers ready and willing to pay for the service or will there be collection issues (thus incurring additional costs)?*
- *Cost coverage ratio: is revenue sufficient to cover costs and at least ensure a certain return?*

The financial viability of any project depends on the Contractor's ability to forecast its cash flows and to successfully attain such forecasts. In the context of water utilities, revenues flows are generally determined by two factors: utilisation levels and tariffs. Utilisation levels will be determined on the basis of reliable historic information documenting demand and price elasticity levels and the availability of such information is thus very important. This type of information is usually available in the water sector. On the other hand, in regard to tariff, the cost of providing water may have been subsidised, making it more difficult to determine how users would behave in the face of higher tariffs or unsubsidised pricing, for instance. Consequently, revenue risk is a fundamental factor in water projects and must be carefully considered in a performance-based contract.

If the Contracting Authority is responsible for providing the infrastructure and completing certain construction or rehabilitation works, failure to deliver such capital works on time is likely to affect the Contractor's performance and bottom line. Therefore, provisions determining the completion dates and consequences (e.g., financial compensation) for failing to achieve the works on time should be included in the contract.

Also, the ability for the Contractor to collect payments from users constitutes another risk which influences its returns. In the EECCA, many users are used too heavily subsidised tariffs or simply unaccustomed to paying for water (as is the case with many state-owned companies), impacting thus the Contractor's cash flows and causing it to invest in collection efforts rather than efficient performance. Coupled with the fact the Contractor has little leverage in terms of collection power (eg, socially unacceptable to interrupt water supply), the threat of non-payment is an important revenue risk in EECCA. Furthermore, it is often the case that government and quasi-governmental entities (state-owned enterprises, armed forces, schools, hospitals are the major culprits for on-payment of tariffs. It is always very difficult (and dangerous) to cut off water supply to the army. In order to

mitigate this risk, Contracting Authorities (or governments) sometimes grant payment guarantees allowing the Contractor to secure a portion of its revenues. Non payment from government and quasi-governmental users may also be guaranteed by Contracting Authorities.

Regulatory Risk

- *Is there an independent regulator?*
- *Does the regulator have the necessary skills?*
- *What limits are placed on the regulator's discretion?*
- *What are the procedures for appealing regulatory decisions?*
- *What compensation or cost pass-through arrangements are there to safeguard the company against shifts in regulatory ground rules?*
- *To what extent must the economic regulator make allowance for or coordinate with other regulators in setting environmental and public health standards?*

Although governments (Contracting Authority) can negotiate contract terms and conditions with Contractor's (private), they are not always successful in maintaining their commitments. This is particularly true of water tariffs, which tend to be politically sensitive.

These risks are more common than many project finance proponents like to admit. They can have substantial effects on existing performance-based agreements. For instance, performance incentives may be tied to tariffs increases and the regulatory framework may not permit such tariff increase without necessary consents or approvals from entities which are not party to the contract. Regulatory risk is exacerbated in countries where new and untested laws govern, which is often the case in the EECCA. Such risks can be expected to be greatest in countries with comparatively little experience with performance-based contracts.

Detailed due diligence on the regulatory framework will need to be conducted to determine its robustness. If the regulatory framework is discovered to be a major impediment to performance-based contracting, then regulatory reform will be essential and will help mitigate this risk. Where regulatory reform is slow, many water contracts provide for "regulation by contract" under which the tariff adjustment mechanism is clearly set out in the agreement and minimal or no discretion is provided to the Contracting Authority. This may be combined with the creation by contract of panel of experts to resolve tariff issues or technical standards.

Political risks

- *How stable is the country?*
- *Will export credit agencies guarantee debt and equity against political risk?*
- *Is insurance available?*

This risk and how it is to be handled depends greatly on the Contracting Authority's willingness to attract private investment. Also, political risks can impact the Contractor's ability to achieve its performance targets. In any event, these risks must be considered in a performance-based contract. The Contractor usually seeks to obtain necessary comfort (or even guarantees) from the Contracting Authority (or government). Assessments of the inherent strength and stability of local political institutions are common in the investment field and are reflected in bond ratings prepared by internationally recognised rating agencies. The common aversion to user fee increases and the political climate in the EECCA, make water projects in this region especially susceptible to political risk. This is exacerbated when new governments oversee unpopular projects instigated by previous administrations. This is the case, for instance, in Belgrade where it is trying to attract foreign and local private investment for its water utility. The recent elections (December 2003), with Milosovic's party in the picture, may impact the City's reform plans and the bankability of the project can be questioned.

However, the Serbian Ministry of Economy and Privatisation and the Privatisation Agency have stated that they will continue with the process of privatisation despite the current political situation in the country – but the underlying risk remains.

Contractors may also purchase political risk insurance from multilaterals (such as MIGA) or from private insurers. Export Credit insurers will also cover political risk, but usually require "national" content (such as export of home country goods and machinery). Also, IFIs and other multilateral organisations (e.g., OECD) can use their influence to help counter political risk.

Table 4. Key Risks

Key risks					
What is the risk?	How does it arise?	What steps can mitigate the risk?	Who typically bears the remaining risk?	In what types of contract does the risk arise?	What steps can minimise risks?
Design and development risk					
Design defects in water or sewerage plant.	Design fault in tender specifications.	Require the public sector to provide a remedy or compensate the project company.	The public sector.	BOT, concession (especially with new infrastructure).	Check tender specifications.
	Design contractor fault.	Include provisions in the design contract requiring the contractor to provide a remedy or pay damages (insurance cover).	The design contractor. Once liquidated damages are exhausted, finance from project lenders is drawn down. ⁴⁹	BOT, concession (especially with new infrastructure).	Monitor design work; replace contractors insurance.
Construction risk					
Cost overrun.	Within the construction consortium's control— inefficient working practices, waste of materials.	Provide for cost overrun in fixed lump sum price in the construction contract.	The construction contractor. Once liquidated damages are exhausted, standby finance is drawn down.	Concession, BOT.	Monitor and inspect construction work; provide for early warning mechanisms in the contract.
	Beyond the construction consortium's control— changes in a law, delays in obtaining approvals or permits, increased taxes.	Allocate cost overruns in the concession contract; purchase business interruption insurance.	The insurer. Once insurance proceeds are exhausted, the investor's return might be eroded because of timing effects.	Concession, BOT.	Obtain approvals in advance; anticipate problems and allocate risk in contract; use insurance.
What is the risk?	How does it arise?	What steps can mitigate the risk?	Who typically bears the remaining risk?	In what types of contract does the risk arise?	What steps can minimise risks?

⁴⁹ Liquidated damages are payments that the contractor or operator is required to make to the sponsor of the project if specified performance targets or milestones are not reached. They are usually capped at a percentage of the contract's value. The amount of the liquidated damages is agreed at the contract's signing.

		the risk?	remaining risk?	does the risk arise?	risks?
Delay in completion.	Within the construction consortium's control—lack of coordination of subcontractors.	Require liquidated damages from the turnkey contractor under the construction contract (sufficient to cover interest due to lenders and fixed operating costs).	The constructor. Once liquidated damages are exhausted, standby finance is drawn down.	Concession, BOT.	Monitor and inspect construction work; provide for early warning mechanisms in the contract.
	Beyond the construction consortium's control— insured force majeure event.	Draw on proceeds from business interruption insurance policy.	The insurer. Once insurance proceeds are exhausted, standby finance is drawn down, debt service coverage ratios will be reduced, and investor's return might be eroded.	Concession, BOT.	Rely on insurance.
Failure of plant to meet performance criteria at completion tests.	Within the construction consortium's control— quality shortfall, defects in construction.	Require liquidated damages payable by the construction consortium, supplemented by insurance.	The construction contractor and, once liquidated damages are exhausted, the insurer. Once insurance proceeds are exhausted, investor return is eroded.	Concession, BOT.	Monitor and inspect construction work; provide for early warning mechanisms; use insurance.

What is the risk?	How does it arise?	What steps can mitigate the risk?	Who typically bears the remaining risk?	In what types of contract does the risk arise?	What steps can minimise risks?
Operating risk					
Operating cost overrun.	Change in operator's practices at project company's request	Require project company to provide a remedy or compensation under the operating contract.	The contractor bears the risk; debt service coverage ratios are reduced; sponsor's return is eroded.	Operation and maintenance, concession, BOT.	Build flexibility into contract; cost changes in advance; define acceptable reasons for changes; provide for changes in remuneration after initial period.
	Operator failure.	Require liquidated damages payable by the operator under the operating contract.	The operating contractor. Once liquidated damages are exhausted, debt service coverage ratios and return are reduced.	Operation and maintenance, concession, BOT.	Monitor and inspect operating practices; provide for early warning mechanisms.
Failure or delay in obtaining permissions, consents, approvals.	Public sector discretion.	Allocate risk in the operating contract.	The public sector. Where there is no public sector discretion, licenses are processed quicker by the contractor, so the contractor bears the risk.	Operation and maintenance, concession, BOT.	Obtain approvals in advance where possible; ensure clear division of responsibilities in the contract.
Shortfall in water quality or quantity.	Operator's fault (malpractice).	Require liquidated damages payable by the operator.	The operating contractor. There is no effect on other parties until liquidated damages are exhausted, when debt service coverage ratios are reduced and the owner's return is	Operation and maintenance, concession, BOT.	Monitor and sample water quality and quantity; provide for early warning mechanisms.

What is the risk?	How does it arise?	What steps can mitigate the risk?	Who typically bears the remaining risk?	In what types of contract does the risk arise?	What steps can minimise risks?
	Project company's fault.	Require liquidated damages payable by project company to the public authority.	The contractor. There is no effect on other parties until payment of liquidated damages completely erodes shareholder returns, when cash flow may become insufficient and the contractor's return is eroded.	Operation and maintenance, concession, BOT.	Quantity: ensure security of supply; enter into bulk water supply contract. Quality: monitor and sample water quantity; provide for early warning mechanism.
Revenue Risk					
Increase in bulk water supply price.	Service difficulties; no security of supply.	Allocate risk by contract; adjust tariffs; if there are off-take and bulk water supply agreements, both guaranteed by the government, pass through the price increase.	As allocated by contract; bulk water supplier.	Lease, concession, BOT.	Fix price by contract and pass through price increase.
Change in tariff rates.	Fall in revenue.	Risk depends on extent of government support. There is usually no market risk in water prices if an off-take agreement is in place. If not, owners may use hedging facilities such as forward sales, futures, and options.	The contractor. There is no effect unless there is no common off-take agreement and unless hedging facilities are not in place or do not compensate for losses, in which case the return can be severely reduced.	Lease, concession, BOT.	Ensure a clear regulatory regime.

What is the risk?	How does it arise?	What steps can mitigate the risk?	Who typically bears the remaining risk?	In what types of contract does the risk arise?	What steps can minimise risks?
Water demand.	Decreased demand.	Risk depends on extent of government support. Use shadow tolls; use long-term take-or-pay off-take agreement that leaves the demand risk with the public utility (guaranteed by the government).	Risk depends on extent of government support. If there is no support and no off-take agreement, the risk is borne by the contractor.	Lease, concession, BOT.	Ensure exclusivity of supply.
Financial Risk					
Exchange rate.	Devaluation of local currency, fluctuations in foreign currencies.	Include in security package hedging facilities against exchange rate risks such as currency rate swaps, caps, and floors.	There is no effect unless hedging facilities are not in place or do not compensate for losses, in which case the return can be severely reduced.	Operation and maintenance, concession, BOT.	Require loans in local currency and same currency as revenue.
Foreign exchange.	Nonconvertibility or nontransferability.	Have the government guarantee availability, convertibility, and transferability (with the ministry of finance a party to the contract); if the government defaults, the project company can terminate. Have the central bank ensure the continuing availability of	The government. If the government defaults on its guarantee and the contractor terminates, the government pays compensation for termination.	Operation and maintenance, concession, BOT.	Transfer funds offshore as much as possible.

		foreign exchange.			
What is the risk?	How does it arise?	What steps can mitigate the risk?	Who typically bears the remaining risk?	In what types of contract does the risk arise?	What steps can minimise risks?
Interest rate.	Fluctuations in interest rates.	Same as above (for hedging facilities against exchange rate risks).	See above (exchange rates).	Operation and maintenance, concession, BOT.	Negotiate fixed rate loans
Force Majeure Risk					
Force Majeure	Flood, earthquake, riot, strike.	If risk relates to an insured event (such as earthquakes in certain regions), the policy is called; if not, standby finance is drawn down.	The insurer. There is no effect unless the event is not insured or is uninsurable. If the insurance policy is exhausted, there might be a severe impact on project returns.	Operation and maintenance, concession, BOT.	Use insurance and government guarantees; clearly define force majeure in contract; include provision in contract that if the changes are specific to the project (rather than general), the government bears the risk.
Legal and regulatory	Changes in tax law, customs practices, environmental standards.	If during the operating period, adjustment is possible (see provisions in contract on compensation).	The contractor.	Operation and maintenance, concession, BOT.	
		If during the construction period, draw down standby finance.	The contractor. Standby finance could be required.	Operation and maintenance, concession, BOT.	
What is the risk?	How does it arise?	What steps can mitigate the risk?	Who typically bears the remaining risk?	In what types of contract does the risk arise?	What steps can minimise risks?
Political.	Breach or cancellation of the concession.	The project company is entitled to terminate if the government defaults.	The government pays compensation to the contractor if	Operation and maintenance, concession, BOT.	Use insurance.

			the company terminates.		
	Expropriation.	Take out political risk insurance with official bodies, such as export credit agencies, with private companies, or involve multilateral agencies (IBRD, IFC) in the financial package.	Once the insurance policy is exhausted, the contractor bears the risk. See clause in contract on expropriation.	Operation and maintenance, concession, BOT.	Use insurance.
	Failure to obtain or renew approvals.	See contract.	See contract. If the government has discretion, it should bear the risk.	Operation and maintenance, concession, BOT.	Obtain approvals in advance where possible.
	Creeping expropriation (discriminatory) taxes, revocation of work visas, import restrictions.	See contract.	The government.	Operation and maintenance, concession, BOT.	
	Interference causing severe prejudice (sometimes referred to as force majeure).	See contract.	The government.	Operation and maintenance, concession, BOT.	
Insurance Risk					
Uninsured loss or damage to project facilities.	Accidental damage.	Insure against all the main risks.	Once standby debt finance is drawn down, the contractor's return is reduced.	Operation and maintenance, concession, BOT.	Quantify and allocate risk in advance in the contract.
What is the risk?	How does it arise?	What steps can mitigate the risk?	Who typically bears the remaining risk?	In what types of contract does the risk arise?	What steps can minimise risks?
Environmental Risk					
Environmental incidents.	Operator's fault	Require indemnity from the operator.	The operating contractor. There is no effect unless the operating	Operation and maintenance, concession, BOT.	Use insurance.

			contractor's payments are exhausted and standby finance is drawn down, in which case the contractor's return is reduced.		
	Preexisting environmental liability.	Provide for public sector cleanup or compensation.	The public sector.	Operation and maintenance, concession, BOT.	Carry out detailed environmental survey; use insurance.

I. Costs

Sensitivity to cost is another key requirement to be considered for performance-based contracting. This notion of “costs” as understood in this Section is not connected to overhead or expenditures inherent to the project, but rather to indirect “losses” (not necessarily quantifiable) which are incurred by a party during the course of the project. This requirement is highly conceptual and less contractual, and consequently, specific provisions relating thereto are typically not included in the agreement. However, the contract may include certain provisions explicitly allocating certain costs to a specific party, generally however, such costs are indirectly related to the agreement and each party must bear its own costs. Nonetheless, during the negotiation and drafting stage the parties should always consider the actual and potential costs inherently and indirectly associated to performance contracting in the water sector.

What is important to remember, though, is that costs arising from performance contracting are often (i) unavoidable and (ii) various. They are unavoidable: costs are necessarily linked to any commercial project (whether or not the project comes to fruition) and the risks associated to such project usually impact on total costs (whether current or future). They are various: it is often difficult to accurately determine and predict the type, amount and number of costs which may surface during the term of a project.

Again, costs which may arise from performance-based contracts are numerous and it can be difficult to correctly determine in advance the costs which the municipality or the utility can or will incur. The most common costs associated with performance contracting include:

- *Risks of using inappropriate performance contracting*
- *Un-monitorable performance targets*
- *Transactions costs of hiring consultants (lawyers, bankers and technicians)*
- *Opportunity costs of staff involved in the negotiations and monitoring*

In considering whether to implement performance-based contracts, the municipality should not neglect to properly assess the costs that will arise from the contracts. A municipality considering reforming its water utility and wishing to implement performance contracting as a means to achieve an improved and more efficient water network should consider hiring qualified technical, financial and legal consultants. These consultants are required to conduct thorough analysis of the network and provide a feasibility study which will then enable the parties to adequately negotiate a performance-based contract and possibly eliminate or at least mitigate future costs. Unfortunately however, it is not uncommon for municipalities wishing to improve their water utilities to precipitate the contractual framework for performance contracting (especially in the wake of elections for political support) and to hastily conclude an agreement with the utility in a hope of avoiding transactional costs.

Unsurprisingly, in both cases the municipality will incur costs, however, the extent of such costs will vary.

Scenario (1): if the municipality drafts, signs and implements a contract without properly assessing the legal, financial, technical and regulatory framework, both parties will save on transactional costs but will face countless risks and therefore escalating costs. At first, this scenario may seem to “fix” the problem while incurring minimal costs, but ultimately, this scenario is likely to result in a plethora of difficulties which will arise during the term of the agreement and each new issue will necessarily entail additional costs. The unpredictability and lack of knowledge of the project is what makes it costly.

Scenario (2): if the municipality hires technical, financial and legal consultants to conduct a comprehensive review and to provide a feasibility study pursuant to such review, it will surely incur transactional costs, but will (and should) limit future cost linked to unpredictability and lack of knowledge of the project. This review and feasibility study should allow the municipality (and the utility) to enter into performance-based contract that have (i) a solid legal and institutional framework in place, (ii) a project scope that is adequately defined and (iii) been drafted in accordance with (i) and (ii).

Furthermore, governments/municipalities have often not engaged suitable legal, technical and financial experts to assist during negotiations, and they have been at a disadvantage in arguing with proponents (often foreign) concerning international practices. Understandably, the goal of each party is to have an agreement whilst incurring the least amount of costs (before, during and after). Although costs necessarily have a negative impact on a party’s bottom line, the ability to forecast costs is essential in determining the financial viability of a project. For this reason, the transaction costs associated with hiring experienced advisors may seem exorbitant, but they remain, to a certain extent, predictable. Ultimately, the parties must choose their respective advisors (and they will decide what costs are reasonable), but the importance of engaging qualified and experienced advisors should not be undermined as this choice can determine the amount of costs incurred by the parties – i.e., risks of using inappropriate performance contracting; un-monitorable performance targets.

Multilateral and bilateral organisations often have "technical cooperation" (i.e. tied or untied grand funding) available to allow governments and contracting authorities to hire international advisors. In two recent Romanian water projects (Bucharest and Constantia) this was combined with the requirement that the winning private sector bidder pay a predetermined amount as a "success fee" to the international advisory team acting for the Contracting Authority.

4.3 Conclusion: Indicators for Successful Contracts

The requirements for performance-based contracts, as contemplated in these Guidelines, establish a foundation based on international practice, and are provided as a starting point for further public-private-participation arrangements in the water sector in the EECCA. In using and interpreting these Guidelines, it is important to remember that drafting contracts, such as performance-based arrangements in the EECCA, is not an exact science and that it is only pursuant to an in-depth understanding of the environment in which a contract is proposed that the full value of these Guidelines will be attained – carving out what is judged to be unnecessary and adapting what is thought to be important.

As an initial step, however, public authorities wishing to use performance contracting should carry out careful strategic planning (including a public awareness campaign) and ensure that the appropriate legal and regulatory framework is in place. Once the decision to move forward with performance-based contracting has been made, the value of a sound legal and institutional/regulatory framework should not be undermined, regardless of whether private entities are involved.

In order to achieve this, the public authority should approach any issues with an open mind, as legal or regulatory reform may often be required. As with any project, it only pursuant to careful due diligence on the legal and regulatory framework that the true feasibility of a project will come to light. If it is

determined that the legal and regulatory framework is an inhibitor to performance contracting, then reform should be considered.

Furthermore, the public authorities must determine and establish the project's scope so that the parties involved have a comprehensive overview of the tasks at hand. Once it is determined where the utility is coming from (i.e., what state it is in) and what the public authority wants to achieve through performance contracting, then the parties will be capable of thoroughly negotiating adequate terms and conditions.

These two requirements are fundamental and essential before even commencing with the drafting or negotiations of contracts. Combined, a sound legal and regulatory framework and a comprehensive project scope are essential indicators in determining whether the environment is conducive to performance-based contracting.

Provided the above indicators are present, the Contracting Authority will need to further determine which performance targets it wishes to utilise. Important questions related to the design of performance targets include:

- *How necessary are specific performance targets?*
- *What elements of the Contractor's performance are best suited to constitute appropriate targets?*
- *To what extent does the need for specific performance targets vary with the type of pricing rule?*
- *How does the level of monitoring and regulatory capacity affect the need for performance targets?*

In determining the type of performance indicators as well as the mechanisms to monitor and control the performance incentives, the following elements should also be considered:

- *Preserve the autonomy of the Contractor:* This should be done by specifying end results to be achieved rather than means to be used. To the extent that the type of service required can be precisely defined, it is best to fully tap the Contractor's creativity and know-how, and leave it free to decide how to organise the supply of the service. Even if the Contracting Authority itself does not overly restrict the autonomy of the Contractor, there is a risk that the regulator might do so. This risk is particularly important if the regulator is made up primarily of former employees of the old public utility company who used to be in charge of actually providing the service. In such cases the temptation for the regulator to micromanage the Contractor might prove irresistible.
- *Maintain sufficient flexibility:* In many cases the targets that are set prove ill-adapted and difficult to modify in new circumstances. One possible answer is to identify more suitable targets initially. Another solution is to design the targets in a more flexible way. Finally, the parties should devise specific renegotiation mechanisms.
- *Ensure that performance targets are realistic:* Overly ambitious or otherwise unrealistic performance targets lose their incentive powers. A recent review of management contracts has shown that many of these contracts suffer from this defect.

The objective of performance contracting is to force Contractors to act differently than they would under the original or underlying incentive scheme put in place by the general price regime and the sharing of responsibilities between parties. The imposition of quality standards, for instance, which the Contractor would not maintain otherwise because they operate under a price cap and would be tempted to lower quality to lower costs. Another example is the imposition of coverage ratios, which operators would not meet under the current price regime. The coverage ratios might, for instance, require that service be extended to rural communities at costs higher than can be recovered from the imposed tariff schedule.

Ultimately, the success of a performance-based contract will depend on the parties' ability to monitor its achievements or shortfalls. This is particularly important in developing countries such as in EECCA, where unfortunately the previous communist regime coupled with the financial hardship of the 1990s have most often resulted in inadequate (or inexistent) monitoring and controlling systems. As a result thereof, the Contracting Authority will need to assess the extent of capital investments required to put in place such monitoring systems (or at least find a way to include and counter this deficiency by transferring this responsibility to the Contractor).

The definition of a "performance-based contract" can be translated as the result of the common will of the parties in reaching an agreement which includes incentives for the Contractor (often financial) to achieve certain goals/objectives set out by the Contracting Authority. In the end, however, these agreements which will regulate water utilities in EECCA will only come to fruition if the following steps have been considered:

- Step 1:* Strategic planning in connection with possible performance-based contracting;
- Step 2:* Due diligence on legal and regulatory framework;
- Step 3:* Due diligence on the utility (technical, legal and financial);
- Step 4:* Identify the scope of the project (objectives); and
- Step 5:* Provide a comprehensive Performance-based contract which considers, at a minimum, the requirements set out in these Guidelines.

Countries in EECCA have identified the need for better water treatment facilities (ie, technically and financially) and have expressed their willingness to find resources to fulfil this need. This willingness, together with the assistance of experienced and qualified professionals in the water sector that can draw from international best practices, should provide the EECCA region with the necessary capabilities to establish working and performing contracts which will improve their respective water utilities and will ensure an environment which could attract private investment (whether local or foreign). *Where there's a will, there's a way.*

Annex 1

Formation of Contractual Relationships between Municipalities and Private Companies in the Water and Wastewater Sector in the Russian Federation

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1. GENERAL DESCRIPTION OF THE WATER SUPPLY SECTOR IN THE RUSSIAN FEDERATION

1.1. Regulatory Framework for water resources

According to the Russian Federation Constitution, the Water Legislation is under the jurisdiction of both the Russian Federation and RF entities. The RF water Code (RF Water Code No.167-FZ of 16 November 1995) regulates the relationship in the sphere of using and protecting water resources so as to ensure citizens the right to pure water and a favorable aquatic environment - it sustains optimum conditions of water consumption; maintains the quality of surface and underground water at a level that meets sanitary regulations and environmental requirements; protects water resources from pollution, blockage, and depletion; prevents or liquidates water nuisance; and also preserves the biological variety of aquatic ecosystems. In May 2004, a revised version of the Water Code was developed by the Ministry of Economic Development and Trade and Ministry of Natural Resources and was sponsored by the RF State *Duma* for consideration during 2004.

The RF Water Code establishes a priority for using water resources for the purpose of drinking and domestic water supply.

In conformity with the RF Water Code all water resources are government property, i.e.they can be owned by both the Russian Federation and RF territories. The Code allows no transfer of governmentally-owned water resources to municipalities, corporations, and individuals. Only separate (isolated, e.g. ponds) water resources can be in municipal and private ownership.

Legal persons and individuals who own no water resources can have the following rights to them:

- Right of long-term use (to be established for a period of three to 25 years);
- Right of short-term use (to be established for a period of under three years);
- Right of limited use (water easement⁵⁰).

Rights to use water resources are acquired on the basis of a license for water use and a contract on water resource management to be concluded in accordance with the license⁵¹. The contract on water resource management is subject to state registration.

Control of how conditions for using water resources as stated in the license are met shall be effected by the agency that issues this license. At present territorial units of the RF Ministry of Natural Resources are charged with licensing. Apart from that, the quality of drinking water is controlled by sanitation agencies under the RF Ministry of Public Health. All the above-mentioned structures are financed from the federal budget.

On the whole, laws on providing residents with water supply and sewerage services are not presently conclusive as they do not include a number of aspects related to the possible attraction of privately-owned companies-operators to this sector (discussed below).

⁵⁰ The right to limited use of water resources can be in the form of public and private water easement. Both concern water resources for general use and other water resources unless otherwise stipulated by the Russian Federation legislation (public water easement). It can be stipulated in a contract that the rights of people to whom water resources have been given for long or short-term use can be limited for the advantage of other interested people (private water easement). Public and private water easements can be established in order to intake water without any special facilities, equipment, and devices; to water and drive cattle; to use water resources as waterways for ferries, boats, and other small ships.

⁵¹ Rules for using governmentally-owned water resources, establishing and revising water use limits, and issuing a water use license were approved by RF Government Resolution No. 383 of 3 April 1997.

1.2. Economic regulation of water resource use

According to the RF Water Code, all water resources are under federal ownership except for a few. Specifically, Russian Federation entities (Republic, Krai, Oblast, Autonomous oblast, Autonomous district) can own water resources, of which the water areas and drainage basins are fully located within the Russian Federation entity itself.

Municipalities can only own isolated water resources, i.e. small and stagnant artificial reservoirs that have no hydraulic connection with other surface water resources.

The Water Code establishes that use, recovery, and protection of water resources shall be carried out on a fee basis.

Economic regulation of use, recovery, and protection of water resources provides for:

- Payments to be requested for using water resources;
- Financing of recovery and protection of water resources;
- Economic incentives for effective use, recovery, and protection of water resources.

Payments to be requested for using water resources include:

- Payments for using water resources (water tax);
- Payments intended for recovery and protection of water resources.

Payments for using water resources are effected by legal persons and individuals who have a water use license. Payments for using water resources are made in the form of regular fees.

According to the RF Law “On General Principles of Local Self-Government in the Russian Federation” (N 131-FZ of 6 October, 2003), all responsibility for delivering water supply services to the population lies with local governments. That is why municipal water supply companies are the major water users for this purpose. Besides, large industrial enterprises often have their own water inlets. Their share in the whole volume of water consumption amounts to about 15 per cent on average.

1.3. Licensing of water resource use

The existing legislation provides for only licensed use of water resources and a contract on water resource management to be concluded in accordance with the license. (But water is not a marketable commodity in the Russian Federation).

A license for using water resources is one of the grounds for establishing rights to use water resources. A water user managing water resources to satisfy the needs of water consumers has the responsibility to fulfill the terms of the license and contract on water resource management – he must consider the availability of water resources, the demand for them from water consumers, and the condition of the water resources.

Depending on the ways and purposes of using a water resource, the license for water use includes:

- Information about the water resource;
- Information about the water user;
- Information about water consumers;
- Reference to ways and purposes of using the water resource;
- Reference to endpoints (3-D coordinates) of the water resource or a part thereof authorised to use and, when necessary, position of water intake (water discharge) points;
- Information about water use limits;
- Information about the water user’s obligations to water consumers;
- License validity term;
- Requirements for effective management and protection of water resources and natural environment.

The license determines limits for water use assuming that the quality of pumped water meets the set standards.

Usually water use limits are determined on the basis of planned needs for water. At the moment, the amount of pumped water is monitored, in most cases, with water meters installed at water intake points.

Where there is no water metering equipment (usually at low-power intake facilities), the volume of pumped water is determined on the basis of pump station capacity and throughput of pipes which, of course, causes an overestimation of the water to be pumped compared to the actual amount of water pumped.

1.3.1. License obtaining process

A license for water use and water management is issued, processed, and registered by a specially authorized governmental agency charged with supervision of water resource management and protection as provided by the RF Water Code. At this time the Ministry of Natural Resources and its territorial offices have these licensing powers.

To obtain a water use license an applicant should submit to a licensing agency:

- a) A license application stating: the applicant's name and legal status, its registered address, settlement account number and corresponding bank's name; name and territorial borders of water resource; type of water use and its specifics; license validity period;
- b) Copies of constituent documents;
- c) Copy of legal person's certificate of state registration;
- d) Description of expected and currently performed economic activities;
- e) Certificate of registration at a tax authority or an individual's certificate of state registration as an entrepreneur with tax authority's stamp;
- f) Document on the allocation of a land plot necessary to use the water resource;
- g) Proposals on the conditions for using the water resource, including those designed to enhance the state of the water resource and ensure its protection;
- h) Data about organisational capabilities and ambient water quality equipment;

To obtain a water use license for water intake purposes an applicant should additionally give:

- a) Information about the water consumers and their needs for water;
- b) Information about the availability of equipment for metering of pumped water and for control (monitoring) of ambient water quality;
- c) Duly approved documentation on the water intake unit operating;
- d) Permission for special water use (water use license) or pre-project documentation on the construction of the planned water intake unit.

The decision to give or refuse a license is made by a licensing agency within 30 days upon receiving an application with all required documents. If it is necessary to conduct an additional analysis (including outside expert examination), such a decision is made within 15 days upon receiving an examination report but no later than 60 days upon submitting the application with all required documents.

The licensing agency draws up and registers a water use license and gives it to a water user within a week upon adopting a favorable decision. According to the effectual legislation, once the license has been received, the license holder is allowed to conclude contracts on using water resources.

A contract on water resource use should be concluded in conformity with the license for water use. Should a contract on water resource management be contradictory to conditions stated in the water use license, that contract shall be recognised as null and void. Once a water use license has been given to a legal person or individual, it is necessary to draw up a contract on managing water resources.

1.4. Institutional structure of the sector

According to Article 14 of the Law “On General Principles of Local Self-Government in the Russian Federation”, (N 131-FZ of 6 October, 2003) organisation of municipal water supply and sewerage fall under the competence of local governments. In most cases municipalities own all fixed assets used to supply the population with drinking water and sewerage services. In other words, all water intake facilities, water supply and sewerage systems, wastewater treatment plants, etc. are under municipal ownership.

On the one hand, some RF entities have water supply and sewerage systems that are owned by the state on sub-federal level. Usually these are used to provide drinking water to the population of the whole region from a single or several large sources due to a lack of drinking water sources near municipal entities. Specifically such structures exist in Primorye, Stavropol, and Krasnodar regions. On the other hand, the water supply and sewerage systems of the cities of Moscow and Saint Petersburg are under Russian Federation entities’ ownership, as these cities are RF entities by their legal status. These companies are state unitary enterprises owned by RF entities.

The vast majority of both governmentally and municipally-owned water supply and sewerage companies are established as unitary enterprises⁵². Municipally-owned property (water supply and sewerage facilities) is transferred to such a unitary enterprise upon its establishing “the right to operate” these facilities.

1.4.1. Unitary enterprises and the right of economic management (the right to operate)

Economic management is a kind of right to operate the property delegated by an owner to an established unitary enterprise. This means the right to operate the government property. It constitutes a particular kind of proprietary right which does not exist in Western law. This is a proprietary right of legal persons delegated for operation and any other use of the owner’s property. In the former USSR the state owned all companies’ property and there could be no private limited companies, public limited companies, or other types of legal persons. However, there was a need for legal persons that were owners of the assets and property they used. Thus, economic management (the right to operate) was aimed at forming a legal base for such entities in order for them to participate in the legal relationship, which is impossible in conventional classical property circulation.

Under the old command economy the state was the owner of most property and was unable to operate it. The state was willing to retain the ownership on the basis of limited proprietary rights. The companies and organisations were formally “independent, self-financed” legal persons – with no power to sell or rent out its property. This is the reason for the existence of economic management (“the right to operate”) intended for enterprises.

The right to operate is granted to a company as a profit-making organisation authorised by the owner to carry out a business. The limited nature of proprietary right to operate is caused by the necessity for a stricter supervision from the owner, primarily public (governmental or municipal) agencies, over activities of legal enterprises-non-owners. With the progress of market relations and the appearance of a strong private sector, the weak points of such limited proprietary right and the presence of legal enterprises-non-owners vested with this right were exposed, these having been concealed under the former economic system. One of the weak points implies a lot of possibilities for such enterprises-non-owners (more precisely, their management) to misuse the economic freedom granted by the owner. The management of municipal entity-non-owner may consciously incur credit from private company and then transfer the ownership of municipal property to the private firm without the owner playing a significant role in this process. Thus, the municipality loses its assets to a private company without

⁵² All findings referring to municipal unitary enterprises are also true for state unitary enterprises.

receiving proper remuneration. That is why the right to operate can neither by name nor by nature recognised as “complete” and similar to the ownership.

1.4.2. Civil code and unitary enterprise

Only legal persons with the special legal status of “unitary enterprises” can be given the right of operational control. Since the introduction of the currently effective Civil Code of the Russian Federation (came into force 8 December 1994), unitary enterprises can be established on the basis of government or municipal property and according to the existing legislation and the right of economic management can be given to governmentally or municipally-owned companies only (Article 113-114 in the Civil Code of the Russian Federation) as a kind of profit-making organisations.

According to Article 294 of the Civil Code of the Russian Federation, the right of economic management is the right given to a state or municipal unitary company to possess, use, and administer an owner’s property within the competence provided by law or other regulatory acts. Since the property given to a unitary enterprise under the right of economic management is written off from the owners’ balance sheet and registered in the enterprise’s balance sheet, the owner retains only partial right to administer. It should be taken into account that the laws on property given to enterprises under the right of economic management can be enforced if these enterprises run into debt but the property cannot be alienated to pay the owner’s debts.

In respect of the property transferred for operation, the owner-founder retains the rights provided by Clause 1, Article 295 of the Civil Code of the Russian Federation, i.e. it can:

- Establish an enterprise-non-owner (this may include the appointment of a director, approval of rules and regulations, determination of competence range);
- Re-organise and liquidate such a company (only in this case can the previously transferred by the owner property can be alienated from the entity-non-owner without the consent of this entity-non-owner but, of course, with observance of rights and the interest of the company’s creditors);
- Effect control over proper use and safety of the property transferred to the company for operation (specifically, conduct at regular intervals an inspection of the company’s activity);
- Obtain part of the profit from the company operating the transferred property.

Thus, the owner of the property transferred to unitary enterprise and the owner of such legal person is the same public entity – municipality or RF entity.

The Civil Code of the Russian Federation has no provision for the necessity to conclude any contract between the founder (property owner) and its unitary enterprise.

However, the common rules of the Civil Code cannot describe all variants of relations between municipalities and the unitary enterprises. For this reason some municipalities in the Russian Federation have been in the process of building contractual relationships between water supply and sewerage enterprises and municipal administrations. Usually before concluding a contract, water supply and sewerage enterprises should change their legal status.

The contract opportunities possible for enterprises and municipalities on the basis of current legislation are discussed below.

1.5. Tax code and its application to the municipal water services

The taxation of legal persons carrying out water supply and sewerage services to the population is regulated by general provisions of the tax legislation. The RF Tax Code contains a general provision

saying that the owner is allowed to charge depreciation costs to the property with the exception of those operated by governmentally and municipally-owned unitary enterprises.

These provisions stated in the RF Tax Code significantly restrict opportunities for attracting privately-owned companies to operate water supply and sewerage facilities owned by the state or municipality. The privately-owned company/operator has no right to charge depreciation costs to property that is not owned by the company. Consequently, such privately-owned companies will carry a greater tax burden as compared to unitary enterprises.

Within the framework of developing a concession legislation, work to alter RF Tax Code provisions on charging depreciation costs to governmentally or municipally-owned property operated by privately-owned companies is now in progress.

1.6. Technical status of the Russian Federation water sector

Water coverage

At the end of 2002 water supply services were delivered to 88.1 per cent of the Russian population. It should be noted that for the period of 1998-2002 the number of residents who received water supply services increased by two per cent. The highest percentage of residents receiving water supply services can be seen in large municipalities where more than 100 000 people live. In such municipal entities 97.7 per cent of residents received water supply services at the end of 2002. In small municipalities (with a population of less than 100 000 people) a little more than 85 per cent received these services.

Wastewater coverage

Compared to water supply coverage, there is much less sewerage coverage. On average, at the end of 2002 in the Russian Federation only 69.6 per cent of the population could use sewerage systems, this being however almost three per cent higher than in 1998.

Water production

During the period of 1998-2002 the volume of water generation per capita went down from 14.2 to 13.7m³, on average. In small municipalities the rate of water consumption per capita was nine m³, whereas in medium-sized and large cities this rate was 15m³ as at the end of 2002.

Water losses

Across all Russian water supply enterprises, on the whole, water losses determined as a difference between produced drinking water which was delivered to the water pipe and billed water consumption amounted to almost a quarter of all produced water as at the end of 2002. It should be noted that during the period of 1998-2002 the amount of water waste increased by nearly three per cent. The specified values are usually determined by calculations rather than by using indications from meters. According to experts, the above values are significantly underestimated. Actual waste of drinking water amounts to 40 per cent and more.

Water metering

Over the last five years in the Russian Federation we have been able to see changes for the better in the introduction of water meters to control water consumption. The share of connection to water supply systems equipped with water meters went up from 26 to 36 per cent between 1998 and 2002.

Accident rate

There is a tendency to a growing accident rate with regard to water supply systems and a decreasing number in sewerage networks. Across the Russian Federation the quantity of accidents in water supply

systems grew slightly, on average, from 1.19 to 1.21 accidents/km in the water network during the period of 1998-2002. Numbers of accidents in the sewerage systems were going down during this period and at the end of 2002 reached the level of 1.6 accidents/km in the sewerage network per annum.

Wastewater treatment

On the whole, across all sewerage enterprises the share of sewage processing in the total volume of sewerage services exceeded 93 per cent during 1998-2002 and only at the end of the last year that value went down to 91 per cent.

2. POSSIBLE FORMS OF CONTRACTS⁵³

Contracts that provide for transfer of rights to operate water supply and sewerage facilities include:

- A contract to lease buildings and structures (RF Civil Code, Chapter 34, Para 4);
- A management contract (RF Civil Code, Chapter 39) ;
- A trust management contract (RF Civil Code, Chapter 53) ;
- A concession agreement.

2.1. Prerequisites

The contract-based partnership between a municipality and a management company, no matter what specific model of it they choose, requires the obligatory provision of the following base terms and conditions:

- Fixed assets (water inlets, pump stations, water treatment facilities, pipes, etc.) should be withdrawn from municipal companies operating them now by right of economic management and transferred to the balance sheet of an appropriate structural unit of a city administration (a housing and utility sector department) or to a municipal property management committee;
- All newly-created fixed assets and infrastructure facilities should be transferred in ownership to a municipal government either upon expiration of a contract validity term or upon completion of specific construction phases.

Before entering into a contract a municipality should draft a long-term programme of municipal property management including long-term investment sub-programmes, among which may be externally financed projects.

Tariff-setting should be coordinated with the short-term programmes of a service producer (production and investment programmes) covering a period from one to three years. If an investment programme lasts more than a year, tariffs should be adjusted every year in accordance with the structure they have at the moment of their approval. Tariff adjustments should also be made without fail in the event of a sharp increase in commodity prices having a particularly grave impact on the structure of enterprise costs (automatic tariff adjustment).

In the event of a city refusing to adjust tariffs to a level adequate to the needs of production and investment programmes, a service producer can abridge its production and investment programmes so as to bring them into line with available finance.

⁵³ We present here the “ideal model” and possible options for private sector participation. All forms of the contracts described below are just possible options.

Until the expiration of the contract term a service producer should regularly report to a city administration about the progress in implementation of its long and short-term programmes of municipal property management.

A city administration may penalise a service producer by reducing a tariff for a next regulatory period in event of violation of contract provisions. These may be discovered by various methods including monitoring of the service producer performance by a city administration.

As for specific models of partnership between municipalities and private investors, each of these models has its strengths and weaknesses.

2.2. Contract of lease of water supply and wastewater facilities⁵⁴

On the one hand, implementation of municipal property lease and management contracts are strictly regulated by the effective civil law and to some extent this has already been tested in practice, but due to specific collisions of legislation in the RF Tax Code on the issue of depreciation accounting, difficulties may arise in counting depreciation costs for a leased municipal property or making settlements between a property owner and its commercial partner.

Under the RF Tax Code depreciation costs can be estimated only by an owner of a depreciated property (except legal persons holding this property by economic management). So, a leaseholder cannot include depreciation costs in its expenses that are taken into account when its tax base is assessed. However, the lessee's costs of construction of capital improvements, inseparable from the leased property do affect its taxable income if such costs are not covered by a property owner as is specified by a contract. At the same time rent payments may be fixed by a property owner not only in terms of cash but also in terms of the leaseholder's obligation to make improvements to the leased property, with the cash equivalent of these improvements having been fixed in the contract. Still this approach turns out to be inconsistent with the effective budget law, which establishes that all revenues from lease of a governmental property should flow to an appropriate budget, i.e. should be made in cash since the law forbids all non-cash settlements with budgets. Moreover, by paying rent a leaseholder is also obliged to pay VAT which also brings down the rate of return on its investments.

When concluding a contract for leasing real property, this contract is subject to state registration, which among other conditions, provides for rating of the leased property by an independent expert. Considering that a great majority of RF municipalities have not conducted an inventory of all water supply and sewerage facilities (let alone independent evaluation of these facilities), concluding any contracts related to municipal property causes many problems the settlement of which requires significant expenditure from municipal budgets.

Thus, the above review demonstrates some difficulties in concluding contracts for a lease of building and structures caused by inadequacy of the effective law. Besides, Russian municipalities and investment communities are still lacking practical experience in contractual relationship (the only exception is their negotiations on contracting EBRD and WB investments, or BOOT model contracts with foreign investors).

2.3. Trust management contract

A trust management contract provides a greater management freedom to a management company but is more cumbersome for a municipality.

Under this type of contract a manager operates the transferred property as if it were an owner (within limits established by the law or a contract) but in reality, it is not an owner. It administers the property in its own name but to the benefit of the owner (or its beneficiary) rather than its own. Trusts may be

⁵⁴ This report intentionally ignores the option of lease of enterprises as industrial property objects because gaps in the effective tax and registration laws make this type of lease rather cost-consuming for both municipalities and investors. With the current tariff rates these costs are not beneficial to making investments in the housing and utility sector.

created by any property owner. A trust management contract has a fixed term of no more than five years. Upon expiration of the contract validity term, the property transferred to trust management should be given back to the creator of the trust.

Worth noting is also the fact that the property transferred for trust management is separated from the other property of the settler and forms the property of the trustee. For this purpose this property is reflected on a separate balance sheet by the trustee and is subject to independent accounting. Moreover, for settlement of accounts in trust management operations a separate banking account must be opened.

A trust management contract makes it possible to definitely delineate obligations of the owner and the trust manager, enhance competition on the market, and give an economic impetus to more efficient management of residential property. However, this type of contract has also serious deficiencies limiting the introduction and wider use of it in practice.

Following the effective Civil Code contracts for trust management of property should be concluded in accordance with rules established for the sale of real property. In particular, to transfer property for trust management it is necessary to have a property inventory record, an asset and liability balance, an independent auditor's report about the structure and cost of enterprise assets and an inventory of enterprise debts. Furthermore, trust management transactions and contracts are also subject to state registration.

Another important notice is that unfulfilled obligations arisen from trust management of the property should be covered at the cost of this property, which implies a risk for the owner to lose its property. Under the effective RF Civil Code "property placed in economic management cannot be placed in trust management. This is possible only after the liquidation of the legal person that had the property in economic management or after termination of the right of economic management of the property and its transfer to the possession of the owner on other grounds stipulated by law". This stipulation of the law implies for municipalities the need to liquidate their utility companies-unitary enterprises and release their personnel which subsequently will cause government expenditure and social tension to grow.

2.4. Municipal property management contract

A municipal property management contract is a contract for the provision of compensable services, under which a municipality transfers its property to a management company, which undertakes to simultaneously manage and renovate in accordance with conditions stipulated in the contract. This type of contract should have a fixed validity term, which helps to stimulate the property manager's work efficiency economically. At the same time, unlike trust management contracts, the law does not establish any specific limits on the validity term of such contracts. They are not subject to state registration. When concluding a contract the owner is supposed to set particular goals and tasks for property management, but ways and methods of attainment are to be chosen by the property manager itself, it simply being required to get the owner's approval of its property management programme. A management company is supposed to develop a management programme for every specific property object and then get the city's approval of all of them. This type of contract helps to take into account all factors of efficient performance of a property manager, provides motives for enhancing the efficiency of municipal property management and creates conditions, under which the property manager will be mostly interested to meet interests of users rather than administrative authorities. Such a system of organisation of property relations excludes the possibility of using the property transferred for management to pay the debts of a management company.

2.5. Concession agreement

Concession agreements are the best model of partnership between municipalities and private investors. It is concession agreements that ensure delegation of responsibility for infrastructure maintenance and service delivery to privately-owned companies which makes it possible to take advantage of the

private sector's administrative experience and financial sources. At the same time public ownership of fixed assets ensures public control over the quality and wide accessibility of services provided. Although this model of legal relations will remain beyond the scope of the Russian law, certain municipalities do undertake steps towards negotiating the possibility of conclusion of such agreements with private investors.

It is expected that after adoption of a framework law, other laws regulating matters of building concession agreements in separate economic sectors will be drawn up and passed. Among those, the Law "On Investment Agreements in Utility Sector" is expected to be drawn up and passed.

Thus, within the framework of the existing legislation there are several possibilities for municipalities and enterprises to agree on operating water supply and sewerage systems. Below are several examples that illustrate concluding such contracts in the Russian Federation municipalities.

3. EXAMPLES OF CONTRACTS

Early in the 1990s in some municipalities a number of water supply and sewerage enterprises were privatised during the mass privatisation period. At that moment the quantity of such privatised enterprises accounted for seven per cent of the total number of water supply companies. In most cases the water supply facilities were subject to privatisation as well and fixed assets were included in authorised capital stock of privatised enterprises. Since work collectives usually became the owner, such a kind of privatisation caused neither change of management nor inflow of investment. Moreover, matters of tariff regulation were usually settled by non-professional people and contractual relationships were not practiced at that time. For all these reasons at the end of the 1990s some cases of deprivatisation (municipalisation) of water supply and sewerage enterprises were noted (Pskov, Kemerovo, Khabarovsk and others). At the same time, in some municipalities water supply and sewerage enterprises were privatised without the related engineering infrastructure that remained municipally-owned. Such cases are rare across the whole of Russia and were noted in Novokuznetsk (Kemerovo Oblast), Tobolsk (Tomsk Oblast), and Nefteyugansk (Khanty-Mansiisk Autonomous District). In these cases it was necessary to establish contractual relationship between the municipality as property owner and a private company-operator. It is precisely these cases that will be the subject of this study.

Studying the situation allowed us to establish several municipalities that switched over to contractual relationships with companies operating water supply and sewerage facilities. These are the following cities: Syzran, Otradny, Nefteyugansk, and Perm. Noteworthy is the uniqueness of each contract under consideration as each one is unique to a certain city and this phenomenon is atypical of the whole of Russia.

All considered contracts have the following common characteristics:

- All contracts are based on Russian legislation;
- The municipality is the owner of the infrastructure;
- The company-operator operates and maintains the assets by itself;
- Usually the Administration of the City represented by its structural unit responsible for the housing and utility sector controls and assesses the quality of operation and maintenance. However, in all considered cases these functions were performed in part and it is common practice that the owner of fixed assets effects loose control over the operator's work;
- Each considered contract provides for negotiations as a major tool in the enforcement mechanism to settle disputes. However, in case of a failure to settle the matter by negotiations the case shall be referred to the Russian court;
- Financing of investments to establish new fixed assets and renovate the existing ones shall be effected at the cost of the company's funds to be formed through a corresponding tariff-setting policy;
- At present no loan is used to finance investments;
- Companies operating water supply and sewerage facilities do not give any financial guarantees within the frameworks of contracts concluded;

- In relation to companies charged with operating water supply and sewerage facilities the Russian Federation legislation has no special anti-bankruptcy provision. Should such companies go into bankruptcy, general provisions on bankruptcy stated in the existing legislation shall be applied to these companies;
- Since companies-operators do not use investment loans, they bear no costs for debt service;
- Consumers cover all expenses related to both the company's operational and investment activity with the exception of budgetary compensation for benefits "Igota" (to be given to eligible categories of citizens) and subsidies to be granted to citizens on a means-test basis. A share of budgetary financing for benefits and subsidies in the total volume of each of the considered companies' receipts can be assessed from five to 15 per cent.
- Taxation shall be effected in full conformity with the provisions stated in the Russian Federation Tax Code. No special taxation procedure related to this line of activity has been provided.

It should be noted especially that all contracts in question contain no technical information about water supply and sewerage facilities. When describing each particular case, we are giving general information about the state of the water supply and sewerage facilities of each city obtained from other sources.

3.1. Case 1. Transfer of municipally-owned water supply and sewerage facilities of the City of Syzran (Samarskaya Oblast) for trust management

3.1.1. Key features of the water supply and sewerage system in the City of Syzran (Samarskaya Oblast).

The town of Syzran belongs to the Samara region, and its population goes slightly above 182 000 people. The whole population of the city has access to the water supply, and 87 per cent of town inhabitants have access to a permanent sewer.

Annually, the water supply enterprise produces more than 28 million cubic metres of water fed directly into the water supply system. Water losses and spills are quite frequent; only 69.4 per cent of water produced in 2002 had been invoiced and accounted for appropriately.

The average cost of the water supply service in 2002, per user, amounted to 10.24 rubles. The town also employs a system of cross-subsidies to the population; population tariffs are 3.6 times lower than tariffs for other consumers; general public rates are at a level of RUR1.62/m³, whereas those effective for industrial consumers are RUR5.82/m³.

3.1.2. Historical background of the contract

During the financial crisis that began in 1998, "frozen" tariffs on delivering water supply and sewerage services to the population pushed the municipally-owned unitary enterprise to the edge of bankruptcy in Syzran by the end of 2000. This resulted in a higher number of breakdowns in the water supply and sewerage systems and growth of individuals' and other consumers' complaints against the unitary enterprise.

One of the ways out of this situation was to charge privately-owned companies with operating the water supply systems and other utility networks. The regional administration was one of those who initiated such an approach. The Syzran Administration was the first in Samara region who implemented this idea. All expected that the management of privately-owned companies would improve the work of the water supply and sewerage sector. Besides, the city administration initiated establishment of a privately-owned company so that it could operate the water supply and sewerage networks. Founders of this newly-established company were large local industrial enterprises which are major consumers of water supply and sewerage services in Syzran. It was expected that these enterprises interested in getting water supply and sewerage services would invest in the water sector in order to ensure consistency and quality of water supply.

Thus the limited liability company "Syzranvodokanal" has been set up by a number of private commercial firms of the town of Syzran. The chartered capital of the organisation is three million roubles.

3.1.3. Key provisions of the contract

Before the coming of the private company, the engineering infrastructure of the water supply and water allocation was held in property by the municipality, and was assigned, for the purposes of economic management, to the municipal unitary enterprise "VKKh".

In June 2001, as per the resolution of the head of the local self-governing body of the town of Syzran, all capital and real estate assets of the municipal unitary water supply enterprise "VKKh" had been transferred to a Limited Liability Partnership "Syzranvodokanal".

Once the decision was made to attract a private company to the management of water supply and water allocation systems, the municipal property (water supply and allocation objects and networks) was seized from the economic domain of the municipal enterprise and transferred to the trust management of the "Syzranvodokanal" LLP. The town administration and the private company signed on June 22, 2002 a contract for "Trust management of municipal property". The "Syzranvodokanal" then employed all the former staff of the Municipal Unitary Enterprise "VKKh". In fact this commercial company acted as an operator in water supply and water allocation for the town of Syzran.

The contract was drawn up in conformity with the RF Civil Code. According to the contract on municipal property trust management, the property of water supply and sewerage sector has been transferred to a privately-owned company in trust for a five year period. The contract determines objectives of trust management as follows: to provide continuous delivery of water supply and sewerage services to businesses, individuals, and organisations of the City of Syzran with a strict conformity to the rates and standards for water supply and sewerage services; to renovate water supply and sewerage facilities; to ensure general and integrated development of the water supply and sewerage sector in the City of Syzran.

The contract determines general principles and the procedure of operating the property. According to the contract, the trust manager - "Syzranvodokanal" LLP shall keep records of the property held in trust, operate and use it to the full, but administer that property within the limits set by the property owner. The trust manager shall operate the property in the interests of residents living within the city territory.

The contract provides for the possibility to recognise the unsatisfactory operating of the property. In this case a local government can require that the trust manager should eliminate its faults and determine a period for their elimination. If the trust manager fails to meet these requirements, the city administration can cancel the contract. For operating the municipal property the trust manager shall receive an annual remuneration equal to 450 minimum wages (according to the Russian legislation "minimum wages" is special unit of calculation of liabilities).

The contract describes no condition or procedure for consideration and revision of tariffs on water supply and sewerage services. Managers' remuneration has nothing to do with the company's operational and investment activity which is an obvious disadvantage of this contract.

The contract contains no investment obligations of the trust manager but requires that the managing company shall have a programme for operating the municipal property. However, till present, no such programme has been developed and thus this clause has not been implemented.

The contract has neither a description of the infrastructure transferred for trust management nor a technical specification related to functioning of the water supply and sewerage systems. The value of property transferred for trust management has been assessed on the basis of a balance sheet submitted by the municipal unitary enterprise "VKKh".

Every month the trust manager shall submit a report on work done for the previous month. The city administration has the right to audit the property transferred for trust management.

3.1.4. Contract assessment

It is obvious that neither the city administration nor “Syzranvodokanal” practiced a contractual relationship in operating the utility infrastructure before. Despite the existing problems, nobody in the city has any doubt about the appropriateness of the adopted strategic decision. The company’s financial standing has improved to some extent; its management has been provided with a stronger motivation to achieve results. During the first year of its operation the “Syzranvodokanal” LLP invested more than three million roubles (US\$100 000) in the municipal property. This made it possible to change the situation in the water supply and sewerage sector slightly for the better.

However, due to the novelty of the task in question as well as deficiencies in the regulatory framework, there were a lot of legal and economic uncertainties during the contract preliminaries. Specifically, the legal form of the contract does not seem to be adequate. According to the contract, the trust manager shall work on a payment basis which provides for poor motivation to decrease the company’s ineffective costs and no motivation to invest funds to renovate the production facilities.

In conformity with the effectual legislation, property management contracts are subject to obligatory state registration. To enter the trust management contract into the state register, it is necessary to make an unbiased assessment of property objects transferred under this contract. However, neither the municipal budget nor the company itself had enough money to pay assessors’ services so there has still been no assessment made - which is necessary for entering the contract into the state register. Thus, despite the two year period of company operations, the status of municipal property operated by a privately-owned company has not yet been defined. It should be noted that the problem of assessment and registration of water supply and sewerage systems is essential for all cases in question.

Other specifics of the effectual legislation which had an adverse effect on establishing the company’s finance policy were not considered. In accordance with the effectual RF legislation, municipally-owned enterprises shall be regulated at the municipal government level, whereas privately-owned companies shall be regulated at the Russian Federation entity level (Oblast, Krai, etc.). When setting a tariff, they neither completely take into account the financing necessary for developing the municipal infrastructure nor do they include company costs for acceptance of departmental and ownerless utility networks.

Besides, the regional government has revoked the tariff on overrated (above permitted standard) water consumption, which also affected the financial standing of trust manager.

Thus, when charging a privately-owned company with operating the municipal property related to the water supply and sewerage sector, some serious errors were made. Eventually these errors along with deficiencies in the regulatory framework made it impossible to realise goals as were declared when signing the contract.

3.2. Case 2. Transfer of municipally-owned water supply and sewerage facilities of the City of Otradny (Samarskaya Oblast) for trust management

3.2.1. Key features of the water supply and sewerage system in the City of Otradny (Samarskaya Oblast)

The City of Otradny is situated 100 km to the east of the region capital Samara on the left bank of the Bolshoi Kinel River (the right tributary of the Samara River, Volga basin). The city area is 27.8sq.km. The population of Otradny is 54000 citizens.

The water supply situation in the city can be assessed as good. As at the beginning of 2003 water supply services were delivered to 100 per cent of the city population, and sewerage services to 96.5 per cent of residents, which exceeds the average figures over the region. Only 91 per cent of residents in Samarskaya

Oblast have been provided with water supply services, whereas a little more than 63 per cent of people can use sewerage services.

The annual volume of drinking water produced and delivered into the water supply system exceeds 15 million m³. Water losses and spills are high and according to experts, the infrastructure network has been depreciated by 70-80 per cent. The rate of breakdowns in the water supply systems amounts to 0.32 accident/km of the water supply network per annum. It should be noted that this indicator was reduced by 18 per cent for the previous year. The rate of breakdowns in the sewerage systems is 0.01 accident/km of the sewerage network per annum.

Based on 2002 reporting documentation, water bills were issued against consumption of 6.7million m³, i.e. more than 44 per cent of produced water was lost in the networks or “illegally” consumed. Of 6.7 million m³ of “legally” consumed water, more than three million m³ was used by consumers that have water meters.

Monthly per capita water consumption is 11.74 m³, a standard household in the City of Otradny consumes a little more than 27 m³ of water. In 2001 the “UK ZhKKh of Otradny” Joint Stock Company collected and processed more than 6.7 million m³ of sewerage.

Actual per annum cost recovered for one m³ of invoiced water to consumers amounted to RUR2.69 (US\$0.09). In 2000 recovery of costs from water bills grew sharply upon charging a privately-owned company with operating. Due to funds collected for the previous years, the managing company’s receipts exceeded the invoiced charges by 20 per cent. In 2001 recovery of costs from water bills diminished to 91 per cent of the invoiced charges.

In 2001 the company’s receipts from rendering water supply services amounted to RUR18 million; receipts from collecting and processing sewerage were RUR17 million.

The city employs a system of cross-subsidies to the population. Tariffs for individuals are 3.6 times lower than that for other consumers. Tariffs for individuals are RUR1.22/m³, whereas tariffs for industrial consumers are RUR5.2/m³.

3.2.2. Historical background of the contract

Before the year 2000 the municipal water supply and sewerage systems in Otradny were operated by a municipally-owned unitary enterprise. By the beginning of 2000 this enterprise had accumulated debts to the equivalent amount of the company’s annual budget. At the same time the size of receivables was half of the debt. The water supply and sewerage systems had been deteriorating; the quality of water supply services was getting worse. Consumers of services expressed their dissatisfaction with the water supply quality.

Due to the problem above, the City Administration made a strategic decision to involve privately-owned companies in operating the municipal housing and utility sector. In the year 2000 the “Upravlyayushchaya Kompaniya Zhilishchno-Kommunalnogo Khozyaistva Goroda Otradnogo” (“UK ZhKKh of Otradny”) Joint-Stock Company was established on the basis of the municipal utility enterprise (MUP ZhKKh of the City of Otradny). Founders of the newly-established joint stock company were the City Administration (33.3 per cent of shares) and two privately-owned organisations (66.7 per cent of shares) interested in creating a market for utility services within the Samarskaya *Oblast*. The municipal networks as well as district heating units, power supply, water supply, and sewerage facilities were transferred to the newly established company for operation. This company concluded with the City Administration, i.e., the owner of municipal property, a trust management contract according to which the newly-established company would operate the property (water supply and sewerage facilities, district heating and power supply networks, boiler units) transferred for trust management.

The relationship between the local government and the “UK ZhKKh of Otradny” Joint-Stock Company shall be regulated by the contract “On transfer of the utility infrastructure for trust management”.

The value of water supply and sewerage facilities transferred to the “UK ZhKKh of Otradny” Joint-Stock Company amounts to RUR93 678 million (US\$3.2 million). The length of water supply systems transferred to the privately-owned company under lease is 178 km and the length of sewerage systems is 92.9 km. The company is staffed with about 1 500 employees, of which 188 workers directly deal with water supply and sewerage.

3.2.3. Key provisions of the contract

The contract was drawn up in conformity with the effectual legislation for a five year period. The subject of this contract is to transfer the municipal property to the “UK ZhKKh of Otradny” Joint-Stock Company for trust management. The trust manager undertakes to operate this property to the municipality’s benefit. The list of property subject to transfer is given in an appendix to this contract. The local government of the City of Otradny retains the ownership of this property. The trust manager has no right to dispose the transferred property.

However, the trust manager is allowed to conclude contracts on water supply and sewerage collection, treatment, and disposal on its own behalf. Thus, the municipality retains the ownership of the water supply and sewerage system, whereas the privately-owned company is charged with operating and maintaining this system under local government supervision.

The contract describes rights and obligations of the parties. According to the contract, the city administration has the right to:

- Control the use of property transferred;
- Choose major investment lines (aims and objectives for investment);
- Check and control how the technical and financial conditions and terms stated in this contract are met;
- Withdraw part of municipally-owned property from trust management upon mutual agreement with the Manager;
- Hear (Examine) the manager’s report (work statement) on how the property is used;
- Audit the property transferred for trust management.

As to the tariffs, the city administration should revise tariffs on water supply and sewerage services at regular intervals. It should be noted that this contractual provision contradicts the effectual legislation. In conformity with RF Government Resolution No.239, tariffs for all businesses except for municipally-owned enterprises shall be regulated by the Russian Federation entities. In other words, the city administration will have no possibility to fulfill its obligations in the part of tariff-setting. This aspect seems to be the most risky for the trust manager.

The trust manager shall:

- Provide uninterrupted functioning of the utility infrastructure;
- Provide continuous delivery of utility services to consumers at an adequate volume and of standard quality;
- Maintain, repair, and renovate at its own expense, facilities, machinery, and equipment necessary to ensure the normal functioning of the housing and utility infrastructure;
- Submit a work statement to the Settler on a quarterly basis.

According to the contract, the Settler can recognise the trust management as unsatisfactory if the contractual terms have not been fulfilled or have been fulfilled improperly.

The contract has the section “Parties’ Responsibilities”, which provides for managers’ responsibility for loss of municipal property. Debts arisen from operating the property transferred for trust management shall be paid at the cost of this property. Operating the property shall be financed from consumers’ payments, budgetary subsidies, and attracted investments. According to the contract, the managing company has no obligation to invest funds in the water supply and sewerage systems. Moreover, responsibility for property investments lies with the municipality.

The contract contains a list of equipment subject to transfer but no related technical description and no technical specification of the water supply and sewerage systems. In general, points of property relations have not been stated clearly enough in the contract.

3.2.4. Contract assessment

Signing the contract on operating the municipal utility networks had a great significance and was conducive to delivering utility services of a better quality and improving the financial situation in the water supply sector. Now there is a system of economic cooperation between the city administration that is the owner of the utility infrastructure, and the privately-owned managing organisation. Notice that the private operator had nothing to do with local business circles as it was in Syzran. City administration's pressure on this operator is quite low so we can say that in Otradny the relationship between the local government and business showed its viability.

Once a new operator took over, it slightly reduced the staff charged with delivering water to consumers and collecting sewerage. A share of wage payments in the operating cost structure had grown to 57.13 per cent in the previous year, whereas in 2000 it declined to 36.61 per cent. At the same time the volume of work performed by outside organisations declined by 21 per cent. It should be noted that once the joint-stock company started operating, the number of consumers' complaints about the quality of water supply services went down.

However, the practice of cooperation between the city and business gave rise to a number of currently unsettled problems. One of the major problems is legal status of the contract. The trust management contract has some serious limitations that restrict its applicability in the housing and utility sector as was mentioned in the previous case. They have still not settled the problem of property assessment and legal registration of the water supply and sewerage facilities, which does not allow them to form depreciation-costing resources sufficient to renew the fixed assets and does not clearly define the extent of the private operator's responsibility.

The analysis of the contract has shown that it features a general description but gives no specific issues about water supply and sewerage. In particular, the contract does not give any assessed value of the property subject to transfer, does not define any quality parameters of rendering water supply and sewerage services and does not determine any responsibility for violating the quality parameters. The contract describes only conditions of delivering utility services: "utility services shall be provided continuously and to the full". However, they do not take into account dead time necessary to repair the utility networks. When the depreciation rate is more than 70 per cent, such interruptions become unavoidable. According to the "UK ZhKKh of Otradny" information, an average daily duration of water supply amounted to 23.9 hours. In other words, they failed to meet the condition of continuity. The contract does not determine the scope of financing work through tariff system on water supply and sewerage services nor procedure for their indexation or revision. All those issues above make it extremely risky to use loan capital in order to enhance operating the water supply and sewerage sector in the city.

At present "UK ZhKKh of Otradny" Joint-Stock Company tries to revise the trust management contract as lease agreement with the city. Transition from the trust management contract to a lease agreement would remove some legal problems and enhance the self-sufficiency of the private managing company. The textual part of the lease agreement has been drawn up by the "UK ZhKKh of Otradny" Joint-Stock Company and submitted to the city administration for approval. This agreement provides for leasing the municipal property for fifteen years.

The agreement also provides for investment obligations of the managing company related to renovation, retrofit, and re-equipment of the leased property.

3.3. Case 3. Transfer of the water supply and sewerage system for trust management in the City of Nefteyugansk.

3.3.1. Key features of the water supply and sewerage system in the City of Nefteyugansk.

The population of Nefteyugansk (Khanty-Mansiisk Autonomous District) is about 100 000 people. Practically all residents receive water supply and sewerage services.

The city has a drinking water network of about 120 km in length and a service water network of about 10 km in length. To produce drinking water they use a groundwater intake facility consisting of 24 water wells. It allows the city to produce totally 5.8 million m³ of drinking water per annum. The service water pipe is used mainly to deliver water to the municipal district heating network. A surface water intake facility of about 4.5 million m³ per annum in capacity is located on the Yuganskaya Ob River.

The rate of deterioration of the water supply and sewerage systems is about 85 per cent; approximately 400 accidents occur every year or about three accidents/km of the network per annum.

Of the whole volume of wastewater running through the sewerage system, approximately 40 per cent has become treated. Untreated wastewater undergoes chlorination and is discharged into a natural sedimentation reservoir to where treated wastewater runs as well. This insufficient capacity of wastewater treatment facilities constitutes a serious threat to good urban ecology. Another source of environmental pollution is the discharge of water after flushing filters in the service water pipe which shows the need for establishing a recycling water supply system.

3.3.2. Historical background of the contract

The “Yuganskvodokanal” LLP was established primarily to avoid debts accumulated by the former municipally-owned unitary enterprise. The property operated by this enterprise/predecessor was transferred onto the balance sheet of the Municipal Property Management Committee of the Nefteyugansk Administration that founded the “Yuganskvodokanal” LLP in April 2001. This company received the right of free use of the municipal property previously operated by the municipally-owned unitary enterprise.

Thus, the City of Nefteyugansk has been practicing a contractual relationship between the city administration and the utility company in order to regulate property interests. Transfer of the property for trust management is no doubt a plus in comparison with the previously existing practice of operating the property by municipally-owned unitary enterprise. However, having analysed the contract, we can note a number of weak points.

3.3.3. Key provisions of the contract

A contract on free use of the municipally-owned property (water supply and sewerage systems) was concluded between the Municipal Property Management Committee and the “Yuganskvodokanal” LLP whose founder is also the above committee. The contract shall be valid for twelve months but it has no provision on its prolongation upon expiration of the contract period. It is obvious that such a short validity period makes it impossible to implement long-term (or even short-term) investment projects designed to improve the company’s efficiency.

Section 1 of the contract contains general provisions on transfer of the property for free use with reference to its balance sheet value (about RUR380 million), whereas the list of that property is given in an appendix to the contract. It should be noted that the balance sheet value of this property gives a vague idea of its actual market value but there is no other assessed value in this contract.

Section 2 describes parties’ rights under this contract. The lender has the right to audit the property and its appropriate use, whereas the borrower has the right to use the property held in trust as provided by the terms and conditions of this contract as well as “determine by itself types and forms of interior finishing and furnishings that do not require any changes in the supporting frame of the real property, its retrofit, or other

inseparable improvements”. Also, both parties have the right to cancel the contract before its expiration. Provisions stated in this section are subject of a number of critical comments. First, the contract does not stipulate the limits of “appropriate use” of the property that can be controlled by the lender. Second, the contract does not clearly define borrower’s right to use the property, i.e. it is unclear what the borrower can do when “operating” the property and what he cannot do. Third, the borrower’s right to determine by itself a certain type and form of interior finishing when applied to water supply and sewerage facilities seems odd. This provision would be more appropriate in a lease contract.

Section 3, which describes the parties’ obligations, is the most comprehensive. Specifically, it provides that the lender is obliged to consider the borrower’s applications for changing the limits of appropriate use of the property, as well as for its repairs and re-equipment not provided by this contract. As mentioned above, the contract does not specify the limits of appropriate use of the property, which makes the issue of changing what has not been defined a difficult one. Also, the contract does not provide any measures for repairing or re-equipping the property which suggests that any repairs must be approved by the lender.

This section provides that the borrower shall use the property appropriately as stipulated by the contract. But again, the contract does not define any purpose of using the property. The lender shall carry out current repairs and overhaul of the property, however, there is no detailed description of this work in the contract. In fact, the only obligation of the borrower related to operating the property stated clearly enough concerns the maintenance of infrastructure network, communications, and equipment in conformity with the standard technical requirements.

Section 4 of this contract deals with the parties’ responsibilities and stipulates only the borrower’s responsibility if damage is done to the municipal property. It is obvious that a number of borrower’s actions can be a primary cause for damaging the municipal property. Among these causes is first of all setting underrated tariffs. As a result, the borrower will not have enough funds to carry out timely repairs which in turn can cause an emergency.

3.3.4. Contract assessment

Below are several provisions that should have been included in this contract. It seems advisable to attach a company’s business plan (programme for municipal property administration) for the whole contract period. This attachment should describe major actions related to the company’s operations and its investment programme.

The contract should have provisions on how tariffs for the managing company should be set. These provisions should describe both basic principles and procedures for setting tariffs. The contract should also provide for the city administration’s obligations to compensate the company for receipts missed due to administering benefits and subsidies.

On the whole, we can state that this contract is no more than a legal ground for transferring the municipal property from the Municipal Property Management Committee to the “Yuganskvodokanal” Joint-Stock Company. In fact, this contract has nothing to do with operating the property as it contains only general limitations of property use but no programme for property management. The purpose of property use has not been formulated, however there are a few references to appropriate use of the property in the contract. There is no provision on the borrower’s obligation to implement the property management programme; no provision on the lender’s obligation to set tariffs adequate to costs necessary to implement the programme; and consequently, no penalty provision if one party fails to implement the property management programme and the other does not meet its own tariff-setting obligations.

Strong administrative pressure is another obvious problem that exists in the relations between the utility company and the city administration. This is due to the fact that Nefteyugansk Administration represented by the Municipal Property Management Committee is the only founder of the “Yuganskvodokanal” Joint-Stock Company, which implies that the city administration has the authority to appoint the company’s director and use other levers to influence the company. In the circumstances where the city administration can interfere in the company’s activity, no contract can regulate the parties’ relationship.

3.4. Case 4. Transfer of the “Permvodokanal” municipal enterprise to the “Sovremenny Gorod” privately-owned company under lease

3.4.1. Key features of the water supply and sewerage system in the City of Perm

The total population in Perm slightly exceeds one million people. Practically all residents receive water supply services. The length of water supply networks is 863 km and sewerage networks is 667 km. The annual volume of water delivered to individuals is about 100 million m³, whereas other consumers are supplied with 30 million m³. Company's receipts in 2002 amounted to US\$18 million. As at the beginning of 2003 the “Permvodokanal” municipal unitary enterprise was staffed with 1 550 employees.

3.4.2. Historical background of the contract

Permskaya *Oblast* is one of the most swiftly developing regions in Russia. The regional administration consists of relatively young and highly-qualified managers oriented to develop market economy. Governor Yuri Trutnev is a quite remarkable and promising politician at the federal level. Before being elected governor, he was Mayor of Perm. Therefore, he is aware of the problems facing municipalities, specifically in the utility sector. It should be noted that the idea of establishing business relations between the local government and businesses in the sphere of providing individuals with utility services was developed by Trutnev's team. The essential point of this idea is to improve the quality of utility infrastructure administration and attract private investments in order to renew fixed assets in the utility sector. In so doing, fixed assets related to the utility sector (all water supply and sewerage systems) are supposed to be under the municipality's ownership. No doubt such approach seems to have good prospects from the municipality's point of view.

The task of qualitative renewal of the water supply and sewerage sector in Perm was discussed long ago. Notice that initially they raised a question of how to attract investments rather than to change the management. The necessity for attracting investments was caused by two major problems, specifically a heavily depreciated (approximately by 80 per cent) utility network and constantly growing debts. Major creditors of the Permvodokanal are electricity companies, the “LUKOIL-Permneftesintez” Joint-Stock Company and the local municipal budget. The “LUKOIL-Permneftesintez” Joint-Stock Company owns the municipal wastewater treatment facilities. A more than 2.5 times growth in wastewater treatment tariffs was not reflected in a corresponding increase of tariffs on the collection, treatment, and disposal of sewerage through Permvodokanal networks which caused a lot of debts. The federal budget did not compensate the municipal company for the 50 per cent benefit to be given to veterans and the disabled under the federal legislation. Thus, most of the company's debts were accumulated due to an unbalanced tariff and budget policy.

As early as in the 1990s the “Permvodokanal” and the city administration closely cooperated with the Swiss Government as regards to water supply. That work was carried out within the framework of preliminaries to the EBRD's loaning US\$40 million to the “Permvodokanal”. But in the long run the loan was not negotiated. According to sources in the Perm Administration, the refusal to get the loan was caused by quite a high loan rate after converting the loan amount into Russian currency.

It was the Swiss counselors' idea to sell municipal company's shares. As early as in 2001 City Mayor Arkadii Kamenyev hinted at possible changes in the corporate status of the municipal enterprise⁵⁵. In December 2002 this idea was officially put into action. The perspective of selling shares of the “Permvodokanal” municipal unitary enterprise were discussed at the meeting in the regional administration with the participation of high-ranking officials of Perm municipality. At that meeting it was decided that a new enterprise would be established as a joint-stock company with 100 per cent municipality shares. According to the city administration leadership, sale of enterprise shares would allow them to attract private investments. However, it became clear that the sale of shares under the conditions of 100 per cent municipal ownership did not lessen political risks and did not make the enterprise attractive for private investors.

⁵⁵ “Komsomolskaya Pravda”, Perm 08.03.2001 ““Permvodokanal’ can change its corporate status under the watchful eye of the City Government”.

Due to this, early in 2003 the city leadership stated that they refused to sell Permvodokanal shares but planned to transfer this enterprise to the privately-owned “Korporatsiya ‘Sovremenny Gorod’” Joint-Stock Company under lease for a 49 year period. This joint-stock company is a branch establishment of the “Finansovaya Korporatsiya ‘Adamant’” Limited Liability Company. The “Adamant” is known in Russia as a financial structure that specialises in the reorganisation and resale of companies/bankrupt enterprises. This financial company has no management experience in the utility sector, specifically in managing water supply companies.

The regional and municipal administrations were interested in having a dialogue with this financial company primarily due to non-official information that it represented one of the biggest financial groups in Russia that had strategic interests in Perm *Oblast*. The interest of “big business” in the utility sector can be explained from a political perspective and is due to the RF President’s public appeal to big business to favour real market reforms in the utility sector. That is why the negotiation process was politicised and many properties, economic, and technical issues remained out of consideration.

In April 2003 the Perm Administration and the “Korporatsiya ‘Sovremenny Gorod’” Joint-Stock Company signed a general contract on transfer of municipally-owned water supply and sewerage facilities to the investors for operating and capital investments purposes.

3.4.3. Key provisions of the contract

The contract was drawn up in conformity with the RF Civil Code. The subject of this contract is to transfer buildings, facilities, and movables related to the water supply and sewerage sector from the Perm Administration to the “Korporatsiya ‘Sovremenny Gorod’” under lease with the company’s obligation to operate this property in order to deliver water supply and sewerage services within the territory of the City of Perm. Thus, the water supply and sewerage systems remain under the municipality’s ownership, whereas the privately-owned company shall operate and maintain the leased property under local municipality’s control. The lease period is 49 years. It should be emphasised that this contract is intended only to initiate transfer of the municipal property to privately-owned companies for operation and provides for concluding related additional long-term contracts on leasing utility facilities.

The private operator undertakes to invest US\$100 million in developing and renovating the municipal network. Of that amount, at least US\$20 million must be invested during the first five years of the contract period. This seems a large amount, however, when analysing the contract it becomes clear that a great part of the amount refers to depreciation charges already included in the tariff rather than to investor’s funds. It is the opinion of the Institute of Urban Economics, Moscow, that the depreciation value for a 49 year period shall come to US\$70 million, which means that the private operator will actually attract no more than US\$30 million. The contract defines such funds as additional investments. Since no investment goal is set in the contract, it seems impossible to judge the sufficiency or insufficiency of these funds. The contract does not determine on what terms and conditions the private operator will attract investments, however, notice that in this contract the privately-owned company is called an investor rather than an operator.

The contract provides for a neat solution to the problem of leaseholder’s paying for operating the property. The payment shall be equivalent to the leaseholder’s capital liabilities to invest in the leased property at the amount equal to depreciation costs. Thus, responsibility for the state of fixed assets actually lies with the leaseholder rather than with the lessor as is usually provided for in lease contracts. This makes this contract similar to concession agreements.

The contract gives a quite detailed description of the property ownership. Both parties have agreed that during the lease contract period the investor is entitled to operate, use, and administer the property subject to additional investments to the full. Should contract validity have expired or have been cancelled at the investor’s initiation, the investor shall transfer to the city, the results of its capital investments free of charge. In case of contract termination by the city’s initiative, the investor has the right to compensation for the value of additional investments. These contractual provisions are similar to those practiced in “build -operate-transfer” agreements.

The investor undertakes to meet strict requirements for service quality. For instance, the total period of receiving water supply and sewerage services by each consumer shall be no less than 99 per cent per annum during 2004-2008 and no less than 99.5 per cent per annum in the subsequent years. Besides, the investor shall liquidate the discharge of untreated wastewater from the sewerage system and allow no such discharges in the future. It is obvious that to resolve this problem will require additional investments but the contract gives no hint on how to attract these investments.

As to the tariff policy, the corporation assumed an obligation not to raise the question of revising tariffs during the first year but at a later time to increase them only in correspondence with the inflation rate, electricity prices, changes in the tax legislation, and a lower rate of water sales as against those currently in existence. The contract unclearly describes the tariff policy. This can be explained by specifics of the effectual legislation.

Unfortunately according to the existing Russian legislation, the level of business administration is determined by a company's corporate status rather than the scale of monopolised market. According to Clause 10.4 in the contract, the Administration undertakes to **favour** setting tariffs on water supply and sewerage services **within its competence**. In accordance with the Law "On Local Self-Government", the administration of municipally-owned enterprises is effected by municipalities. However once the enterprise is no longer municipally-owned, RF Government Resolution No.239 takes effect according to which, it is the Russian Federation entity that regulates tariffs for all businesses except for municipally-owned enterprises. In other words, the city administration bears no responsibility to revise tariffs for the investor's sake. This aspect is the most risky for the operator. Due to the active governor's support, it looks like the currently working regional administration will take investors' interests into account when establishing tariff policy but this does not guarantee that the next regional administration that is not obliged to meet the contractual commitments would carry out the same tariff-setting policy in relation to the investor. The contract has no provision in the regional administration though it is essential for contract implementation in the future. Neglect of this problem is not allowed in the contract with a 49 year validity period.

The contract has no description of the leased equipment and no technical specification of the water supply and sewerage systems. In general, property ownership issues are not stated clearly enough in the contract. The time for transfer of municipally-owned property under lease is connected with the period during which the municipal unitary enterprise must be liquidated and seems to be unrealistic as it is stipulated in the contract. Even now this process is going on behind schedule.

On the whole, the contract suggests that investors' rights are protected better than local government's rights. Specifically, should the contract have been cancelled by request of the city administration due to an investor violating its own obligations, the investor must receive compensation equivalent to the invested amount. At the same time, the contract has no provision on possible bankruptcy of the private operator. Apparently outside operational control shall be introduced in this case as provided by law.

3.4.4. Contract assessment

A lot of claims can be lodged against this contract. The lease period of a 49 year duration does not seem adequate or reasonable. The contract gives no clear motivation to invest a stated amount as well as no solution to the problem of how to minimise tariff regulation risks. Many issues on the transition period during which the municipal unitary enterprise should be liquidated and its property should be transferred to the privately-owned company have not been settled yet. Also, it quite clear that the private operator has no real experience in operating such utility systems and consequently, no essential aspects necessary for further successful work were discussed within the framework of contract preliminaries. There are lots of difficulties in establishing a relationship between representatives of the Perm Administration and the corporation. This can be explained in that there has been no similar practice in Russia until now, whereas the contract subject is very complicated. It therefore seems reasonable to focus on provisions that require further elaboration. Many property ownership provisions stated in the general contract can be improved and set forth in greater detail in the following lease contracts. The Perm Administration has established a commission charged with liquidating the "Permvodokanal" municipal unitary enterprise so the inventory of fixed assets subject to transfer under lease is in progress now.

This contract is the first serious move to establishing public business relations between the local government of a large city and big business in the utility sector (which seems the most important). Since both parties are very much interested in achieving success first of all from the political perspective, there is every reason to think that this process will be successfully implemented in the future.

4. CONCLUSION

The analysed contracts on operating the municipally-owned water supply and sewerage systems are the first signs of the establishment of business relations between local government and businesses in such a vitally important sector as providing water supply and sewerage services to consumers. Due to a lack of adequate experience and a regulatory base this process is rather politicised than economically sound. Problems not settled within the considered contracts are so great that we should speak about intentions to develop business rather than actual business in the utility sector.

However, this process has sharply changed recently. In the Spring of 2003 a number of leaders of the large national financial and industrial groups stated their companies' interests to develop business in the utility sector. No doubt these statements were to a great extent politicised and initiated by the Russian President's team, but this attaches considerable weight to the publicly declared obligations of "big business". As a matter of fact the course of events in Perm demonstrates the implementation of the declared statements. In this context, it is of interest to see the evolution of approaches to developing and negotiating the above-mentioned contracts.

In the first three cases, the basic motive for concluding a contract to operate the municipal water supply system was the poor financial standing of municipally-owned water supply and sewerage companies as well as local governments' will to save them from bankruptcy, specifically to avert the threat of selling the water supply and sewerage facilities to cover debts.

In Nefteyugansk they had practically only been performing this task. The joint-stock company established to operate the water supply and sewerage systems is fully controlled by the city administration. From this perspective, it does not seem correct to consider this company as typical of private business. But even this particular solution is positive enough because it removes all problems with "dissolved" rights of ownership that arise when talking about unitary enterprises as well as clearly defines parties' responsibilities and mechanisms of owner's control over the newly-established company.

In Syzran they tried to go further. The water supply and sewerage infrastructure is operated by a completely privately-owned company. However, the local administration that initiated its establishment arranged that founders of the newly-established company should be local businesses/major consumers of water supply and sewerage services. The city administration's idea is clear enough - if you need water, you must arrange for its production. However, there is an evident conflict of interests. There is always the question of what the primary interest of owners of a privately-owned company is. This can be either rendering inexpensive water supply and sewerage services, or the successful work of their company. Clearly these are opposing options.

In Otradny, water supply services are provided by private business which is free of local government pressure. Such business lies within the regional government's competence, is carried out within the Samarskaya *Oblast*, and features a growing tendency to expansion. Here, equitable business relations between the local government and businesses appear to be much stronger than in the first two cases. This is the reason why the company/manager has raised the question of revising the contract in order to define the parties' responsibilities more clearly.

In Perm we see the relationship between the local government and big business; real investment obligations appear; issues about property ownership are stated more clearly and in greater detail.

In the case of Nefteyugansk it has been drawn up as a contract on transfer of the property for free use. From the contractual relationship perspective, this form is not clear enough. However, since the water supply company is municipally-owned, it does not matter because at any time the city can interfere with the company's activity.

In the cases of Syzran and Otradny we can talk about trust management contracts that lie within the regulatory framework designed for other legal relationships. However, there is no other appropriate regulatory framework as yet and that is why the currently existing model is used. In spite of many unsettled issues, the work has started. It should be pointed out that shortcomings in trust management contracts can be seen more clearly in the cities where political issues are not of the main concern and private business can concentrate on the work at hand (e.g. Otradny). In the case of Perm we see a lease contract with investment obligations. It is noteworthy that sometimes the contract text bears a close resemblance to a concession agreement.

In this connection, close attention should be paid to the problems common to all considered contracts:

- Property ownership issues. Practically in all cases the problems with the state registration and assessment of the property to be transferred to a private company either have not been settled or have been solved unsatisfactorily; as seen from the contract, close attention to this problem is paid only in Perm;
- Operator's production and investment commitments. None of the contracts has a programme for the operator's actions. Only the Perm contract gives figures on the investment volume but they look unreasonable;
- Pricing policy. Tariff-setting agreements look too unstable. If we recall that according to currently effectual Russian legislation, local governments are not allowed to regulate tariffs for private operators, this becomes a determining risk factor for the operator;
- Tax issues. At the moment, in all four cases operators are responsible for the state of fixed assets transferred to them for operation. But according to both legislation and the legal status of the contracts, this is the property owner's responsibility. This means that the operator is not allowed to include expenses for renewal of fixed assets into its costs but can cover these expenses out of its taxable profit. Of course, operators do in fact administer depreciation costs, but they do so in what can be considered as an illegal manner. Only the Perm contract deals with this subject seriously enough.

From the analysis of the existing contracts it becomes clear that a successful relationship between the government and business in the sphere of providing water supply and sewerage services requires regulatory support of this process through developing a regulatory base for concession agreements on operating the utility infrastructure as well as for tariff regulation of natural monopolies, including water supply and sewerage companies.

Appendix 1

CONTRACT

on Municipal Property Trust Management No.3

The City of Syzran, Samarskaya *Oblast*

11 June 2001

The municipality of the City of Syzran (Samarskaya *Oblast*) represented by Committee Head, Chevychelov Yuri Stanislavovich, acting on the basis of Letter of Attorney No.01-14.9/1512 issued by the Syzran City Administration Head, hereinafter referred to as the “Settler”, on the one side, and

The “Syzranvodokanal” Limited Liability Company represented by Director Sotnikov Alexander Ivanovich, acting on the basis of Company’s Charter, hereinafter referred to as the “Trust Manager”, on the other side,

have set forth this contract as follows:

1. Subject of the Contract

1.1. According to this contract, the Settler shall transfer water supply and sewerage facilities of the City of Syzran, hereinafter referred to as the “property”, to the Trust manager for the period of five years, while the latter undertakes to operate the property for the advantage of Syzran municipality which is the beneficiary under this contract.

1.2. The Trust Management Programme (hereinafter referred to as the Programme) is given in Appendix No.1 to this contract.

1.3. The list and value of the property to be transferred for trust management are given in Appendix No.2, which is an integral part to this contract.

2. Objectives and Tasks of Trust Management

2.1. Trust management of the property is intended to provide continuous delivery of water supply and sewerage services to businesses, individuals, and organisations of the City of Syzran with a strict conformity to the rates and standards for water supply and sewerage services; to renovate water supply and sewerage facilities; to ensure general and integrated development of water supply and sewerage sector in the City of Syzran; to achieve the highest commercial efficiency of operating the municipal property.

2.2. The Trust Manager shall ensure the implementation of the following management tasks:

- Allow no growth of debts and receivables;
- Allow no misuse of the property;
- Maintain the asset structure of the water supply and sewerage sector proportional to the currently existing structure during the whole contract period.

2.3. When managing the property the Trust Manager shall fulfill obligations stated in the Programme which describes how to operate the property.

3. Transfer of the Property to the Trust Manager

3.1. Transfer of the property for trust management implies no transfer of title of ownership to the Trust Manager.

3.2. The transfer of trust management property shall be registered by the Trust Manager in a separate balance sheet and is subject to independent accounting.

3.3. Transfer of the property from the Settler to the Trust Manager and vice versa shall be made on the basis of a bilateral acceptance report. Other property shall be transferred under supplementary acceptance reports.

4. Procedure for Operating the Property

4.1. The Trust Manager shall operate the property for the benefit of the Syzran municipality with appropriate commercial efficiency, which is understood by both parties to be the achievement of trust management objectives due to maximum resource saving when receipts, generated from operating the property, exceed the costs of property maintenance.

4.2. The Trust Manager shall operate the property transferred for trust management as an owner within the frameworks provided by the law and this contract.

4.3. For the Settler's advantage the Trust Manager is allowed to take any legal and practical actions in relation to the property transferred for trust management.

4.4. The Trust Manager shall administer the real property if this is necessary to meet the provisions stated in the Section "Objectives and Tasks of Trust Management" of this contract.

4.5. The Trust Manager shall operate the property transferred for trust management on its own behalf noting that it acts as a trust manager and putting "T.M." after the Trust Manager's name on written documents.

4.6. Rights acquired by the Trust Manager in the process of operating the property held in trust shall be included into that property. Obligations resulting from the Trust Manager's operations shall be fulfilled at the cost of that property.

4.7. To protect the rights to the property transferred for trust management the Trust Manager is entitled to require no violation of its own rights as provided by Articles 301, 302, 304, and 305 of the Civil Code.

4.8. The Trust Manager shall operate the property by itself excepting the cases provided by this contract.

4.9. The Trust Manager can appoint another person with operating the property on the Trust Manager's behalf.

4.10. The Trust Manager is responsible for its appointee's actions as for its own.

4.11. When fulfilling its obligations under this contract, the Trust Manager is not allowed to implement the following transactions:

- Acquire any property to the benefit of itself or its founders at the cost of receipts generated from operating the property held in trust;
- Alienate the property held in trust to the benefit of itself or its founders;
- Encumber the property held in trust to secure its own obligations (except for those arising from the Trust Manager's carrying out this contract) or its founder's obligations;
- Transfer the property held in trust to other legal persons or individuals for safe-keeping or operation.

5. Recognition of Ineffective Trust Management

5.1. The Settler can recognise the trust management as ineffective in the following cases:

- If the Trust Manager fails to fulfill the terms and conditions of this contract;
- If the Trust Manager has improperly fulfilled the terms and conditions of this contract;
- If the Trust Manager fails to pay the Settler's income in full and on time.

5.2. Should the trust management have been recognised ineffective, the Settler (the Syzran Administration) can give the Trust Manager a written notification specifying the reasons why the trust management was considered ineffective as well as a period for eliminating the existing violations. This period can vary from two to six months.

5.3. Should the Trust Manager fail to meet the requirements stated in the notification, the Settler is entitled to cancel the contract unilaterally.

6. Income from Using the Property

6.1. Income from using the property transferred for trust management belong to the municipality and shall be transferred to the GORFO (City Administration Finance Department) account except for the Trust Manager's remuneration, which is to be paid as a repayment of expenses on operating the property held in trust.

6.2. The Trust Manager shall transfer an amount of income from operating the property to GORFO's account every quarter but no later than the 15th of the month following the previous quarter.

6.3. GORFO's settlement account for remitting income which generated from operating the property held in trust shall be given by GORFO's Head in his/her letter to the Trust Manager. Should the above settlement account have changed, the Settler shall immediately notify the Trust Manager about this fact.

6.4. The size of the Settler's estimated annual income amounts to fifteen per cent of the managing company's profit.

7. The Trust Manager's Remuneration

7.1. The Trust Manager shall receive remuneration for operating the property from related receipts.

7.2. The size of the Trust Manager's annual remuneration shall be equal to 450 minimum wages.

7.3. If the dimension of minimum wage goes up, the Trust Manager's remuneration shall proportionally increase.

7.4. If the dimension of minimum wage goes down, the Trust Manager's remuneration shall not be cut.

7.5. The Trust Manager's remuneration shall be paid every month in equal shares by reducing income generated from operating the property by a certain amount.

8. Compensation for the Trust Manager's Expenses

8.1. The Trust Manager has the right to the compensation for necessary expenses incurred when it is operating the property held in trust.

8.2. Compensation for the Trust Manager's expenses shall be paid out of income from operating the property transferred for trust management.

8.3. Only necessary expenses actually incurred by the Trust Manager and duly documented as well as approved by the Property Committee under the Syzran Administration and corresponding departments of the City Administration are subject to compensation.

8.4. Compensation for the Trust Manager's expenses shall not exceed a set limit, specifically the annual compensation size shall not be more than 85 per cent of all income generated from operating the property held in trust.

8.5. Expenses incurred by the Trust Manager during the first year of this contract period shall be compensated in equal parts during the three following years upon expiration of the first year of this contract period.

8.6. Schedule of compensation payments for expenses incurred during the first year of this contract period shall be determined and signed by both contractual parties with their seals affixed.

8.7. In case of inflation, expenses shall be compensated by applying corresponding government-set coefficients and indices.

8.8. Conditions stated in Clauses 9.4, 9.5, and 9.6 of this contract shall not be applied to compensate the Trust Manager for expenses for routine upkeep, maintenance, and repairs of the property transferred for trust management.

8.9. All costs incurred by the Trust Manager when operating the property are subject to compensation, specifically:

- Expenses for routine upkeep, maintenance, and repairs of the property transferred for trust management;
- Expenses for capital repairs and renovation of the property transferred for trust management;
- Expenses for construction work necessary to ensure effective operating the of property;
- Payments of interest on loans received to raise funds in order to ensure effective operating of the property;
- Other expenses directly related to operating the property transferred for trust management.

8.10. Costs for routine upkeep, maintenance, and repairs of the property transferred for trust management include:

- Expenses for wage payments to the Trust Manager's personnel charged with maintaining and operating the property transferred for trust management;
- Labour protection expenses and other costs related to the everyday work of the Trust Manager's personnel;
- Expenses for purchase and repair of necessary facilities, vehicles, office equipment, inventory, raw materials;
- Expenses for power supply, district heating, water supply, sewerage;
- Transport and forwarding charges;
- Expenses for current repairs;
- Expenses for the property protection;
- Expenses for getting special permissions, licenses; certificates, etc.;
- Expenses for the development of necessary project and technical documentation;
- Expenses for the state registration of ownership;
- Legal costs.

9. Control Over Implementation of the Trust Management Contract

9.1. Control over performing the trust management contract shall be effected by the Settler who is entitled to attract structural units of the Syzran Administration (Property Committee, Finance Department, Economic Department, etc.) in order to exercise these rights..

9.2. When effecting the control, the Settler according to the Russian legislation is allowed to check the progress in implementing the trust management contract, as well as to audit the property transferred for trust management and require reports on work done.

9.3. The Trust Manager shall submit reports on implementing the trust management contract every quarter but not later than the 15th of the month following the reporting period as well as upon the Settler's request.

10. The Trust Manager's Responsibilities

10.1. The Trust Manager who fails to take due care of the Settler's interests shall compensate the Settler for losses caused by loss of, or damage to, the property taking into consideration its natural deterioration, and shall compensate for lost profits.

10.2. The Trust Manager is responsible for caused losses if it fails to prove that these losses were caused by *force majeure* circumstances or the Settler's actions.

10.3. The Trust Manager bears personal responsibility for any transaction concluded by itself that misuses delegated powers or disregards set limits.

10.4. If a third party in such a transaction did not know and was not aware of the misuse of powers or imposed restrictions, accrued liabilities shall be met as follows: Debts on obligations arisen from operating the property held in trust shall be paid at the cost of this property. If the property value is not enough to pay the debt, the Trust Manager's property can be exacted. Should its value not be enough either, the guarantors' property can be exacted within the limits stipulated by a contract of guarantee. Should its value not be enough either, the Settler's property not transferred for trust management can be exacted.

10.5. If this contract is cancelled for reasons stated in the Section "Cease of operating due to the Trust Manager's violations" of this contract, the Trust Manager shall pay the Settler for caused damage in full, including lost profits.

10.6. If this contract is cancelled for reasons stipulated in **Clause 13.9** of this contract, the Trust Manager shall:

- Be deprived of remuneration as provided by this contract;
- Pay a penalty (fine) as provided by the trust management contract;
- Compensate for caused damage by remitting funds to the municipal budget.

10.7. In case of a Trust Manager's actions causing the loss of the property transferred for trust management, all responsibility for any consequences of these actions rests with the Trust Manager.

11. Security of Contract Fulfillment

11.1. This contract provides for **collateral** to be provided by the Trust Manager as a security of its appropriate operating of the property transferred for trust management.

11.2. The Trust Manager shall provide the Settler with such collateral within no longer than three months upon receiving the property transferred for trust management in order to guarantee the appropriate operating of this property.

12. Enforcement of Property

12.1. Debts on obligations arising from operating the property held in trust shall be paid at the cost of this property. If the property value is not enough to pay the debt, the Trust Manager's property can be exacted. Should its value not be enough either, the Settler's property not transferred for trust management can be exacted.

12.2. No property transferred by the Settler for trust management can be enforced in order to pay the Settler's debts.

13. Contract Termination and Prolongation

13.1. Should neither Party have put forward a claim on termination of this contract by the expiry date, the contract validity period shall be considered extended for the same period and on the same terms.

13.2. If one Party refuses this contract, the other Party shall be notified about this fact three months before the contract termination.

13.3. The contract period can be extended by written consent of both Parties and upon the resolution of the Syzran Administration.

13.4. Should this contract have been terminated, the property held in trust shall be transferred to the Settler.

13.5. The trust management contract shall be terminated:

- If the Trust Manager or the Settler refuse to carry out trust management due to the impossibility for the Trust Manager to operate the property by itself;
- If the Settler refuses the contract due to changes in the legislation about paying the Trust Manager remuneration stipulated by the contract;
- Upon expiration of the contract validity period;
- If the Trust Manager has been recognised insolvent (bankrupt);
- In case of the Trust Manager's closure (liquidation);
- In case of loss (destruction) of the property or any part thereof;
- In case of alienation of the property without the Settler's consent.

13.6. The trust management contract can be terminated before the expiration of its validity period:

- By mutual agreement of both Parties;
- Unilaterally.

13.7. Anticipatory and unilateral termination of the trust management contract is allowed as provided in this contract as well as by the effectual legislation.

13.8. In case of termination and cancellation of the trust management contract, the property shall be returned to the Settler under an acceptance report within 10 days upon terminating and canceling this contract.

13.9. The Settler can unilaterally cancel the trust management contract if:

- Trust management has been recognised ineffective;
- The Trust Manager has deliberately submitted false information to the Settler during the bidding process or after its completion;
- The whole property or any part thereof has not been used for the purpose of trust management;
- In case of deliberate or careless actions that have caused damage to the property;
- The Trust Manager has transferred the property to pay its own debts or has encumbered it to secure its own obligations;

14. Parties' Addresses and Settlement Accounts

Appendix 2

CONTRACT

on Transfer of Utility Infrastructure Property for Trust Management

“ _____ ” _____ 2001

The municipal entity The City of Otradny, hereinafter referred to as “the Settler”, represented by _____ *Head of the City Administration Vishnyakova N.M.* acting on

the basis of _____, on the one side, and “*Upravlyayushchaya* _____” hereinafter

“*Kompaniya Zhilishchno-Kommunalnogo Khozyaistva*” Joint-Stock Company referred to as the manager, represented by _____, acting on the basis of Company's Charter, on the other side, have *Director General Servetnik L.Sh.*

1. SUBJECT OF THE CONTRACT AND OTHER GENERAL PROVISIONS

1.1. In accordance with this Contract the Settler shall pass the Manager real property and movables related to the utility infrastructure specified in the List of real property and movables (hereinafter referred to as the List of Property) which is an integral part of this Contract, while the Manager undertakes to operate this property to the Settler's benefit. Stated in the List of Property is what is owned by the Settler, which is proven by corresponding documents, and is free of legal claims from third parties.

Beneficiary under this Contract is the municipal entity city Otradny

1.2. Transfer of the utility infrastructure property for trust management does not entail transferring rights of their ownership to the Manager.

1.3. The Manager is entitled to take any legal and practical actions for the Settler's benefit in relation to the utility infrastructure property transferred for trust management excepting carrying out transactions intended to alienate and lease the third party real property and movables valued at one hundred and more minimum wages effective at the date of a future transaction. (Note: Further the question is the right of the Manager to lease the property received from municipality).

The Manager holding the property on its balance sheet is entitled to sign a contract on the Lessor's behalf upon agreeing with the Lessor on technical conditions and the possibility of using the property appropriately. Unused property (by Manager) shall be leased out by the Settler upon agreement with the Manager. The Lessor in relation to municipally-owned property transferred for trust management shall be the Settler. Receipts from leasing the property held in trust shall come to the local municipal budget.

1.4. The Manager shall carry out transactions with the property transferred for trust management on its own behalf noting that it acts as a trust manager and putting “T.M.” after the Manager's name on written documents.

1.5. Trust management objects shall be real property, movables, as well as low-value and non-durable units of the utility infrastructure (hereinafter referred to as the Property) specified in the List of Property. The property shall be passed to the Manager under an acceptance reports to be signed by authorised representatives of the Settler and the Manager within 10 days upon concluding this contract.

1.6. The transfer of trust management property shall be registered by the Manager in a separate balance sheet and is subject to independent accounting.

1.7. In order to make settlements under trust management activity a separate settlement account shall be opened.

2. THE SETTLER'S RIGHTS AND OBLIGATIONS

2.1. The Settler has the right to:

- Effect control over the Manager's operating of the property held in trust;
- Choose major investment lines (aims and objectives for investment);
- Check and control how the technical and financial conditions and terms stated in this contract are met;
- Withdraw a part of municipally-owned property from trust management upon mutual agreement with the Manager;
- Hear (Examine) the Manager's report on how the property is used, this being presented at the meetings of audit commissions under the Administration.

The control over implementing this contract and the Manager's activity shall be effected by the Settler who is entitled to attract structural units of the Administration in order to exercise these rights.

In so doing and according to the currently effectual RF legislation, the Settler is allowed to control the implementation of this contract as well as audit the property transferred for trust management.

2.2. The Settler shall:

- Pass the Manager all required documentation (including documents that prove the Settler's ownership of the property) so as to ensure state registration of the real property transferred for trust management;
- Provide the Manager with regulatory support when performing work under this contract;
- Give a tariff guarantee (i.e. determine a maximum amount of utility charges and guarantee to revise tariffs at regular intervals and in conformity with indices-deflators set by state);
- Transfer the Manager the right to collect charges for utility and other services delivered to consumers and notify them about this right accordingly;
- Pass the Manager technical documentation necessary to design and maintain utility facilities;
- Bear responsibility for development of the utility infrastructure within the framework of new projects (not connected to the present contract).

3. MANAGER'S RIGHTS AND OBLIGATIONS

3.1. The Manager has the right to:

- Operate and maintain the utility infrastructure facilities transferred for trust management within the limits of their proper use;
- Act as an owner in relation to the property transferred for trust management within the limits provided by the effectual legislation and this contract as well as own newly acquired or created property until all settlements with the Settler have been made. The Manager shall administer the real property upon the Settler's consent.
- Require the elimination of any violation of its rights in order to protect the right to the property held in trust (Articles 301, 302, 304, and 305 in the RF Civil Code);
- Develop and implement programmes for insurance of property interests arising from operating the property held in trust;

- Act as a customer for capital development of the utility sector;
- Cover expenses incurred when operating the property transferred for trust management, other costs and expenditures borne by the Manager when fulfilling obligations under this contract at the cost of income generated from using the property;
- Receive remuneration as provided by this contract.

3.2. The Manager shall:

- Ensure uninterrupted functioning of the utility infrastructure facilities during their operation (except for *force majeure* circumstances);
- Provide continuous delivery of utility services to consumers at a required level and meet the quality standards for these services;
- Keep in good condition, repair and renovate at its own expense facilities, machinery, and equipment necessary for the normal functioning of the utility infrastructure;
- Submit a work statement to the Settler every quarter but no later than the 25th of the month following the reporting period as well as upon the Settler's request.

4. RESTRICTIONS IMPOSED ON THE MANAGER

4.1. When fulfilling its obligations under this contract, the Manager is not allowed to implement the following transactions:

- Acquire any property to the benefit of itself or its founders at the cost of receipts generated from operating the property held in trust;
- Encumber the property held in trust to secure its own obligations (except for those arising from the Manager carrying out this contract).

5. RECOGNITION OF UNSATISFACTORY TRUST MANAGEMENT

5.1. The Settler can recognise operating the municipally-owned property held in trust as unsatisfactory in the following cases:

- If the Manager fails to fulfill the terms and conditions of the trust management contract;
- If the Manager has improperly fulfilled the terms and conditions of the trust management contract.

6. PARTIES' RESPONSIBILITIES

6.1. The Manager who fails to take due care of the Settler's interests shall compensate the Settler for losses caused by loss of, or damage to, the property taking into consideration its natural deterioration, and shall compensate for lost profits.

6.2. The Manager bears responsibility for caused losses if it fails to prove that these losses were caused by *force majeure* circumstances or the Settler's actions.

6.3. Debts on obligations arisen from operating the property held in trust shall be paid at the cost of this property. If the property value is not enough to pay the debt, the Manager's property can be exacted.

7. FINANCING

7.1. The Manager's expenses for operation, retrofit, renovation, and maintenance of the property held in trust, as well as for delivery of utility services to consumers shall be repaid from utility charges to be collected by the Manager from consumers by the right assigned to it and in conformity with the set tariffs, as well as from the budget and investment funds as provided by the development programme.

7.2.The utility infrastructure development shall be financed from the regional budget and other non-budget sources.

7.3.This contract provides for the Manager's remuneration as _____ % of the volume of work done and services rendered.

7.4.Remuneration shall be paid to the Manager every month.

8. TERMINATION OF THE CONTRACT

8.1.The contract shall be terminated:

- 8.1.1. Upon expiration of its validity period;
- 8.1.2. In case of the Manager's closure or liquidation;
- 8.1.3. If the Manager refuses to carry out trust management due to the impossibility for the Manager to operate the property by itself;
- 8.1.4. If the Settler decides to terminate the contract unilaterally and refuses to pay the Manager the remuneration stipulated in this contract;

8.2.The contract can be terminated before the expiration of its validity period:

- By mutual agreement of both Parties;
- Unilaterally upon any Party's request.

8.3.The Settler can terminate the contract unilaterally:

- 8.3.1. If trust management has been recognised as unsatisfactory (this should be confirmed in the document), and if the Settler's interests or direct instructions have been violated provided that there is no property claim or Settler's debt to be paid to the Manager;
- 8.3.2. The property (or a part of the property) has not been used appropriately;
- 8.3.3. In case of deliberate or careless actions that have caused damage to the property (or a part of the property);
- 8.3.4. The Manager has transferred the municipally-owned property to pay its own debts or has encumbered that to secure its own obligations;
- 8.3.5. In other cases provided by the effectual legislation.

8.4.If one Party refuses this contract or should the contract has been terminated unilaterally by request of any Party, the other Party shall be notified about this three months before the contract termination.

8.5.In case of alteration, termination, and cancellation of the trust management contract, the property shall be returned to the Settler under an acceptance report within 10 days upon altering, terminating, and canceling this contract provided that the Settler has settled with the Manager and paid the Manager all amounts due under this contract.

9. CONTRACT VALIDITY PERIOD

9.1.This contract takes effect upon its signing and will be in force during a five year period.

9.2.State registration of the real property transferred for trust management under this contract shall be made by the Manager.

9.3.Upon expiry of this contract the Manager has a prior right to receive the property for trust management (for new contract).

9.4.Should neither Party have put forward a claim for termination of this contract by the expiry date, the contract validity period shall be considered extended for the same period and on the same terms.

10. FINAL PROVISIONS

10.1. Parties' relations not provided by this contract shall be regulated by the currently effectual RF legislation.

10.2. Both Parties undertake to do their best to settle all disputes by mutual agreement. Unsettled disputes and differences arising from the implementation of this contract shall be referred to the Arbitration Court.

10.3. This contract is made up in three copies each one is for the Settler, the Manager, and for the State Registration Chamber, all texts having equal force.

11. PARTIES' ADDRESSES AND SETTLEMENT ACCOUNTS

The Settler:

The Manager:

Parties' signatures:

The Settler:

The Manager:

Place for seal

Place for seal

ASSOCIATION OF HOUSING AND UTILITY COMPANIES

443010 The City of Samara ul. Chapayevskaya 144 Tel./Fax 79-82-47 (48)

E-mail: holding@aport2000.ru

Appendix 3

CONTRACT

ON FREE USE (LENDING)

OF MUNICIPALLY-OWNED PROPERTY

The City of Nefteyugansk

1 October 2002

The Department of municipally-owned property of the City of Nefteyugansk, hereinafter referred to as the “Lender”, represented by Department Director Bragin Boris Ivanovich acting on the basis of Department Regulations, on the one side, and the “Yuganskvodokanal” Limited Liability Company, hereinafter referred to as the “Borrower”, represented by Director Kardymon Viktor Borissovich acting on the basis of Company’s Charter, on the other side, have set forth this contract as follows:

1. General Provisions

1.1. The Lender transfers and the Borrower receives the below-mentioned property for free use:

- Fixed assets stated in Appendix No.1 and of balance sheet value equal to RUR380 150 565.69.

1.2. The property shall be passed to the Borrower under an acceptance report within 10 days upon signing the contract.

This contract shall be considered signed (takes effect) upon both parties’ putting their signatures on the contract.

1.3. The property shall be transferred to the Borrower for the period from 1 October 2002 to 1 October 2003.

2. Parties’ Rights

2.1. The Lender is entitled to:

2.1.1. Control the safekeeping and appropriate use of the property transferred to the Borrower under this contract at any time and without notifying the latter about it in advance.

2.1.2. Cancel the contract before its expiration for reasons and in accordance with the procedure provided by the law and this contract.

2.2. The Borrower is entitled to:

2.2.1. Use the received property in conformity with terms and conditions of the contract and provisions of the effectual legislation.

2.2.2. Determine by itself types and forms of interior finishing and furnishings that do not require any changes in the supporting frame of the real necessary, its retrofit, or other inseparable improvements.

2.2.3. Cancel the contract before its expiration for reasons and in accordance with the procedure provided by the law and this contract.

3. Parties' Obligations

3.1. The Lender shall:

3.1.1. Pass the Borrower the property in conformity with the terms and conditions of this contract under the acceptance report within 10 days upon signing this contract.

3.1.2. Consider within a month's period the borrower's applications for changing the limits of proper use of the property as well as for its repairs and re-equipment not provided by this contract on the basis of an additional agreement to be concluded by the parties.

3.1.3. Receive the property from the Borrower under an acceptance report within 10 days after the contract has been terminated.

3.1.4. Inform the Borrower through the mass media about changes to the lender's name, location, and settlement accounts.

3.2. The Borrower shall:

3.2.1. Receive the property from the Lender in conformity with the terms and conditions of this contract under an acceptance report within 10 calendar days upon signing this contract.

3.2.2. Use the transferred property appropriately as provided by this contract.

3.2.3. Promptly and in conformity with the established procedure register the right to use a plot of land under the real property.

3.2.4. Promptly and at its own expense carry out current and capital repairs of the property transferred under this contract.

3.2.5. Not carry out retrofit, re-equipment, capital repairs, and other inseparable improvements without the Lender's written consent. Should the above work have been done, the Borrower shall at its own expense put the property back to its previous condition in conformity with the Lender's decision and within a period specified by the Lender.

3.2.6. Ensure the safekeeping and maintenance of the infrastructure network, communications, and equipment in conformity with the standard technical requirements.

3.2.7. Meet technical sanitation, fire safety, and other requirements when operating the property.

3.2.8. Maintain at its own cost fire alarm systems, air conditioning, and other equipment in conformity with all departmental rules and standards covering the Borrower's activities and the limits of proper use of the transferred property, and also take measures to eliminate situations that constitute a threat to the property's safety, and its environmentally acceptable and sanitary condition.

3.2.9. Landscape the territory adjacent to the real property upon receiving consent from corresponding departments in the municipal administration.

3.2.10. Immediately notify the Lender about any breakdown, accident or other incident that caused (or can cause) damage to the property and promptly take all possible measures to prevent the property from further damage or destruction.

3.2.11. Within fifteen days upon signing the contract, conclude agreements with corresponding services on property maintenance, and power and water supply.

3.2.12. Promptly effect payment of utility and maintenance charges related to the transferred property.

3.2.13. Not transfer the property to third parties without the Lender's written consent.

3.2.14. Provide the Lender's representatives with free access to the property upon their first request so that they can inspect the property and check how the terms and conditions of this contract are being met.

3.2.15. Promptly revalue the property upon agreeing with the Lender, keep accounting records, calculate depreciation costs of the property using depreciation-costing rates, and every quarter submit these to the Lender.

3.2.16. If this contract has been terminated in conformity with any legal grounds, including the expiration of the contract validity, the Borrower shall transfer the property to the Lender under an acceptance report within five working days upon the contract expiration. In this case, the Borrower shall return the property in the original condition taking into consideration the standard depreciation rate and all improvements made.

3.2.17. In case of any intention to refuse the contract and return the transferred property, inform the Lender in writing about it no later than one month before the contract termination.

3.2.18. In case of its reorganisation, change of its name, address, settlement accounts, inform the Lender in writing about these changes.

4. Parties Responsibilities

4.1. Should the property transferred under this contract have been damaged, the Borrower shall pay the Lender damages. If damages are not paid within 10 days upon drawing up a damage report, the Borrower shall pay the Lender a penalty at the rate of one per cent of the amount of damages for each day of delay.

4.2. If a commission established by the Lender finds that the Borrower did not fulfill or improperly fulfilled its obligations as provided by Clause 3.2.3 and Clauses 3.2.6 – 3.2.17 of this contract, the Borrower shall pay the Lender a penalty at the amount of 100 minimum wages effective at the payment date. The penalty payment does not release the Borrower from returning the property to its original condition and within a period specified by the Lender.

5. Special Conditions

5.1. Inseparable improvements, including capital repairs of the property, shall be carried out by the Borrower upon the Lender's – Department of municipality-owned property of the City of Nefteyugansk - written consent only.

5.2. All separable and inseparable improvements of the property transferred to the Borrower are under the Lender's ownership and shall not be compensated upon the expiration of this contract.

6. Alteration, Cancellation, and Termination of the Contract

6.1. Each Party is entitled to refuse this contract at any time if it is concluded for an uncertain period upon notifying the other Party in writing about it no less than one month before.

6.2. The contract can be terminated before the expiration date if the Borrower:

- Does not use the property appropriately as provided by the contract;
- Does not fulfill its obligations to keep the property in good condition;
- Makes the property's condition worse;
- Has violated Clause 3.2.14 of this contract.

6.3. The Lender has the right to cancel the contract on free use unilaterally:

- In case of privatisation of the municipal premises, by compensating the funds invested in the renovation and notifying about the privatisation as provided by the effectual legislation.

6.4. The contract can be cancelled for reasons stated in Clause 6.2 of this contract on the basis of the Lender's decision and upon its notifying the Borrower in writing about the anticipatory termination of the contract.

The contract shall be considered terminated upon expiring one month after the notification date.

6.5. Alterations and amendments to this contract shall be discussed by the Parties and stated in additional agreements.

7. Other Conditions

7.1. Issues not settled by this contract are regulated by the effective Civil Code.

7.2. Disputes arising from this contract shall be referred to the Court, the Arbitration Court in compliance with the rules and procedures of the said legal institutions.

7.3. The contract is made in two copies, both texts having equal force and to be kept with the Department and with the Borrower.

8. Parties' Addresses and Settlement Accounts

The Lender

Department of municipally-owned property of the City of Nefteyugansk
Nefteyugansk, Neighborhood Unit No.2, Bldg.25
INN 8604029014

Director of Department of municipally-owned property of the City of Nefteyugansk _____ B.I.Bragin

Place for Seal

The Borrower

The "Yuganskvodokanal"
Limited Liability Company
The City of Nefteyugansk,
Neighborhood Unit No.7
INN 8604028282

Director General

"Yuganskvodokanal" L.L.C. _____ V.B.Kardymon

Place for Seal

GENERAL CONTRACT

**OF TRANSFER OF MUNICIPALLY-OWNED WATER AND WASTE WATER FACILITIES
OF PERM CITY TO INVESTORS FOR OPERATION AND CAPITAL FINANCE**

concluded between

Perm City Administration

and

Sovremenny Gorod Corporation Closed Joint-Stock Company

City of Perm

April 2003

GENERAL CONTRACT

OF TRANSFER OF MUNICIPALLY-OWNED WATER AND WASTE WATER FACILITIES OF PERM CITY TO INVESTORS FOR OPERATION AND CAPITAL FINANCE

Perm City

8 April 2003

The Head of Perm City, _____, acting by virtue of the Perm City Charter on behalf of the Perm City municipality (hereinafter referred to as the City) and the Perm City administration (hereinafter referred to as the Administration) as the Head of Perm City (hereinafter referred to as the City Head) and the **Contemporary City Corporation** Closed Joint-Stock Company represented by its general director, _____, acting by virtue of the Company's Charter and hereinafter referred to as the Investor

In consideration of the need to make significant investments (capital finance) to ensure proper operation and development of the water and waste water works of the city, and

In view of the need of improvement of the quality and reliability of water and waste water services, and

In recognition of the importance of retaining the municipal ownership of most of city water and waste water works at this time, and

In acknowledgement of the feasibility and acceptability of private investments in municipal water and waste water works as well as private ownership of specific facilities, and

Being aware of the inadequacy of the effective laws and regulations in governing relations covered by this Contract

the parties hereby have agreed about the following:

Article 1

TERMS AND DEFINITIONS

1.1 This Contract operates with the following terms and concepts:

Public water and waste water system – a unified system of water and waste water works used for the purposes of water supply to the City inhabitants and other users residing in the City territory as well as collection, treatment, and disposal of waste water.

Water network – a system of pipe lines, connections, and works used for water supply;

Waste water network – a system of pipe lines, drains, and works used for collection and drainage of waste water;

Water inlet – a system of works and devices used for water intake;

Sewage disposal – a system of works and devices used for discharging waste water into water reservoirs;

Buildings – immovable property objects designed to provide an enclosed area for conducting various types of human activities;

Engineering infrastructure– immovable property objects (structures) consisting of one or more elements that comprise a single whole and cannot be removed from a land plot without damaging it;

Movable property – machinery and equipment, transfer devices, means of transportation, other movable property categorised by the book-keeping regulations as capital assets.

1.2 The term “transitional period” is used here to denote a time period from the date of signing of this Contract to 1 January 2004.

1.3 The term “inflation index” is used here to denote a consumer price index determined by the State Statistics Committee of the Russian Federation and published in the press. In the event of cessation of the practice of publishing an official consumer price index the parties will use another indicator for determining the inflation index starting from the premise that the inflation index is a relative indicator showing the behavior of consumer prices in a specific time period.

Article 2

SUBJECT MATTER OF THE CONTRACT

2.1 The Administration by virtue of the right to dispose of the municipal property of Perm City will lease out buildings, engineering infrastructure, and movable property comprising a system of public water and waste water works (hereinafter waterworks) to the Investor on terms and conditions set by this Contract, and the Investor will operate these waterworks to provide water and waste water services within the Perm City area.

2.2 The Investor will autonomously decide the size and schedule of investments to be made in the public water and waste water works in accordance with its obligations under this Contract.

The total amount of investments into the public water and waste water works will be not less than 100 (one hundred) million USD dollars including 20 (twenty) million USD dollars to be invested during the first five years of this lease.

2.3 The Investor will start providing water and waste water services in accordance with the terms and conditions of this Contract from 1 June 2003.

Article 3

LENGTH OF CONTRACT VALIDITY

3.1 This Contract will come into effect from the date of signing and will be held valid till 1 January 2053 (expiration date of the Contract).

3.2 Expiration of the validity term of this Contract will not free the parties from liability for violation of it.

3.3 The Administration may terminate this Contract before the schedule in event of repeated gross violations of contractual obligations by the Investor.

In the event of the Investor’s violation of terms and conditions of this Contract, the Administration will have to notify the Investor about committed violations in writing. The Investor will have to remove the committed violations and report in writing to the Administration about the removal of them.

3.4 In case of the Administration’s decision to terminate this Contract before the schedule by virtue of Clause 3.3 of this Contract, the Investor will have to recover damages incurred by the Administration.

Article 4

TRANSFER AND RETURN OF WATERWORKS

4.1 The Administration will, in 30 (thirty) days after the date of signature of this Contract, issue an order on closedown of the *Permvodocanal* municipal unitary company (hereinafter referred to

as the *Permvodocanal* Company) and establish a liquidation commission. Before expiration of the transitional period the Administration will make contracts for the lease of waterworks to the Investor starting from 1 June 2003.

4.2 Waterworks leased to the Investor for a transitional period will be specified in annexes to contracts concluded in accordance with Clause 4.1 of this Contract.

4.3 During the transitional period the Administration, with assistance of the Investor, will organise a detailed inventory of movable and immovable property of the *Permvodocanal* Company; the Administration will also ensure the state registration of immovable property belonging to the public water and waste water works.

4.4 Not later than 30 (thirty) days prior to expiration of the transitional period the Administration will ensure withdrawal of the waterworks from the *Permvodocanal* Company, which held them by right of economic management, and conclude long-term contracts of lease of these waterworks to the Investor. Buildings and engineering infrastructure will be leased for 49 (forty nine) years, and movable property (including means of transportation) will be leased for up to five years.

Contracts for lease of building and engineering infrastructure will be subject to state registration in accordance with the procedure set by the effective law.

4.5 The Investor will use the waterworks only for the designated purpose.

4.6 The Investor will maintain the waterworks in good working condition including making current repairs and capital refurbishment of them at its own expense. Considering the long term of this contract the Investor will have the right to set the programme and schedule of capital refurbishment in accordance with provisions of Clause 8.3 of this contract.

The Administration will have the right to check the technical condition of the waterworks once a year. Costs of a check will be repaid by the Administration.

4.7 Waterworks leased to the Investor will be specified in annexes to contracts concluded in accordance with Clause 4.1 and Clause 4.4 of this contract.

4.8 Description of buildings and engineering infrastructure will be provided in technical passports, explications, and certificates issued by the BTI (Bureau of Technical Inventory) and layouts attached to contracts concluded in accordance with Clause 4.1 and Clause 4.4 of this contract.

4.9 Waterworks will be transferred to the Investor under the procedure set by contracts concluded in accordance with Clause 4.1 and Clause 4.4 of this contract. The transfer of buildings and engineering infrastructure will be certified by release acts executed in accordance with the effective civil law. The obligation to transfer buildings and engineering infrastructure to the Investor will be considered fulfilled when the Investor comes into possession and use of buildings and infrastructure facilities and this fact is certified by a relevant release act signed by the parties.

4.10 The Investor may at any time refuse to use any of the property transferred to it under this contract and give it back to the Administration with a respective notification made at least three months prior to the return transfer provided that this is not detrimental to operation of the public water and waste water works. In this case this Contract as well as contracts concluded in accordance with Clause 4.1 and Clause 4.4 of this Contract will be considered ineffective with respect to the property that the Investor refused to use.

4.11 The water inlet and the sewage disposal will be transferred to the Investor for operation only when the Investor receives a license and other related documents that an applicable law requires operators to have in order to receive direct access to water reservoirs.

If such licenses and permits are received by the Investor after 1 June 2003, the Investor will reimburse reasonable and documented costs of operation of the water inlet and the sewage disposal to the *Permvodocanal* Company.

4.12 Before 1 August 2003, the Administration and the Investor will form a joint parity-based commission (hereinafter referred to as the Commission) to make decisions on the use of uncompleted construction projects, abandoned networks, as well as fixed assets received by the *Permvodocanal* Company as a result of technical assistance and incorporated into the public water and waste water works. Within a year after the date of establishment the Commission will make decisions on advisability of liquidation, completion, transfer to the Investor for use or other ways of disposal of each object. However, decisions to take part in financing completion of construction projects, if such decisions are taken by the Commission, will be at the full discretion of the Administration and the Investor.

Article 5

RENTAL FEE FOR THE USE OF WATERWORKS

5.1 Taking into account Clause 5.4 of this contract the parties have agreed that the Investor's obligation to make capital investments into the waterworks will be treated as the rental fee for the use of this property.

5.2 The size of capital investments made by the Investor within a calendar year in pursuance of its obligation specified in Clause 5.1 of this Contract will equal the amount of depreciation costs charged for the same year to the waterworks operated by the Investor during this year. In the event of retirement of specific assets from the Investor's operation before the end of the year depreciation costs for these assets will be counted towards the fee pro rata the time period these assets were operated by the Investor.

5.3 Within 15 days after the date of signing of this contract the Administration will enter a resolution permitting the treatment of the Investor's obligation to make capital investments into the waterworks in the size equal the amount of depreciation costs as the rental fee for the use of the municipal property to the City *Duma* for approval.

5.4 Until approval by the City *Duma* of the resolution permitting to treat the Investor's obligation to make capital investments into the leased waterworks in the size equal to the amount of depreciation costs as the rental fee for the use of the municipal property, the Investor will have to pay a rental fee in cash and in size calculated under the formula set by the Perm City *Duma*, and in the event of a failure to set such a formula in the size equal to the depreciation costs of the leased property.

5.5 Within 60 (sixty) days after the end of the calendar year the Investor will report to the Administration in writing about the fulfillment of its obligation under Clause 5.1 of this contract.

5.6 In the event of an alteration to the book value of the waterworks as a result of reassessment conducted in accordance with the effective law and subsequent alteration of the amount of depreciation costs, the size of the rental fee will grow respectively subject to the condition that the increased fee does not exceed the inflation index for the period starting from the date of the previous revision of the fee.

The rental fee cannot be revised more than once a year.

Article 6

PROPERTY RELATIONS

6.1 The parties have agreed that the Investor will have the full right of possession, use, and disposal of additional investment projects.

6.2 the Investor will have no right to alienate additional investment projects that are an integral part of the public water and waste water works.

6.3 Clause 6.1 of this contract does not affect the City right to capital investment outputs counted as a rental fee for the leased waterworks as it is stipulated by this contract.

6.4 The Administration permits the Investor to make its own capital investments into the waterworks in the amount exceeding the size of the rental fee set in Clause 5.2 of this Contract (additional investments). The Investor's additional investments will be treated as investments made with the consent of the owner of the waterworks.

If the rental fee for the leased waterworks is paid in accordance with Clause 5.4 of this contract, all the Investor's capital money invested into the waterworks will be treated as additional investments.

6.5 The Investor will have the full discretionary power of additional investments. Additional investment projects will be included into the balance sheet of the Investor and depreciated in accordance with the depreciation life set for this type of asset and the Investor's own depreciation policy.

6.6 Within 60 (sixty) days after the end of the year the Investor will report to the Administration in writing about additional investments made in the reported year.

6.7 Following the effective law and Clauses 6.1–6.4 of this contract the parties agree that in the result of the Investor's additional investments the common shared ownership of the City and the Investor to related investment projects will arise. The City's and the Investor's shares in a specific common property object will be determined on the basis of the residual value of this object at the date of signing of this contract and the value of the Investor's additional investments made into it.

6.8 If common shared ownership arises, pursuant to Clause 6.6 of this contract, to an object which is classified as immovable property, the parties will execute and sign respective documents and make other steps on state registration of real property required by the effective law.

6.9 If this contract is terminated at the date of its expiration, or it is terminated ahead of schedule on the Investor's initiative, the Investor will transfer capital investment outputs made during the life of this contract to the City free of charge. If this contract is terminated ahead of the expiration date, regulations of Clause 11.3 will be applicable.

Article 7

LAND RELATIONS

7.1 The Administration will in the shortest time after the date of signing this Contract lease out land plots necessary for operation of the waterworks to the Investor.

7.2 If capital investments of the Investor made in accordance with this contract entail the need to use additional land plots, the Administration will allocate and/or assist in allocation of such lands to the Investor under rules and procedures set by the effective land law.

7.3 Rent for the above-mentioned land plots will be collected at the lowest rate permitted by the effective law.

7.4 Adjustment of the rent rates with indexes going beyond the inflation index will be considered as a material modification of terms and conditions.

Article 8

WATER AND WASTE WATER SERVICES

8.1 The *Permvodocanal* Company will provide water and waste water services until 31 May 2003 inclusive.

8.2 From 1 June 2003 water and waste water services will be provided by the Investor. The conclusion of services contracts with users will be the responsibility of the Investor.

The Investor will provide water and waste water services within the City territory to any applicant provided that the latter pays the fee for provided services promptly and adequately.

8.3 Getting necessary approvals and permits from appropriate authorities (architecture and construction, fire preventing, sanitary, environmental, and others) for conducting works that can be made only with such approvals and permits will be the responsibility of the Investor.

The Investor will submit annual and long-range programmes of capital refurbishment, modernisation and expansion of the waterworks, as well as plans of adjustment of carrying capacity of the waterworks' pipelines to the Administration to get its approval of them.

8.4 The Administration will make the necessary steps to prevent the loss of technical, legal, and financial documents of the *Permvodocanal* Company and provide the Investor with copies of documents that are important for the water and waste water service management.

Classified documents will be presented only to those representatives of the Investor that are properly authorised to have an access to them.

8.5 Upon expiration of this contract the Investor will give copies of technical, legal, and financial documents that are important for the water and waste water service management to the Administration or its authorised agent.

8.6 The Investor will be responsible for the fulfillment of all requirements of the effective law and will make all reasonable efforts to ensure safe operation of the public water and waste water works in close coordination with the appropriate authorities.

8.7 All users will pay for water and waste water services delivered before 31 May 2003 inclusive, to the *Permvodocanal* Company. Starting from 1 June 2003 user fees for delivered water and wastewater services will be paid to the Investor's settlement account.

8.8 Before the end of 2004 the Investor will provide all municipal agencies and municipally-subsidised organisations using the cold water service with meters showing the water consumption rate.

8.9 Municipal agencies and municipally-subsidised organisations will be supplied with water and waste water services to the amount covered by respective appropriations from the city annual budget.

Before 1 October 2003 the parties will jointly establish annual water and waste water consumption limits for municipal agencies and municipally-subsidised organisations and control the observance of them.

Before the end of 2003 the Investor will provide the City with recommendations on the reduction of excess consumption of water and waste water services by municipal agencies and municipally-subsidised organisations.

8.10 During the first three years of this Contract's performance, the Investor will cut off municipally-subsidised organisations and low-income families that have unsettled arrears with water and waste water fees only with the consent of the Administration.

8.11 Before 1 June 2003 the Investor will conclude labour contracts with *Permvodocanal* Company employees that have appropriate qualifications and no violations of labour discipline in accordance with the Investor's manning table.

8.12 *Permvodocanal* Company employees not contracted by the Investor will receive a dismissal benefit in accordance with the effective legislation. If the *Permvodocanal* Company lacks money to pay dismissal benefits, the Investor will provide the Company with the necessary resources to fulfill the Company's obligations to its employees by way of acquisition of the Company's receivable debts or by other mutually acceptable ways.

8.13 Before 1 June 2003, the Investor will conclude contracts with suppliers of products and services important for standard operation of the water and waste water works.

8.14 The Investor will assist the *Permvodocanal* Company liquidation commission in settlement of its debts - payable and receivable. If the *Permvodocanal* Company lacks money to satisfy its creditors' claims the Investor will provide the Company with the necessary resources to fulfill the Company's obligations to creditors by way of acquisition of the Company's receivable debts or by other mutually acceptable ways.

Article 9

SERVICE QUALITY

9.1 Water and waste water services provided to end users should meet the quality standards established by the effective laws and regulations of the Russian Federation.

9.2 The Investor will be held liable for observance of water quality standards at any spot of water nets maintained and serviced by the Investor. The Investor will not be held liable for non-observance of water quality standards at any spot of water networks that are not maintained and serviced by the Investor.

9.3 In the event of legislative enhancement of water quality standards the Investor will have to bring the quality of its services into compliance with new standards within five years after the date of enforcement of them.

9.4 If, during the transition period, particular users are provided with a water service of a quality lower than the established standards (according to data provided by organisations authorised to control the quality of water service) the Investor will have to bring the quality of the water service in line with the established standards within:

- One year if this non-compliance is a result of violation of the water network operation rules and procedures;
- Five years if this non-compliance can be corrected only by way of renewal of old or construction of new water pipelines and equipment.

9.5 Upon the completion of the transitional period the Investor will secure the regular supply of cold water to users. The total time of users' access to water and waste water services will be not less than 99 per cent per year in 2004–2008, and not less than 99.5 per cent in the subsequent years except interruptions caused by:

- Breakdowns suffered through no fault of the Investor;
- Planned works on sanitation or replacement of pipelines provided that this delay in the water and waste water service delivery is brief and in any case is no longer than two months.

9.6 If the delivery of a water service to particular users was irregular before the date of signing of this contract the Investor will have to fulfill the requirements of Clause 9.5 of this contract not later than five years after the date of signing.

9.7 The Investor will be responsible for taking measures to exclude environmentally hazardous activities.

9.8 Within five years from the date of signing of this contract the Investor will stop the practice of untreated waste water disposal and guarantee no such cases in the future.

Article 10

TARIFF POLICY

10.1 During the transitional period the Investor will provide water and waste water services at tariff rates set by the *Permvodocanal* Company. The Administration will do its best in order to ensure the consistency of the Investor's tariffs with the current tariffs of the *Permvodocanal* Company.

10.2 Furthermore the Investor will provide water and waste water services at tariff rates set by the effective laws and regulations for water service producers.

10.3 The Investor will not claim for a rise in tariffs beyond the inflation index except in instances when this is necessary for covering reasonable additional costs of the Investor caused by:

- A decision of the tariff-setting authorities to lower tariffs for specific user groups;
- Growth in electric power tariffs or market prices above the tariff rate effective at the date of signing of this contract if this growth is greater than the inflation index of the reported period;
- Growth in the rental fee paid by the Investor for leased-out waterworks and land plots, or growth or introduction of taxes not related to the Investor's economic activities above the rates effective at the date of signing of this contract.
- Growth of fixed maintenance and operation costs (including the rental fee paid under this contract) in total costs due to the drop in actual retail consumption of cold water below the rate effective at the date of signing of this contract.

10.4 The Administration will ensure, within its limits of power, the establishment or assistance in establishment of water and waste water tariffs in accordance with provisions of It.10.3 of this contract.

10.5 The Investor will have the right to demand from enterprises and organisations the installment of certified water meters if they have none.

10.6 By signing this contract the parties proceed in the agreement that the water tariff setting procedure will not be substantially changed during the life of this contract.

Article 11

GUARANTEES TO INVESTORS

11.1 The Administration will not interfere in the Investor's economic activities unless they are hazardous for the environment or for the rights and legal interests of the third party.

11.2 In the event of the City's decision to fully or partially cover the cost of water and waste water services for particular user groups out of the municipal budget, the Administration will ensure the making of prompt payments to the Investor for services delivered to such user groups.

11.3 In the event of termination of this contract (or contracts concluded in accordance with Clause 4.1 and Clause 4.4 of this contract) ahead of schedule on any grounds, the Investor will have the right to claim for the compensation of the cost of additional investment projects, an amount calculated by way of adjustment of the initial cost of these projects in accordance with the inflation index effective at the date of termination of this contract (or contracts concluded in accordance with Clause 4.1 and Clause 4.4 of this contract).

11.4 Termination of operation and/or use of the waterworks as well as giving them back to the City will take place only upon transfer of the compensation mentioned in Clause 11.3 of this contract to the Investor's settlement account.

11.5 During the life of this contract the Administration will refrain from taking decisions and steps that would deteriorate the Investor's standing below that at the date of signing of this contract.

Article 12

MISCELLANEOUS

12.1 The parties agree that the provisions of this contract subject to public disclosure in accordance with the Russian Federation and Perm *Oblast* laws and the City Charter will not be treated as confidential.

Both parties have the right to issue press releases and make other public statements related to this contract. However, the parties agree, as far as is practicable, to notify each other in advance about their plans to make public statements, and disclose and coordinate the contents of them.

The Administration and the Investor will join efforts to arrange and implement an awareness campaign about this contract among all parties concerned.

12.2 All notifications in writing made under this contract and/or related to its implementation, modification, or termination will be forwarded to the Investor at the following address:

23 Ulitsa Profsoyuznaya, Moscow 117859

Sovremenny Gorod Corporation

12.3 This contract can be extended or modified only by way of signing by both parties of written protocols which will be added to this contract and treated as an integral part of it.

12.4 Disputes arising under this contract will be settled in accordance with the effective law.

12.5 The headlines of this contract are used only as a matter of convenience and thus have no significance for the interpretation of this contract.

SIGNATURES OF THE PARTIES

On behalf of Perm City

On behalf of *Sovremenny Gorod* Corporation

City Head

General Director

Annex 2

Case Studies of Contracts in the Urban Water Sector in Ukraine

Valentyna Svyatotska⁵⁶

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SECTION 1

1 Background

1.1 Condition of the housing and utility infrastructure and the water sector in Ukraine

Ukrainian housing and utility entities are unable to efficiently operate in a market environment, providing consumers with high-level and quality services. As at January 1, 2003, aggregate accounts receivable and payable within the industry totaled 8.6 billion hryvnas (UAH) each, of these UAH 7.4 billion related to residential charges for housing and utility services. Losses by industry operators capped UAH 500 million, an increase of 1.3 times against 2002.

One fourth of treatment facilities and one out of each five pumping stations are past their statutory useful lives. In fact, half of pumping units are fully depreciated, and 40% require replacement. 30% of water and 27% of sewerage networks are in extremely poor condition.

Each year, the quality of housing and utility services, including water, deteriorates. Only 70% of Ukrainian population has access to centralized water service. In more than half of the cities with a population of over 100,000 drinking water is provided at certain hours rather than round-the-clock. In several regions, drinking water has been found to deviate from the national chemical and bacteriological standards. One out of each three houses, including internal water and sewerage systems, is in need of capital or routine repairs.

The poor technical condition of water networks results in secondary drinking water contamination and the risk of infectious diseases.

The problems summarized above mandated a reform of the Ukrainian housing and utility industry, including the water sector. In March 2002, the Government set up the State Committee of Ukraine on Housing and Utilities to direct the reform process. Since then, several national reform concepts and programs have been adopted for the sector and are now underway. At present, two more programs are being agreed by the central government and will be submitted to the Supreme Rada (Council) of Ukraine in the nearest future. These are the Drinking Water Program and the National Program for Reform and

Development of Ukrainian Housing and Utility Infrastructure for 2004-2010. Among other things, the National Program aims to ensure the access of all consumers to services of adequate level and quality approximating EC requirements; the creation of conditions for the stable and efficient operation and development of housing and utility entities; and enhanced transparency in relations between all parties involved in the process of service provision and consumption.

Housing and utility reform develops alongside the evolution of local governance in Ukraine, an essential factor for the analysis of the issues raised in this survey as it is the local governments that 1) are obliged by legislation to ensure the provision of utility and housing services; 2) assume ownership of the service infrastructure (fixed assets, equipment, networks).

The current processes in Ukraine's housing and utility sector are significantly affected by the general development of Ukrainian legislation and its harmonization with the European Union standards. Among the laws that already had an impact is the Law "On Enterprises in Ukraine", which created the necessary conditions for transforming the water and sewerage departments of city councils into autonomous commercially-oriented business entities. Utilities have entered the market environment and are now part of market relations.

Law "On Property" defined communal (municipal) property as a separate class and stipulated its equality before the law vis-à-vis other types of property.

Law "On Natural Monopolies" gave a definition of natural monopolism, listed natural monopolists, and specified the agencies responsible for the regulation of various natural monopoly activities.

Law "On Local Governance in Ukraine" established the responsibility of local authorities for ensuring that consumers have access to the relevant services, their powers in respect of communal property assets and entities, and the role of local governments in developing municipal infrastructure, including utilities.

Ukraine also adopted a Budget Code, which defined the powers of government agencies at various levels and the mechanisms of budget funding in the utility sector.

In May 2003, the Supreme Rada of Ukraine passed the Business Code and the new Civil Code that become effective on January 1, 2004. Both Codes will play a major role in changing the organizational/institutional and business/contractual environment in Ukraine, including for utilities.

1.2. History and origins of service contracts and private sector participation in the water sector

Until 1991, Ukraine, much like the rest of the Soviet Union, had one sole form of state ownership, with all enterprises, including utilities, being state property. The government managed the entities, approved service tariffs, subsidized operators, established service rules and monitored the provision of services.

Utilities were effectively a component of the administrative economic management system. There was no need for contracts between authorities and utilities or between utilities and consumers. No autonomy or commercialization of utilities was on the agenda at that time.

1991 heralded the process of segregation of state and communal property that directly affected the housing and utility sector. It was decided to hand over the assets employed in the provision of utility services to consumers in a single-locality environment to territorial *gromadas* (municipalities). The process is still underway, with the state owning four water utilities, while territorial *gromadas* (at the district or regional level)⁵⁷ jointly own 61 utilities.⁵⁸

⁵⁷ The legal treatment of "joint property of territorial *gromadas*" remains a controversial issue even though the 1996 Constitution of Ukraine lists urban, rural and township *gromadas* and their local governance bodies among lawful holders of communal property. Assets may be transferred into joint ownership only as approved by and agreed with communal property operators. In practice, some utility companies remained in state ownership and are still run by district or regional authorities, while territorial *gromadas* have neither gained or delegated control over them, notwithstanding that formally these companies are now billed as "facilities in joint ownership of territorial *gromadas*". As a result, the legal status of regional utilities does not conform to current legislation.

In 1995 the Government began a phased reduction of budget subsidies provided to housing and utility operators, eliminating them completely by July 1998. Water utilities gradually acquired the status of natural monopolies operating in a market environment based on the principle of self-funding.

Simultaneously, utility tariffs began to increase to approximate actual costs, and a system of housing and utility subsidies was introduced for low-income households. The powers to approve tariffs for utility services provided by municipal enterprises were delegated to local authorities. Tariff-setting authorities were obligated to reimburse the difference between the approved tariffs and actual costs from their budgets in the event the tariffs did not enable water or power utilities to operate with a profit. Although this provision of the companies law has been virtually idle until now, utilities have been increasingly vocal on the subject recently, insisting that the debts resulting from such differences be covered by authorities.

In addition, the Government dramatically reduced budget allocations for overhaul and reconstruction of utility assets. The technical condition of water and sewerage facilities has declined so severely that the crucial issue now is stopping their further rapid deterioration. However, this requires significant investments. The growing capital investment requirements to sustain water facilities have forced all parties involved in water production and consumption to seriously consider attracting private investment into the sector.

It is obvious that the attraction of private investors mandates the establishment of clear service provision parameters and production and financial indicators for utilities, both municipal and private. The importance of such parameters is also conditioned by the need of control over the efficient use of municipal property in business operations, given that Ukrainian laws prohibit the privatization of "engineering infrastructure and urban utilities, including networks, facilities and equipment associated with the provision of consumers with water, gas, heat, and wastewater disposal and treatment services"⁵⁹. Such facilities remain municipal property in all cases, including where a private operator is engaged to manage a water utility, and may be handed over to operators only on lease terms.

Over the past several years, Ukrainian legislation has evolved to expand the opportunities and arrangements for involving the private sector in the operation of utilities, including the adoption of legislation on concessions and leasing (financial and operating) and the enactment of the new Civil Code introducing the concept of asset management.

The process of water utilities' transformation into communal-property enterprises is accompanied by the development of legislation governing the provision of utility services, their quality parameters and protection of consumers and their entitlement to quality service.

Ukraine is currently working on the Concept of Water and Sewerage Sector Regulation that will address the question of performance-based service contracts using measurable and controllable service/management level and quality benchmarks.

Ukraine has virtually no experience in the development and implementation of service contracts between municipalities and water utilities with various types of ownership structure. There are hardly a handful of cities with even an insignificant history of such contracts. Informal sources (no data has ever been formally collected, registered or analyzed) indicate that contracts between

⁵⁸ Data taken from Ukraine's National Water Sector Development Strategy prepared in 2002 by COWI/DANCEE experts in conjunction with the State Committee of Ukraine on Housing and Utilities.

⁵⁹ Article 5 of Law of Ukraine "On Privatization of State Property".

local authorities and municipality-run utilities have existed in Sevastopol, Kremenchug, Zolotonosha, Odesa and Lviv. However, our attempts to obtain copies of such contracts or comments thereto have largely been unsuccessful, the major reasons being as follows:

- many officials, authorities responsible for housing and utilities, and utilities as such have change since then;
- representatives of water utilities and municipal authorities who oversee housing and utilities realize that such contracts were very formal, imperfect and more political than contractual in nature;
- all persons contacted by us in the above cities believe that the contracts did not meet the requirements of legislation;
- The contracts did not specify the production and financial benchmarks, the target service levels and quality parameters or asset management requirements.
- All interviewees largely agreed that the contracts lost their appeal and fell out of use primarily because local authorities did not want to assume responsibility for huge debts to utilities relating to compensation of subsidies and overdue reimbursements for the difference between actual costs and approved service tariffs.

As no production/financial indicator-based contracts have been concluded, no analysis is available on their use and impact on the service provision process. The resulting conclusion is that the mechanism of water utility management/regulation through performance contracting has not been operational in Ukraine.

Only in 2001-2002, a PADCO/USAID project yielded a Model Performance Agreement for Provision of Water Supply and Wastewater Disposal (Heat and Hot Water) Services, which has some features similar to performance-based contracts. Such contracts were concluded as part of the Ukraine Tariff Reform and Communal Services Enterprise Restructuring Project in Khmelnytsky and Lutsk. The contract between the Lutsk City Council and the local water utility was signed in the summer of 2002 and is the subject of one of the case studies herein.

Two other contracts (in Lviv and Zaporizhzhya) resulted from cooperation with foreign consultants in the process of preparation of application packages for World Bank and EBRD loans.

1.3. Current status of and prospects for service contracts in Ukraine

What are the objectives of service contracts between municipalities and water utilities?

Pursuant to current Ukrainian legislation, municipal authorities and water utilities are responsible for provision of adequate-level and quality water and sewerage services to residents. Both parties acknowledge that this task may be achieved only by concerted efforts.

In the process of our analysis, we conducted a survey that covered various cities and water utilities (including Case Studies) to identify the objectives of service contracts concluded or planned by them. The following objectives were mentioned:

- segregate and define the parties' respective rights and obligations within the service process;
- identify the funding sources, volumes and methods for infrastructure development efforts, especially on co-financing terms;
- determine the municipal tariff policy. This objective is closely interlinked with the previous one as municipalities are often faced with a choice of using tariffs

that fully cover service costs and provide capital investment financing or, alternatively, subsidizing utilities from the city budget;

- define local service parameters and rules. Each city has a unique service environment (degree of network depreciation, network technical characteristics, landscape specifics, etc.) that may affect service parameters (e.g., network pressure, water service schedule);
- establish and monitor utility performance indicators. A complementary indirect objective is eliminating the numerous and often unnecessary utility reports to municipal authorities;
- define strategic development options for the utility;
- establish disconnection policy for non-payers;
- define accounting arrangements for services.
- According to respondents, the key advantage of service contracts is the definition and establishment of the parties' respective responsibility for achieving the agreed targets. However, existing contracts have been concluded in the absence of any provisions on such contracts or penalties for their non-performance or improper performance in the then current legislation.⁶⁰

The problems identified in the course of the Case Study include, among other things, the absence of a proper set of performance indicators to be included in contracts.

The very process of contract negotiation and conclusion has become an important procedure allowing municipalities and water utilities alike to take a fresh look at the current state of things and identify the necessary solutions to address unclear definition of mutual rights and obligations.

Representatives of all municipalities and utilities with whom we have been able to discuss this type of contracts in terms of their conclusion and use, indicate the need of further research in the area so as to design and approve a model service contract and a model set of utility performance parameters (indicators). One other requirement is a system of potential guarantees and sanctions, complete with the procedure for their application in the event of non-performance or improper performance by contracting parties. Once such provisions are developed, performance-based contracts will become a requisite and efficient tool within the Ukrainian water sector.

What are the initial outcomes (achievements) resulting from such contracts? Do consumers and utilities perceive any improvements?

We have learnt of the following water and sewerage service contract deliverables in the cities covered by the report:

- municipal authorities have estimated, discussed (with community involvement) and endorsed new tariffs for water and sewerage services (in Lutsk and Lviv);
- in Lutsk, the local utility has developed, and the city approved, a strategic corporate development plan. In Lviv, the city council approved a comprehensive municipal water supply plan for 2003-2006;
- in Lviv, water service to 140,000 consumers has increased from 6 to 12 hours daily.

⁶⁰ The Commercial Code of Ukraine in effect as of January 1, 2004, allows so-called "organizational and commercial contracts". However, before service contracts with pre-agreed service parameters can be introduced, respective research must be undertaken, and application mechanisms designed.

- collection has improved considerably. In Lviv, it exceeded the target indicator specified in the service contract;
- in Lutsk, work is underway to develop and approve local laws to create a revolving energy conservation fund in the city's utility sector;
- in Lutsk, an Advisory Committee has been set up and meets regularly.

As municipalities are yet to develop a practice of annual assessment of contract performance against the agreed parameters, we were unable to obtain more detailed information.

Have there been any cases of contract enforcement?

We learnt that neither municipal authorities nor utilities practice contractual enforcement, primarily due to the absence of the relevant legal framework rather than unwillingness to do so.

What was the selection criteria for the cities and water utilities considered in this report?

The monitoring of the organizational and legal structure of utilities in Ukraine commenced only in the summer of 2002, following the creation of the State Committee of Ukraine on Housing and Utilities. The process is complicated by the absence of vertical subordination of urban utilities to the State Committee. Accordingly, complete and accurate information on water and sewerage operators with private sector participation (their total number and list) is yet to be compiled. An even more difficult task is the monitoring of the number (and quality) of current contracts between municipalities and water companies. Virtually no such figures exist.

In our report, we used data obtained by Denmark's COWI with the assistance of the State Committee, which does not have official status. No other data is available.

Of the 14 utilities organized as open joint stock or limited liability companies, only the Kyiv Vodokanal was transformed into a joint stock company under the standard corporate procedure in line with current legislation.

All other utilities (including Donuglevodokanal, discussed in an appendix hereto) were privatized using rather "one-of-a-kind" arrangements, namely:

Scheme 1 (used in 1990-1995): in the process of privatization, various state-owned enterprises in different industries would spin off business units specifically to service company housing, including the provision of utility services to residents, with all underlying fixed assets given the status of communal property and transferred to municipal authorities, which in turn would lease them to such units' workforce (that was deemed to include all employees);

Scheme 2 (used in late 1990's when the Soviet lease legislation was still in place): state-owned utilities were relinquished to municipalities and given the status of communal property, while municipalities leased them to utilities' workforce. A subsequent law enacted after Ukraine had gained independence required the workforce of utilities leasing communal property to register as either limited liability (LLC) or open joint stock companies (OJSC).

Both schemes and both entity options, OJSC and LLC, ignored the principles of corporate participation of shareholders (members). In essence, such companies do not differ from any other municipal utility, maintaining a very weak level of commercial and organizational activity and remaining under the control, if informal, of municipal authorities. Many of such companies have long ceased to be OJSCs or LLCs.

Only Donuglevodokanal has managed to maintain more or less steady operations due to a highly competent team of professionals.

We did not have sufficient resources during the preparation of this report to examine in detail the contracts of all 14 utilities. Suffice to say that the Kyiv *Vodokanal* and the Kyiv city administration refused to disclose any information on their relationship or utility operations, let alone the absence of a performance-based contract between them.

Interviews with other utilities showed that they often lack such contracts and use only lease agreements for fixed assets without any performance indicators. Such lease agreements are very formal and are more political in nature than legal or commercial.

The principal selection criteria for case studies were as follows:

- the existence of a contract between the utility and municipal authorities very similar to the French model. Other types of contracts are completely different in subject matter and cannot be reasonably compared to the French model;
- consent of both parties to participation in the study and potential information disclosure;
- a relatively stable (compared to other Ukrainian water utilities) organizational and financial condition of the utility.

General comparison of contracts described in the report with the French model contract

Our examination and analysis of service contracts in Ukraine as compared to the French model contract lead to the following conclusions:

Advantages of the French model contract:

- clear and detailed description of all types of work performed by the operator and the relevant quality parameters;
- detailed description of contracting parties' rights and obligations;
- financial guarantees provided to operator by the municipality;
- application of sanctions in the event of non-performance or improper performance;
- detailed description of the operator's relationship with users;
- extensive description of the operator's reporting obligations;
- objective and accessible information on utility performance;
- detailed description of contracting parties' rights and obligations in respect of capital investments;
- description of asset transfer procedures upon contract termination.
- Advantages of Ukrainian contracts:
- description of parties' responsibilities in the preparation and approval of strategic utility development plans;
- description of mechanisms to secure public involvement in the adoption of strategic decisions on utility operations.
- Importantly, the principal difference between the two models is that a Ukrainian contract is more of a policy-level agreement whereas the French model focuses on establishing operational arrangements for the utility.

2 Description of the Background AND General information concerning the water sector in UKRAINE

2.1. Institutional aspects

2.1.1. Who owns water resources? Is water marketable as a commodity or considered a public good?

Pursuant to the Ukrainian Constitution, water and other natural resources within the country's territory are owned by the people of Ukraine. Ownership rights are exercised on behalf of the people of Ukraine by government authorities and bodies of local governance⁶¹. Water (water bodies) are classified as having national or local significance and can only be made available for temporary use. For centralized water supply, both local sources (surface waters located and used within a given region) and national (all other) water bodies are used⁶².

The law on drinking water and drinking water service provides the following definition of drinking water: water, which conforms to the state standards and sanitary legislation in terms of organoleptic, chemical and microbiological properties and radiological parameters.

The new Civil Code defines a service as a commitment by one party (contractor) to provide to the other party (the customer) a service consumed in performing a certain action or activity. In the case of centralized water supply, water is a commodity, which effectively enables the provision of the service as such. By paying for the service, the consumer (customer) also pays the cost of the water consumed.

Centralized and non-centralized water supply services are provided under the special water use regime, which allows business entities to withdraw water from a source and render water supply services, provided they have obtained a permit for special water use. A permit prescribes certain limits for water intake/use and pollutants discharge. Utilities are obliged to pay for special water use.

2.1.2. Which organizations are systematically involved in the monitoring of water services (i.e. organizations in charge of sanitary control and water quality control, organizations in charge of financial control of water services)? How are they financed?

The provision of centralized water and sewerage services is monitored across the following parameters: health safety of drinking water (diseases, epidemics); quality of delivered water (biological, chemical and organoleptic properties, color and odor); compliance with service provision requirements (continuity, network pressure, disconnections).

Our general observation is that Ukrainian authorities supposed to oversee the quality of centralized water services have a rather wide array of powers that require a clearer definition and are sometimes duplicated by other agencies. Also, the system of public control of service quality is not developed.

a) Control over compliance with statutory drinking water standards

⁶¹ Article 13 of the Constitution of Ukraine.

⁶² The Water Code of Ukraine.

Provided by the Sanitary and Epidemiological Service of the Ministry of Health Care and its local and subordinate agencies. The Service is run by the Chief Health Inspector of Ukraine who is also a deputy Minister of Health Care and reports directly to the Cabinet of Ministers. The Chief Health Inspector nominates chief health inspectors in the Autonomous Republic of Crimea, regions and cities, as well as water, rail and air transport chief health inspectors.

The Ukrainian Sanitary and Epidemiological Service and its local and subordinate bodies are funded from the state budget.

In administering control over compliance with sanitary legislation standards and requirements, health inspectors have the right to suspend the offenders' operations and impose administrative sanctions (fines) on the officers at fault.

All agencies of the State Sanitary and Epidemiological Service have the right to conduct sanitary and epidemiological audits of water and sewerage utilities at both the design and active operation stages. However, there is no formal list of instances where an audit of an operating entity may be conducted, or a prescribed procedure for such audits.

b) Control over compliance with regulations on special-purpose water use and pollution

Administered by the Ministry of Environmental Protection, the State Committee on Natural Resources and the State Environmental Inspectorate, which are part of and subordinate to the Ministry of Environmental Protection, as well as their local agencies⁶³.

Control over compliance with the rules regulating special water use and wastewater disposal is provided by the agencies which issue permits for special water use, namely:

- state environmental agencies (for national water bodies);
- the Supreme Rada of Crimea, regional, Kyiv and Sevastopol city councils as agreed with local offices of the Ministry of Environmental Protection (for local water bodies).

As permits for special water use establish limits for water intake/use and pollutants discharge, limit compliance is monitored by the same agencies that issue permits.

State Environmental Inspectorate and their local agencies are funded from the state budget. The activities of regional and municipal authorities are financed from the state and local budgets, respectively.

The above agencies are authorized to impose fines and adopt decisions on suspension of activities of business entities in the event of violations of environmental legislation.

Public associations specializing in environmental protection are entitled to participate in the audits conducted by environmental agencies.

c) Control over compliance with operational safety rules for centralized water and sewerage networks

⁶³ The Ministry of Environmental Protection and the State Committee on Natural Resources are in the process of re-organization (until September 15, 2003 Ukraine had an integral Ministry of Environment and Natural Resources), with mandates and proceedings yet to be endorsed by the Ukrainian President. Accordingly, the information presented in this section of the report is general in nature and may be subject to change.

Centralized water and sewerage services are subject to licensing. Licensing is based on a comprehensive list of organizational, qualification and other special requirements in respect of specific business activities. The list was approved by a joint order of the State Committee on Housing and Utilities and the State Committee on Regulatory Policy and Entrepreneurship.

Depending on the size of the locality in question, a license is issued by the State Committee on Housing and Utilities, the Council of Ministers of Crimea, or the Kyiv or Sevastopol city administrations, which are also entitled to conduct reviews of respective utilities' compliance with the terms of licenses issued.

Below is a brief description of the structure of housing and utility authorities in Ukraine. The supreme executive authority is the State Committee on Housing and Utilities. The Committee chairman and deputies are appointed by the President of Ukraine. Regional and district administrations have own housing and utility departments, with department managers appointed by heads of administrations as agreed with the State Committee on Housing and Utilities. Regional and local housing and utility departments are subordinate to respective administrations and the State Committee on Housing and Utilities.

Local authorities determine the structure, headcount and staffing lists of their executive bodies at own discretion. The executive boards of local councils include housing and utility sections which are not subordinate either to regional departments or the State Committee on Housing and Utilities.

The activities of the State Committee on Housing and Utilities and the regional and district administrations (including their housing and utility units) are funded from the state budget. All other agencies are financed from municipal budgets.

d) Control over compliance with pricing legislation

Administered by the State Price Control Inspectorate, a subordinate division of the Ministry of Economy and European Integration. The Inspectorate has local offices in the Autonomous Republic of Crimea, regions and the cities of Kyiv and Sevastopol. The head of the Inspectorate is nominated by the Cabinet of Ministers upon recommendation of the Minister of Economy.

The Inspectorate and its local offices, within the scope of their authority, conduct compliance reviews of the formation, establishment and application of prices and tariffs, and assess their economic reasonableness. Control is administered through the examination of accounting documents and computations relating to the formation, establishment and application of prices and tariffs. Agencies which set (regulate) prices and tariffs are obliged to forward copies of their resolutions to the State Price Control Inspectorate or its territorial (local) offices within 5 days of the date a resolution is adopted.

Heads and deputy heads of the central and local offices of the Inspectorate are entitled to adopt decisions on levying unjustified utility earnings into the relevant budget (state or local) at a rate of 200%, and consider cases involving administrative offences and the imposition of administrative fines on offenders of pricing legislation.

The Inspectorate and its territorial agencies are funded from the state budget within the limit of allocations for the Ministry of Economy.

e) Control over use of budget funds, accounting and reporting

Provided by the Auditing and Control Department (ACD) of the Ministry of Finance of Ukraine and its territorial offices (at regional or city level). The head of the ACD is appointed by the Cabinet of Ministers upon recommendation of the Minister of Finance.

Within the scope of their authority stipulated by legislation, ACD and its territorial offices conduct audits and reviews of companies' financial activities for designated use of budget funds (including subsidies and benefit compensations), and the accuracy of accounting records and financial statements. They are also responsible for controlling the proper use and safeguarding of state and municipal property (including property handed over on usage terms).

Auditing and control agencies may apply the following sanctions: suspension of transactions per settlement and other corporate accounts at banks and other financial institutions, issuance of resolutions binding on company management, adoption of decisions on cessation of funding from various-level budgets, imposition of financial and administrative penalties.

The activities of auditing and control agencies are funded from the state budget.

f) Control over compliance with tax legislation

Administered by the State Tax Administration of Ukraine (STA) and its territorial and special agencies at regional, city and district level. Among other things, the STA monitors compliance with tax legislation, the accuracy of tax accruals, the complete and timely remittance of taxes and levies (mandatory payments) and non-tax revenues into budgets and special-purpose state funds at all levels. Tax authorities may provide tax deferrals or allow payment in installments on tax credit terms, and participate in corporate recovery procedures.

The Chairman of the STA is appointed by the President of Ukraine. The chairmen and deputy chairmen of regional, city and district tax administrations are appointed by the STA Chairman.

Tax authorities may apply the following sanctions: demand rectification of tax violations and monitor compliance, arrest payers' settlement and other accounts at banks and other financial institutions, impose financial and administrative penalties. The tax police, which is a structural subdivision of the STA, is entitled to initiate criminal proceedings in the event of certain violations of tax legislation.

Tax authorities at all levels are funded from the state budget.

g) Control over the quality of water and sewerage services

Pursuant to Rules of Provision of Water, Heat and Sewerage Services to Consumers, control over compliance with the Rules lies with the State Committee for Protection of Consumer Rights, the Ministry of Health Care, the State Committee on Housing and Utilities, the State Standards Committee, the Anti-Monopoly Committee and other agencies.

At the same time, in accordance with Law "On Local Governance in Ukraine", control over the quality of

drinking water and services is the responsibility of executive boards of local councils. However, executive boards have only housing and utility departments which are primarily responsible for general management of housing and utility entities, while control over the quality of consumer services is not their main focus.

- Local authorities

Local executive authorities approve the service schedule in respective localities and agree the schedules of service interruption for repairs and maintenance prepared by utilities. They also establish certain technical indicators for utilities, such as the length of networks and network pressure, connection of new consumers, and some other parameters. However, there is no regulation that would establish a list of parameters subject to approval by local authorities (executive boards).

By agreement with the Ministry of Health Care, the Ministry of Labor and Social Policy, the State Standards Committee, the State Committee on Housing and Utilities or their territorial agencies, local authorities may adjust the parameters and standards relating to service regimes and consumer properties, and establish a guaranteed service level as adjusted for the available capacity, composition and depreciation of fixed assets, climatic and other local conditions. The experience of such adjustment in Ukraine has so far been insignificant, as the relevant provisions were introduced only in May 2003. The only exception is the negotiation and issuance of special permits for supply of drinking water that does not comply with the established state standards, where utilities are obliged to remit 10% of the value of delivered low-grade water to a special fund within the local budget. These payments are then used to fund improvements in the quality of drinking water.

Executive committees appoint water and sewerage providers⁶⁴ for apartment buildings, who in turn are obliged to monitor the technical condition and operation of building and apartment water and sewerage systems. Pursuant to current legislation, the cost of maintenance of building networks is included in rental charges.

However, the control of executive boards over service providers in this respect is extremely poor. There are no penalties for inadequate building network maintenance⁶⁵, and virtually no contracts exist between municipal authorities, utilities and housing operators to regulate all of these issues.

- Government agencies for protection of consumer rights

The government agency responsible for consumer protection is the State Committee of Ukraine for Technical Regulation and Consumer Policy Matters (the State Consumer Standards Committee or the State Standards Committee, as it is commonly called, both officially and unofficially). The Chairman of the State Standards Committee is appointed by the President of Ukraine. At the local level, consumer rights protection is the responsibility of the Committee's territorial offices that exist in regions and the cities of Kyiv and Sevastopol. All consumer protection agencies are funded from the state budget. Compliance with consumer protection legislation in cities, villages and other communities is controlled on behalf of the state by departments of local executive boards with dual subordination (vertically, to the central and local offices of the State Standards Committee, and horizontally to local authorities). The activities of executive board departments for consumer protection are supposed to be financed from the state budget, but in practice funds come from local budgets.

The State Standards Committee approves national drinking water standards.

The State Standards Committee, its territorial offices and the relevant departments of local executive boards provide state supervision of compliance with product and service standards, norms and safety rules. They are entitled to review utilities' compliance with drinking water standards and rules of service provision, and the accuracy of settlements with consumers for services rendered; prohibit the provision of services if quality compliance cannot be confirmed;

⁶⁴ Pursuant to the Rules of Provision of Water, Heat and Sewerage Services to Consumers approved by the Cabinet of Ministers of Ukraine, service providers should be either the utilities as such or housing operators. This directly contradicts Law "On Protection of Consumer Rights" and the new Civil Code, which stipulate that services shall be provided by their producers.

⁶⁵ The issue of poor maintenance and, consequently, condition of house piping in Ukraine is very acute, resulting in major water losses primarily within the water distribution systems at apartment buildings with no condominiums or house meters available. Losses may total 25-40% of all water supplied to a building.

file suits for protection of consumer rights, including on behalf of unspecified consumer groups; and impose administrative fines on officers at fault.

- Anti-Monopoly Committee

The Anti-Monopoly Committee of Ukraine (AMC) is the central government authority with a special status. The main objective of the AMC and its territorial agencies in regions and cities is to provide state control over compliance with anti-monopoly legislation as relates to natural monopolies, and ensure state protection of competition and entrepreneurial activities. The AMC maintains a register of natural monopolies.

The AMC chairman is appointed by the President of Ukraine as agreed with the Supreme Rada. Chairmen of its territorial offices in cities and regions are appointed by the Committee chairman. AMC and its agencies are funded from the state budget.

Ukrainian legislation does not clearly specify the types of possible violations of anti-monopoly legislation by natural monopolies and lacks a clear description of the powers of AMC and its territorial agencies in respect of natural monopolies. In practice, however, AMC and its agencies can use their powers to impose administrative fines and conduct anti-monopoly investigations to interfere in utility activities, citing consumer rights as the formal pretext for such intervention. There have been cases where territorial agencies of AMC filed suits to reassess already issued consumer bills on the basis that the scope of rendered services was less than that prescribed by the Rules of Service Provision.

2.1.3. How advanced and thorough is the legal context with regard to public services management and drinking water?

Over the last decade, Ukrainian legislation governing the water and sewerage sector underwent significant evolution. The key development was the adoption of Law of Ukraine "On Drinking Water and Drinking Water Service" in January 2002. Despite a number of weaknesses, this law became a framework piece of legislation that specified:

- the subjects and objects of legal relations in the drinking water sector;
- the state policy and principles of state support in the sector;
- the scope of authority of various-level state bodies in managing the drinking water sector;
- the basic principles of business activities and economic incentives for centralized water service providers;
- the rules governing state monitoring, control and record-keeping in the sector;
- the liability for violations of legislation on drinking water;
- the entitlement of consumers to reliable and complete information on the quality of drinking water.

Matters relating to the organizational and legal structure of enterprises and the ownership of their assets are governed by the Constitution and laws "On Enterprises" and "On Local Governance". However, given the absence of a law on communal (municipal) property and the violation of the legal status of formerly state-owned and currently state and so-called 'regional' enterprises, the legislation in the area may not be regarded as comprehensive. An important issue is the absence of control mechanisms available to local authorities and territorial gromadas for monitoring the efficient use of municipal assets.

Another critical issue is the authority of government agencies to set and regulate tariffs. Pursuant to current legislation, executive boards of local authorities set tariffs for centralized water and

sewerage services provided by communal (municipal) entities to all consumer categories, and also agree service tariffs filed by enterprises of all other ownership structure (private, state, regional, mixed) before they are approved by regional government administrations⁶⁶.

Ukraine does not have an independent national regulator or local regulatory agencies, with some functions administered by the State Committee on Housing and Utilities and regional administrations which issue licenses for centralized water and sewerage services, and other functions by municipal executive boards and regional administrations that regulate tariffs during the approval process.

The formation of tariffs for centralized water and sewerage services takes place in accordance with the Tariff-Setting Rules for Centralized Water and Sewerage Services approved by the State Committee on Housing and Utilities in 2002, which establish the procedure for the formation of base tariffs, the list of costs that may be incorporated in tariffs, including capital investment costs, the process of tariff approval or indexation, and the methods of tariff regulation.

Other adopted regulations include the Rules for the Use of Communal Water Distribution and Wastewater Disposal Systems in Cities and Villages of Ukraine and the Technical Operation Rules for Water and Sewerage Systems in Ukraine. These regulations, approved by the State Committee on Housing and Utilities in 1995, establish the rules governing the connection of consumers (legal entities and private individuals) to centralized water and sewerage systems; the responsibility of water utilities and consumers for compliance with system use and operation rules; technical specifications for system operation; the production functions and structural subdivisions of water utilities; the qualification requirements for utility personnel and their functions; the technical documentation of water utilities and requirements for its format and preparation; scheduled and routine maintenance arrangements; the procedures for water accounting and water delivery and sales control; and the operation of building networks.

The Cabinet of Ministers of Ukraine approved Rules of Provision of Water, Heat and Sewerage Services to Consumers (1997)⁶⁷, which govern the service provision process, the relations between consumers and service providers⁶⁸, their rights and obligations; describe requirements for contracts between providers and consumers; govern payments for services and calculation of charges based on meter readings or statutory consumption standards. The Rules also approve certain service quality parameters that experts believe are too general and stipulate an unnecessarily wide range of indicator values.

An analysis of the status of contractual relations in the water and sewerage sector indicates that contracts between water utilities and legal entities, as well as with private house owners, condominiums and housing and construction cooperatives do exist and are effective (up to court hearings and imposition of financial penalties for inadequate contract performance, including non-payments and network disconnection). They constitute comprehensive civil law obligations, except for the right of utilities to accrue and collect penalties for late payment by residential consumers and private house owners.

⁶⁶ A draft law currently considered by central authorities suggests that utility charges for all consumer categories and types of enterprises be established by executive boards of local authorities.

⁶⁷ The State Committee on Housing and Utilities is preparing a new version of the Rules that will be submitted for approval to the Cabinet of Ministers of Ukraine.

⁶⁸ Pursuant to the new Rules, utility service providers at communal apartment buildings will be nominated by executive boards of local councils and may be either utilities or housing operators working under direct or indirect contracts.

There is a sufficient legal framework to support contracts between water utilities and apartment owners/tenants at apartment buildings. However, contract-based relations evolve very slowly. In our opinion, the main impediment is the unreadiness of water utilities to provide quality services, as contracts must contain specified service parameters, while residential consumers, on their part, are unwilling to make timely payments for services. An equally important factor of legislative nature is the current moratorium on late payment penalties⁶⁹. For technical and political reasons, utilities very rarely exercise their right to disconnect non-payers. The procedure of collecting overdue payments through court is very time-consuming due to the extreme workload of courts and poor enforcement. The current situation makes non-payers confident of their impunity.

In the summer of 2003 the Supreme Rada of Ukraine adopted a law on restructuring residential debts for housing and utility services. Under this law, a residential consumer may apply for debt repayment in installments over a period of up to 60 months. A restructuring agreement may be concluded provided the consumer timely pays current bills. The amount of monthly installments and the settlement period are established for each utility by a commission of the municipal executive board.

Water utilities pay taxes on general terms applicable to all other business entities. The tax legislation is rather extensive and complex. Companies pay national and local taxes established by a special law. The amounts of national and local taxes are stipulated by laws and resolutions of the relevant councils, respectively.

Pursuant to Law "On Accounting and Financial Reporting", ministries and state committees, within the scope of their authority, are responsible for developing and approving methodological recommendations on the application of accounting standards in their respective industries. The purpose of such recommendations is to ensure correct application of statutory accounting standards as adjusted for industry specifics. Such recommendations (known as 'accounting policies') have not been developed yet for housing and utilities, where the accounting statements (standards) designed by the Ukrainian Ministry of Finance currently apply.

2.2. Market description

2.2.1. Existing models of private sector involvement in the water sector and utility operations

Ukraine has a rather well-developed legal framework that enables the use of all international approaches to involving the private sector (including both investors and operators) in the utilities industry, including the following options: engagement contracts, hire, leasing (financial and operational), concession (including its variations), management contracts⁷⁰, partial divestiture as a form of privatization (adjusted for the moratorium on privatization of fixed assets used in the provision of water and sewerage services).

Engagement contracts are used to engage private firms for R&D and research and advisory projects, including the preparation of business and strategic corporate development plans for utilities. Outsourcing billing and collection (including overdue payments) to non-government

⁶⁹ In 1996, the Supreme Rada of Ukraine issued a resolution prohibiting late payment charges per issued residential bills and their collection from consumers.

⁷⁰ Management contracts in Ukraine, including the legal treatment of underlying assets, will be introduced as of January 1, 2004, following the enactment of the Civil Code.

entities is quickly becoming a common practice. There have also been cases of engaging private sector operators for maintenance and repairs of special-purpose equipment.

Fourteen Ukrainian cities have leased out local water utilities as entire going-concern businesses. However, it should be borne in mind that all of these lease contracts have been concluded with employees of the old utilities transformed into joint stock companies, without the involvement of any third party lessees. Hence, this form of private sector participation should be factored in with major reservations.

The leasing (financial and operating) of fixed assets is gradually becoming more common, albeit the process is being inhibited by high lease payments charged by equipment manufacturers and the lack of funds in the sector. This problem could be solved through creation of a government leasing fund or company similar to those that already exist in other industries.

Legislation on concessions was enacted in Ukraine five years ago. Whereas going-concern concessions in the utility sector are hardly a promising approach at present, concessions covering specific assets under the rehabilitate-operate-transfer (ROT) and build-operate-transfer (BOT) options are starting to take hold, including one active project and three more in the development stage.

As indicated above, Ukraine has lacked legislation regulating access to assets in the event of their handover under management contracts (see Footnote 13), which is why so far there have been no cases of an entire utility being managed by a private operator. Also, the idea that private operators can provide value through their advanced management and technology skills is yet to become a common notion.

As described above, Ukraine prohibits the privatization of fixed assets used in the provision of centralized water and sewerage services⁷¹, rules out 'pure' privatization of utilities. However, a number of entities have either completed (e.g. the Kyiv water utility) or are preparing for privatization of all other assets and transformation into joint stock companies.

The lack of private operators in the utility sector in general, including water utilities, is due to the following general reasons:

- poor financial condition of water utilities;
- meager collection;
- unstable and unpredictable tariff policies.

2.2.2 Major operators in the urban water sector market in the region studied

The Ukrainian water sector comprises 306 enterprises providing centralized water and sewerage services, including 223 utilities established and owned by municipalities on communal-property basis, 61 regional utilities; 4 state-owned enterprises, 3 limited liability companies and 14 joint stock companies⁷².

Business plans are currently in the making for creating a number of large regional water companies that will serve consumers in several regions rather than locally.

⁷¹ No list of such assets has been legislated.

⁷² Data taken from Ukraine's National Water Sector Development Strategy prepared in 2002 by COWI/DANCEE experts in conjunction with the State Committee of Ukraine on Housing and Utilities.

Analysis indicates it is a common belief in Ukraine that water utilities should be set up, managed and fully controlled by local authorities. However, there are no economically, technologically or financially validated requirements for utility performance and service parameters. As a result, while legislation declares the business and operational independence and autonomy of any enterprise, municipalities in their capacity as asset owners do not provide the requisite conditions for the realization of this principle.

2.2.3. What are the structure of the market and the degree of competition?

Centralized water and sewerage service providers in Ukraine fall under the definition of monopolies pursuant to Law "On Natural Monopolies". Therefore, there is room only for the introduction of isolated market elements in the natural monopoly sector.

We have already described the status of private sector involvement in the Ukrainian water sector, and would only like to stress again that the historic tradition of providing services through utility enterprises set up by municipal authorities does not promote the creation and development of specialized service providers that could compete for the operation and management of municipal assets. There is no competition for either the management of municipal property or for the preferential right to provide services (concessions).

The so-called cross-subsidies, essentially the practice of fixing tariffs for industrial consumers at a level much higher than for residential customers, also discourage the development of market relations the natural monopoly sector. In various communities, industrial charges exceed residential tariffs by 4 to 40 times. This tariff policy has already resulted in a significant reduction in the number of industrial users of centralized water services that try to find and develop individual water sources, especially where process water is concerned.

Consumers of centralized water services comprise the following categories:

- individuals:
- private house owners;
- apartment owners or tenants at apartment buildings;
- institutions and organizations funded from various-level budgets;
- industrial consumers.

For tariff-setting purposes, the two "individuals" categories are combined into a single "residential" group. The other categories may vary from place to place and include, for example, only "industrial consumers", with tariffs that also apply to budget institutions and organizations. Some towns operate a three-category system that includes residential consumers, industrial consumers and the budget sector.

2.2.4. Customer expectations and priorities

The issue of the quality of centralized water services in Ukraine is quite acute. One can often hear from consumers that the reason they are unwilling to pay and do not pay for utility services is their poor quality. The same idea regularly comes up in the mass media. One has to admit that this assertion is not completely baseless. At present, the average continuity of water service across Ukraine is 20 hours per day (according to a survey that covered 10 million persons)⁷³, and

⁷³ Data taken from Ukraine's National Water Sector Development Strategy prepared in 2002 by COWI/DANCEE experts in conjunction with the State Committee of Ukraine on Housing and Utilities.

it is highly likely that it will reduce further to 15 hours in the nearest future. The reasons underlying rationed water service include energy-saving efforts, insufficient water treatment, pumping or storage capacity and heavy network losses.

In a situation where water is sometimes not available altogether, consumers rarely raise the issue of its conformity to national quality standards. Even those consumers who have running water 24 hours per day rarely complain about its quality, while the higher-income group has by now developed a habit of buying bottled drinking water.

The severity of the problem is conditioned not only by the below-standard quality of utility services but also by consumers' unawareness of drinking water quality parameters. Objective information is not available because of an almost complete absence of professional and independent consumer surveys to assess public perception of water utilities and the quality of their service.

To fill the gaps in information on the quality of services and consumer priorities, PADCO/USAID conducted special surveys in the towns of Lutsk and Khmelnytsky as part of an international technical assistance project. These surveys indicate that over 85% of cold water consumers are content with the level of service they receive, and over 90% rate sewerage service as satisfactory. At the same time, 76-82% of respondents indicated that tariffs for centralized water services are too high. However, the results of these surveys cannot be extrapolated over all Ukrainian consumers, as in both Lutsk and Khmelnytsky water service is provided round-the-clock, and local utilities are quite robust.

The key improvements expected by consumers from water and sewerage utilities are as follow (in the order of priority): enhanced quality of drinking water (67-75% of respondents); replacement of old piping that affects the quality of water (62-67%); reduced cost of services (49-61%); uninterrupted cold water supply (36-40%); and fewer network breakdowns (30-33%). There is virtually no history of consumer suits for protection of infringed rights resulting from low service quality. We were unable to obtain any such information.

SECTION 2. LUTSK

1. CONTRACT DESCRIPTION

1.1. General information on the Contract

The centralized water and sewerage service contract (the "Contract") in Lutsk was concluded on June 7, 2002. The parties to the Contract include the director of local utility Lutskvodokanal, representing the utility, and the city head (mayor) of Lutsk. The Contract was drafted and concluded on the basis of current Ukrainian legislation (Law "On Enterprises" and Law "On Local Governance") and pursued three goals: ensure stable provision of highest-quality services to consumers with the lowest possible level of charges; create conditions for comprehensive and mutually beneficial collaboration between the parties in the process of service provision; and cooperate in the introduction of new, technologically advanced and financially efficient methods of water and sewerage system operation.

In terms of its corporate status, the Company is a 100% communal (municipal) enterprise owned by the territorial *gromada* of Lutsk as represented by the City Council. The City Council, in its turn, delegated the organizational and business management of the Company to the City Executive Board.

The Company is a comprehensive, full-production-cycle facility providing water and sewerage services. Fixed assets have been handed over to the Company on unrestricted business management terms as described in its Charter. The assets are run and maintained by hired staff recruited by the Company's director, who is appointed by the city mayor.

The Company holds a license for centralized water and sewerage services issued by the State Committee of Ukraine on Housing and Utilities, which also monitors the Company's compliance with the terms of the license.

Quality control over asset operation and maintenance is administered by the relevant functions of the City Executive Board (the Housing and Utility Department, the Natural Resource Use and Environmental Protection Section, the Communal Property Department, the Main Department of Economics). The operation of treatment facilities is supervised by the laboratory of the State Directorate for Natural Resources of the Volynsk Region. The City Executive Board discusses the Company's operations at weekly staff meetings.

To ensure the parties' compliance with contractual obligations, the City Executive Board set up an Advisory Committee comprising representatives of local utilities, the Executive Board and public organizations in the city. The Committee is an advisory panel intended to adopt decisions on key contractual performance matters to and other strategic issues pertaining to the parties' activities. The Committee's work is regularly covered in various mass media.

The Company's capital expenditures and equipment modernization are funded from the city and regional budgets, as well as the Company's own resources. In 2002, for example, allocations totaled UAH 22,000, UAH 10,300 and UAH 135,200, respectively.

The accrual and projection of charges and collection are the responsibility of the Company's Sales Department, while bills are issued by the central settlements office in Lutsk, which also collects payments. The Company and the settlement office have a contract that covers all relevant transactions.

Tariffs are calculated based on the national Tariff-Setting Rules for Water and Sewerage Services. Under the Contract, tariffs are subject to discussion and approval (see Comparative Matrix).

All claims by all parties (the Company, its partners and consumers) in respect of non-performance or debt collection are referred to courts of general jurisdiction or business courts. Hearings are held at all levels, including local, regional and central courts, depending on the jurisdiction of a dispute and appeal proceedings. Where required, the Company may petition the Prosecutor's Office, which is empowered by current legislation to file suits in the name and on behalf of the State (i.e. government authorities at any level, state and municipal entities).

No special anti-bankruptcy mechanisms are envisaged. In the event of the Company's bankruptcy, the general procedure will apply as described in current legislation. Should the Company be declared bankrupt, its assets will be subject to attachment and disposal via an exchange or auction, save for assets not liable for privatization (see description in the main body of the Analysis), which remains municipal property in any circumstances.

Average annual investments and fixed assets (at original and net book value) are shown in the table below:

	<i>Fixed assets, original cost, UAH '000</i>	<i>Fixed assets NBV, UAH '000</i>	<i>Depreciation</i>	<i>Annual investments, UAH '000</i>
2001	113,457	33,545	70,4	417,7
2002	113,735	32,111	71,8	168,0

Shown below is the share of operating costs covered by consumer payments (%):

	2000	2001	2002
Water	91,3	92,3	81,3
Sewerage	101,0	86,5	87,5

As investments are borne by the Company, the cost coverage ratio for investments is the same as for operating costs.

The share of outstanding bills (by the number of customers and in monetary terms) in 2002 (net of VAT) was as follows:

	<i>Charged, UAH '000</i>	<i>Collected, UAH '000</i>	<i>%</i>
Residential consumers (before allowances and subsidies)	7,523.5	6,702.5	89.1
Other consumers	6,340.6	6,389.8	10
TOTAL:	13,864.1	13,092.3	94.

The Company pays taxes on general terms applicable to all other business entities.

<i>Tax, levy or mandatory payment</i>	<i>Tax basis, payment terms</i>
Land tax	Area effectively used by the enterprise based on land market value
Communal tax	Average headcount; payable pursuant to Resolution by the City Council
Tax on the owners of vehicles and other self-propelled machines and devices	Engine volume for all vehicles owned by the enterprise, payable at the relevant statutory rates
Levy for special-purpose use of natural resources	Volume of water lifted from Dnieper, payable at the relevant statutory rates
Levy for environmental pollution	Volume of pollutants discharge, payable at the relevant statutory rates
Levy for the use of Ukrainian radio frequency capacity	Radio frequency used, payable at the relevant statutory rates
Levies for obligatory state social insurance	Payroll
Value added tax	20% of value of services rendered over the period or of payments credited to the corporate account, whichever is earlier. The only exception are services to residential consumers or budget-funded enterprises, for which tax liability arises on the date funds are credited to the corporate account
Corporate profits tax	30 % of taxable corporate profit. Services to budget-funded enterprises rendered over the period are included in gross profit when funds are actually credited to the corporate account
Payments to the state budget for excess payroll	The difference between effective and budgeted payroll, payable at 30% of the excess amount (at the profits tax rate)

The Company receives subsidies from the state budget.

In Ukraine, living standards are assessed based on four indicators: cash income, total income, cash expenditure and total expenditure, which for Lutsk are as follows⁷⁴:

	<i>UAH per capita</i>	<i>UAH per household</i>
Total income	119.37	413.54
Total expenditure	164.43	540.45

1.2. Technical description of the Contract

Lutsk has a population of 210,000. The Company serves 175,000 persons.

Of the total of 72,820 clients (consumers), 71,567 are residential and 1,263 fall into other categories.

One of the Company's strategic goals is to provide affordable water and sewerage services to 90% of local residents by 2020.

Company headcount by type of job:

Total	600
of these: managers, experts, professional staff	106
workers	494
Breakdown by job:	
pump unit operators	102
filter and screen operators	82
fitters	89
drivers	57
arc welders	4
electricians	28
painters	12
masons	7
carpenters	1
turners	5
lab assistants	11

⁷⁴ Household income and expenditure estimate for Lutsk and Khmelnytsky // PADCO Statistical Bulletin. – Kyiv, May 8, 2002.

sample takers	4
controllers	25
cleaners	28
shovel operators	15
guards	12
water chemical treatment operators	4
other	8

The Company provides water and sewerage services.

Centralized water service includes treatment of raw water to drinking standards and its delivery to consumers. Drinking water must comply with the relevant state standards (DZSTU 2874-82).

The main sources of raw water are underground water horizons. Water is lifted using artesian wells. First-stage pumping stations are capable of lifting 91,000 cubic meters per day.

Wastewater is discharged through sewage pumping stations and treated at sewerage treatment facilities in compliance with the rules of surface water protection from pollution. The treatment facilities' throughput capacity is 160,000 cubic meters per day.

Water quality parameters:

	<i>Indicator</i>	<i>Unit of measure</i>	<i>Actual</i>	<i>Statutory</i>
1.	Color	Degree	8	20
2.	Turbidity	mg/dm ³	0.64	1.5
3.	Oxidation	mg/dm ³	1.3	-
4.	Dissolved solids	mg/dm ³	455.3	-
5.	Ammonia and ammonium sulfates	mg/dm ³	0.06	2
6.	Nitrites	mg/dm ³	0.003	3.3
7.	Nitrates	mg/dm ³	3.31	45
8.	Sulfates	mg/dm ³	36	500
9.	Chlorides	mg/dm ³	17	350
10.	Fe	mg/dm ³	0.3	0.3
11.	Total hardness	meq/dm ³	7	7
12.	Alkalinity	meq/dm ³	6.7	7
13.	pH	-	7.15	6-9

	<i>Indicator</i>	<i>Unit of measure</i>	<i>Actual</i>	<i>Statutory</i>
14.	Total bacteria		1	100 max.
15.	Coli index		<3	3

Company infrastructure

Water

Raw water lifted by first-stage pumping stations from underground horizons is delivered by pipelines to the Company's treatment facilities for filtration, purification, aeration and disinfection. Once the process is complete, water is considered potable and pumped into the distribution network.

The water supply system comprises the following components: water source (underground horizons); first-stage pumping stations; treatment facilities (sedimentation tanks, filters); clean water tanks; relift pumping stations; water storage tanks; water pipelines; street distribution network with standpipes and fire hydrants; house networks; internal piping in buildings.

Wastewater

All wastewater is delivered by sewerage treatment stations to treatment facilities and processed to a condition compliant with maximum permissible discharge requirements.

The wastewater system comprises the following components: internal piping in buildings; house and block sewers; street sewers; collectors sewers; sewage pumping stations; main treatment facilities. These include cesspools, cutting screens, sand catchers, aerator tanks, methane digesters, biofilters, a compressor station, a relift station, recirculation stations and drain fields.

Drinking water is delivered to the city by three relift pumping stations with a set of tanks and four booster stations. Three water treatment plants with 18 filters are capable of processing 104,000 cubic meters per day. At November 1, 2003 the depreciation of water and sewerage networks stood at 62% and 83%, respectively, while their length totaled 301.5 km and 193.4 km.

12 sewerage pumping stations (including 8 booster plants) deliver wastewater to the city treatment facilities with throughput capacity of 120,000 cubic meters a day. First-stage treatment facilities are 100% depreciated, for stages two and three the wear factor totals 82%.

Water networks use steel, cast-iron, cement-asbestos and polyethylene wide-diameter (100-600 mm) pipes. Gravity and pressure sewers use ceramic, cast-iron, cement-asbestos and reinforced concrete 50-600 mm pipes and steel and cast-iron 100-1,200 mm pipes, respectively.

The number of consumers with water meters totals 21,328 (20,080 residential and 1,248 other).

Relift pumping stations and sewage treatment facilities are equipped with ultrasonic flow meters (7 and 2 units, respectively). Readings are taken and logged hourly.

As at November 1, 2003 28% of households had individual meters installed. Readings are taken by the Company's employees according to a schedule.

Of the 1,253 corporate consumers, 1,248 (or 99.6%) have operating meters. The Company's controllers take readings monthly in the presence of consumers' representatives. These readings are then used to issue bills.

The Company issues 15,642 bills annually.

Performance indicators for 2002 (cubic meters):

water intake – 27,577,000;

own water consumption – 781,000;

water delivered to the network – 26,796,000;

losses and unaccounted-for water – 9,077,000;

water sold (all consumer categories) – 17,719,000.

Water is supplied 24 hours a day.

Annual service interruptions total 10,408 hours.

2. CONTRACT FOR PROVISION OF WATER AND SEWERAGE SERVICES IN LUTSK – COMPARISON MATRIX

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
	CHAPTER 1 GENERAL PROVISIONS		
FORMATION OF THE CONTRACT	Identification of the parties and of their competencies	<p>The Lutsk City Council, on behalf of which the 'city head' (the official title of the mayor) signed the Contract, is also chairman of the City Council and the Executive Board. On the Company's side, the Contract was signed by its Director whose powers are specified by legislation and the Company's Charter.</p> <p>In accordance with Law "On Local Governance", the city administration (the "City") is responsible for ensuring adequate management of facilities owned by territorial <i>gromadas</i>, their proper maintenance and efficient operation, and the requisite level and quality of service.</p> <p>The Company was established to administer the operational and business activities in the process of provision of water and sewerage services to the public. It was established by decision of the assets' owner (City Council) and is subordinate and accountable thereto. No competitive operator selection is in place, as the City is both the incorporator of the Company and its managing/supervising authority.</p>	
OBJECT OF THE CONTRACT	General definition of the rights and obligations transferred by the authority to the operator	<p>The City Council hands over assets to the Company on unrestricted business management terms, free of charge.</p> <p>In the process of production and provision of services, the Company:</p> <ol style="list-style-type: none"> 1) acts as the sole provider of centralized water and sewerage services in the city; 2) operates and maintains all assets (fixed and current); 3) is entitled to use and dispose of the property in accordance with the Charter and applicable legislation; 4) is responsible for the proper and efficient use of assets; 5) prepares corporate business and profit allocation plans and submits them for approval by the City Council, which determines the portion of profit to be remitted to the city budget⁷⁵; 6) issues bills to consumers and collects payments; 	

⁷⁵ Due to financial difficulties experienced by utilities, the practice of partial remittance of profit to the municipal budget is virtually non-existent, and we are unaware of any such instances.

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
		7) bears commercial risks; 8) safeguards assets; 9) bears liability under all obligations to third parties; 10) is responsible for compliance with the terms of special licenses and environmental requirements; 11) approves the corporate accounting policy.	
PERIMETER OF THE SERVICE	Determination of the service area, within the limits of the authority's territory	The Contract does not specifically address the Company's service area. However, as water and sewerage services are provided only by the Company in the absence of any other similar business entities, all administrative areas of the city are assumed to be included. The Company does not serve consumers outside the city limits.	
DURATION OF THE CONTRACT	Identification of the starting and expiry dates	The Contract was signed and became effective on June 7, 2002. The Contract was signed for the period until the expiration of the term in office of the then elected City Council (i.e. until 2006). The Contract may be prolonged as agreed between the parties. No prolongation procedure or terms are specified.	
CHAPTER 2 RESPONSIBILITIES OF THE OPERATOR			
INSURANCE OBLIGATION	Definition of parties' insurance responsibilities	The Contract contains no insurance provisions. These matters may be partially covered by the Charter or the labor contract with the Company director. It is assumed (based on prevailing practice) that the Company is responsible for adequate organization of operations and liable for any damage to the Company's assets. The companies law contains general provisions to this effect. However, no legal mechanism is in place to enforce liability to owner for damage to property. The Company is liable for damage (including moral) to private individuals or other legal entities, i.e. in the event of a civil suit it will act as defendant.	
CHAPTER 4 ASSETS OF THE SERVICE			
TRANSFER OF THE ASSETS AT THE BEGINNING OF CONTRACT	Identification of the service assets and of the conditions of their transfer to the operator, including ownership	At the effective date of the Contract, the issue of asset transfer was irrelevant - by that time, the Company existed as a legal entity, and the assets had already been contributed to its charter capital by the City. The Charter specifies the procedure for obtaining the assets, and for their registration and use on unrestricted business management terms. The relevant Transfer and Acceptance Protocol must be appended to the Charter. The City retains full title to the assets transferred.	

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
		<p>In accordance with Ukrainian legislation, all fixed assets emerging over the time of a company's activity must be contributed to its charter fund. In practice, however, this is rarely done, and companies simply list newly developed or acquired property and equipment on their balance sheets.</p> <p>The above information is not part of the Contract.</p>	
CHAPTER 5 ORGANIZATION OF THE SERVICE			
OPERATOR'S STAFF	<p>Definition of requirements for staff training, organization</p> <p>Possible conditions of hiring the current utility staff</p>	<p>The statutory and qualification requirements for hired staff are listed in national regulations.</p> <p>The Contract does not deal with staff matters.</p>	
CHAPTER 6 SERVICE OPERATION AND MONITORING			
SERVICE OPERATION	<p>Definition of result requirements (water quality, continuity of service)</p>	<p>The Company is obliged to provide city residents with sufficient volumes of water in compliance with state quality standards and the Rules of Service Provision. The technical parameters of service provision are not specified.</p> <p>The Contract includes the following provision (without any further specification): "The enterprise shall be obliged to effectively operate and duly maintain the property transferred by the City, and comply with state and local operation and maintenance rules".</p>	<p>The Contract does not incorporate statutory requirements for effluent quality and quantity (discharges) or a list of measures to preserve or improve the natural environment.</p> <p>The Contract includes the following provision (without any further specification): "The enterprise shall be obliged to effectively operate and duly maintain the property transferred by the City, and comply with state and local operation and maintenance rules".</p>
PERFORMANCE INDICATORS	<p>Definition of measurement tools to assess the operator's performance and possibly define performance-based revenues. Provided the current quality of service (water quality, continuity etc.) and nature of assets (absence of meters etc.),</p>	<p>The Contract includes an appendix that lists 18 performance indicators. However, it does not specify either the units of measure or the monitoring and control procedures. The body text of the Contract only stipulates that the Company is</p>	<p>Same as for water service.</p>

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
	only improvements would be measured	<p>obliged to timely report to the City on compliance with the approved indicators.</p> <p>In practice, these indicators are used when evaluating annual performance (together with financial, tax and statistical data) and in the work of the Advisory Committee.</p>	
RELATIONS BETWEEN USERS AND THE OPERATOR	Definition of the documents specifying the relation between users and the operator, of the practical connection means and the limit between the service and private properties	<p>Service provision rules exist only at the national level. No local service ruling is available and, accordingly, specified in the Contract.</p> <p>General service access requirements are stipulated by the national Rules of Service Provision. No local ruling is available and, accordingly, specified in the Contract.</p> <p>There have been no instances of decisions not to collect charges from consumers in financial difficulty, and no such procedure is envisaged.</p> <p>In an emergency or where water resources are limited, the Company may introduce rationed water supply or reduce pressure in outer networks. Such decisions must be agreed with the relevant authorities and specify a fixed term of reduced service.</p> <p>The instances where water service may be suspended for repairs and the procedure for such suspension are prescribed by national regulations.</p>	<p>Same as for water service. The City has no approved service ruling.</p> <p>Any consumer may be connected to the network per written application, provided the availability of a sewer and sufficient capacity of treatment facilities.</p> <p>There have been no instances of decisions not to collect charges from consumers in financial difficulty, and no such procedure is envisaged.</p>

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
		<p>The Contract contains no additional provisions.</p> <p>The Contract includes a provision stipulating that the Company must notify consumers of temporary disconnection for scheduled maintenance three days in advance.</p>	
CHAPTER 8 Maintenance, replacement of assets and new investments			
DEFINITION OF MAINTENANCE, REPLACEMENT OF ASSETS	<p>Establishment of a clear distribution between the municipality and the operator of maintenance and replacement responsibilities, with the aim of sustaining or improving assets value</p> <p>Definition of the above two types of works</p>	<p>The Contract does not segregate routine maintenance and major equipment replacement responsibilities.</p> <p>Routine, emergency and capital repairs are governed by national regulations and are the responsibility of the Company.</p> <p>Replacement occurs as required by the state of equipment and serves to secure its continuous designated use in the future.</p>	
DISTRIBUTION OF MAINTENANCE AND REPLACEMENT WORK AND NEW INVESTMENTS	<p>Identification of the role of each party in the implementation of maintenance, replacement and investment tasks. In the case of replacement and investments, a reference should be made to a projected program</p>	<p>The Contract stipulates the City's obligation to raise budget funds for the implementation of the Company's Strategic Development Plan designed by the Company and approved by the City Executive Board. This document contains a special section listing capital investment sources, short-term and long-term projects and the implementation plan.</p> <p>The Company also funds capital investments from own resources.</p> <p>Routine repairs are financed by the Company.</p> <p>Fixed asset renewals are funded by depreciation charges. However, the Contract does not specify the procedures of the owner's control over their use by the operator (the Company).</p>	
CHAPTER 9 FINANCIAL PROVISIONS			
REMUNERATION OF THE PARTIES	<p>Identification of all revenues and subsidies, their collectors and beneficiaries and payment frequencies</p> <p>Definition of the conditions for evolution of estimated costs and revenues (inflation)</p>	<p>The Contract does not contain any cost arrangements.</p> <p>Tariffs are calculated using the nation-wide methodology. The City undertakes to approve such tariffs that would cover economically and technologically substantiated Company costs relating to the operating, financing and investing activities.</p>	

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
	Definition of tariffs, their settlement and calculation procedure		
CONDITIONS FOR REVISION OF REVENUES	Description of a procedure to renegotiate revenues after a given period of time or after significant changes in the service	The Contract does not specify the procedure for modification of initial costs and revenues.	
CHAPTER 11 CONTROL AND ANNUAL REPORT			
CONTROL BY THE AUTHORITY	Definition of the extent of the control by the authority	The Contract does not specify the mechanisms or methods of contractual compliance control, except for a sole provision stipulating that for the purposes of on-going control the parties shall meet at least once each quarter. Reports on such meetings are published in mass media.	
ANNUAL REPORT BY THE OPERATOR	Description of the information the operator must provide to the municipality for service intelligence and control. This annual report includes a technical chapter, a chapter relating to users and a financial chapter, giving a global picture of the service and contract enforcement	Not specified	
CHAPTER 12 GUARANTEES AND SANCTIONS			
GUARANTEES	Description of the guarantees provided by the operator to ensure contract enforcement and continuity of service	The Contract does not specify any guarantees or sanctions.	
ARBITRATION	Definition of the conditions of conflict settlement	Not specified	
FINANCIAL PENALTIES	Definition of the object and value of penalties in case of a breach of contract	Not specified	
EMERGENCY	Definition of the procedure to enforce, if	Not specified	

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
MEASURES	the operator shows an incapacity to operate the service appropriately		
CHAPTER 13 END OF CONTRACT			
CONTINUITY OF SERVICE AT THE END OF THE CONTRACT	Definition of the terms of assets and obligations transfer at the end of the contract so that to secure service continuity	Not specified	
FATE OF ASSETS AT THE END OF THE CONTRACT	Definition of assets transfer	Not specified	
SETTLEMENT OF INVESTMENT COSTS	Definition of the conditions of settlement in case of unspent investment amounts, so as to achieve sustainability of system assets	Not specified	

3. SERVICE CONTRACT

AGREEMENT ON PROVISION OF WATER SUPPLY AND SANITATION SERVICES IN THE CITY OF LUTSK, UKRAINE

An Agreement On Provision of Water Supply and Sanitation Services in the City of Lutsk shall be entered into and signed by the City Head representing the municipal authority, on the one hand, and by a director of the communal utility providing citizens with centralized water supply and sanitation services. It is herewith provided that the Agreement shall become another measure promoting contractual relations between all the stakeholders in the communal services production and consumption process.

This Agreement pursues an objective to determine and settle the relationship between local self-governments and their executive committees held responsible before the territorial communities members for the effective and efficient operation of the enterprises' assets and provision of water supply and sanitation services, and before the enterprise operating the assets transferred to it in the course of production and provision of said services to consumers on the municipality's behalf.

The Agreement sets forth the following, among other things:

- an enterprise's obligations in performing its functions being complementary to those contained in the enterprise's Articles of Association;
- the role and place of the municipality in rehabilitation and furthering of the services infrastructure owned by the territorial community;
- degree of public involvement in the discussion over the rates of tariffs to utilities' services;
- measures targeted at the inducing public awareness and consumers' responsible behavior.

The Agreement conclusion is also aimed at identifying and ensuring the boundaries of an enterprise's economic autonomy, reduction of political pressure on the process of tariffs determination and revision.

The Agreement is made out in manner allowing for the enterprise and the municipality to establish clear and transparent rules of the company's operation and its performance monitoring. Alongside that, it is envisaged that a higher degree of transparency of the tariffs setting process based on the highest possible public involvement will be achieved.

The Agreement outlines responsibilities and authority of municipal power bodies performing the functions the communal enterprise owner, as well as their obligations before the public with respect to water supply and sanitation system improvement and upgrading.

This Agreement is entered into and signed on the 7th of June 2002 by and between Mr. A.F. Kryvytsky, , the City Head of the City of Lutsk (hereinafter referred to as the Municipality) and Mr. A.P. Bashchuk, Director, Communal Enterprise "Lutskvodokanal" (hereinafter referred to as the Company) with the view of determining responsibilities of both parties in creating sound and reliable conditions for water supply and sanitation services provision to consumers, provision by the Company of a high level of services at the lowest possible tariffs.

1. PURPOSE OF THE AGREEMENT

The entering into the Agreement pursues the attainment of the following purposes:

1.1 Creation of conditions for the comprehensive and mutually advantageous cooperation of the Parties in provision to the Company's consumers with water supply and sanitation services in the sufficient amount and of adequate quality being not inferior to the quality standards as set by applicable regulations;

1.2. Attainment of the utmost possible efficacy of the utilization of capital assets as well as such other resources of the Municipality and Company for achieving the goals as agreed by the Parties;

1.3. Productive cooperation in introducing best technical and financial practices and techniques of water supply and sanitation system operation;

1.4. Ensuring sustainable provision of water supply and sanitation services to the Company's consumers with services of the highest possible quality at the lowest possible tariffs.

2. PARTIES TO THE AGREEMENT

The following are the Parties to this Agreement:

2.1. City Council of Lutsk represented by the City Head acting on behalf and the in the interests of the Municipality's territorial community, the city council and its executive committee;

2.2. Director of the Company acting on behalf of the communal enterprise;

2.3. With respect to matters referring to the exclusive competence of the council and being a subject matter hereof, decisions shall only be entered into effect upon their approval by the council;

2.4. With respect to matters requiring the making of a decision of the executive committee and referring to the subject matter hereof, decisions shall be entered into effect upon the approval of a respective decision by the executive committee.

3. OBLIGATIONS OF THE COMPANY

The Company herewith assumes the following obligations:

3.1. To efficiently operate and duly maintain the assets transferred to the Company into the complete economic disposal with adherence to the national and local rules and regulations governing its operation and technical maintenance;

3.2. To provide the Municipality consumers with water supply and sanitation services in adequate amounts and at the quality level being not inferior to the ones established under applicable state standards and Rules of Provision of water supply and sanitation and heat supply;

3.3. To notify the City Executive Committee, sanitary and epidemiological services and, through mass media, the consumers in a timely manner of possible deviations in the water quality in the centralized water supply system from the requirements as set by applicable standards, indicating therewith the rationale for such deviations;

3.4. To furnish a three-day notice to consumers, housing and utility organizations, and other interested parties on water supply disconnection for the purposes of prophylactic maintenance works prior to such disconnection, as well as to notify of services provision restoration;

3.5. To conduct consumers awareness-building activities in regard to matters pertaining to provision of consumers with water supply and sanitation within the framework of the programs as approved by the city executive committee;

3.6. To settle, in a timely fashion, all payments due to creditors under any liabilities assumed by the Company and the Municipality on behalf of the Company (to pay both interests and the principal) as provided by respective Loan Agreements;

3.7. To pursue ongoing efforts to the end of energy saving and efficiency and reduction of losses in water supply and sanitation systems;

3.8. Supervision (monitoring) of the Company's operation shall be exercised as per indicators defined in Annex 1 hereto. To ensure timely reporting of the Company's performance indicators to the Municipality and the territorial community twice a year;

3.9. To develop the Company's Strategic Development Program and to furnish same, no later than in July of 2002, for the approval of the Executive Committee and for the public discussion of the city;

3.10. To provide the Municipality with an ability to conduct independent audits and verifications of the Company furnishing a prior notice of such audits and verifications to the Company;

3.11. The Company may assume such other obligations as the Parties may agree to.

4. OBLIGATIONS OF THE MUNICIPALITY

The Municipality herewith assumes the following obligations:

4.1. Not to interfere with the Company's business and financial affairs save for cases covered by applicable laws or the Company's Articles of Association;

4.2. Not to modify in any way the organizational and legal form of the Company, not to assign, not to lease out, not transfer into leasing or concession any of the Company's capital assets without serving an at least three-month prior notice thereof to the Company stating therein the grounded motivation for said modifications;

4.3. To attract funds of the municipal budget (development budget) and loans for the purposes of the Company's Strategic Development Program implementation subject to availability of such funds and in accordance with priorities and deadlines as provided by other municipal socio-economic development programs;

4.4. To review and approve the Company's Strategic Development Program developed and submitted by the Company not later than in August 2002;

4.5. To ensure timely payments for communal water supply and sanitation services institutions and organizations financed from the municipal budget;

4.6. To provide the Company with complete compensation of the cost of all subsidies and benefits granted to its consumers;

4.7. To recover, in a timely manner, all and any costs incurred by the Company as a result of provision of preferences applying to utility bills payment by certain categories of consumers granted subject to respective decisions of the city council;

4.8. To promote the creation, registration and operation of associations of co-owners of blocks of apartments and tenants committees in the Municipality;

- 4.9. To assist the Company in collecting payments from consumers – tenants of residential communal blocks of apartments;
- 4.10. To determine performers of works relating to the technical maintenance of in-house networks of blocks of apartments in conformity with the Rules of Provision of water supply and sanitation and Heat Supply Services to the Public;
- 4.11. To create favorable conditions for involving private enterprises in provision and inventory of water supply and sanitation services until the time of installation of meters, and in technical maintenance of in-house equipment of blocks of apartments;
- 4.12. Through involving other enterprises, institutions and organizations, to assist the company in the performance of activities aimed at reductions of incidence of accidents in water supply and sanitation systems;
- 4.13. To amend, on a need-be basis, the Company's Articles of Association to ensure the Company's ability to establish and define the procedure of the reserve fund formation and of its monies use for the purposes of financing programs and other activities aimed at the development of the infrastructure, energy and resource saving, environmental protection, Company's material and technical capacity enhancement, as well as for purposes of social insurance, social security and material incentives;
- 4.14. To notify the Company of the necessity to provide information in addition to the data referred to in Annex 1.
- 4.15. To approve the Program of the Company's Awareness Building Activities focused at Municipality consumers.
- 4.16. To render organizational and technical assistance to the Company in all matters referring to the Company's provision with energy and fuels.

5. RECIPROCAL OBLIGATIONS OF THE MUNICIPALITY AND THE COMPANY

The Municipality and Company herewith assume the following reciprocal obligations:

- 5.1. To survey public opinion concerning the quality and amounts of meeting the consumers demand for communal services. The surveys outcomes shall be made public through the local self-government agencies or through mass media;
- 5.2. To develop and coordinate activities aimed at securing the payment by consumers of their utility bills (which activities may include disconnection from services supply for the delayed payment or failure by citizens, budget-sustained institutions and organizations, commercial enterprises and other consumers to pay for the consumed services);
- 5.3. To cooperate to the end of payments collection system improvement;
- 5.4. To develop, approve and conduct joint and mutually agreed activities in case of occurrence of emergencies and accidents in the water supply and sanitation systems;
- 5.5. To review and take into consideration proposals of the Advisory Committee on matters involving preparation and implementation of the Company's Strategic Development Program, setting tariffs for services, water supply schedules, schedules of prophylactic disconnections for maintenance, consumption norms;
- 5.6. With the view of the Municipality 's evaluation of the Company's performance and efficiency of its disposal of assets transferred to it, the Parties have agreed to set

performance indicators laid down in Annex 1 hereto. The parameters of the Company's performance shall be identified and established by the Parties within a one-month's term following the date of signature of the Agreement;

5.7. The Municipality and the Company may also assume such other obligations as they may agree to.

5.8. To perform the losses analysis based on which the Network Losses Reduction Program shall be devised/ In so doing, the priority shall be attached to the introduction of services inventory and metering tools (by the building and by the apartment).

6. RELATIONS BETWEEN THE MUNICIPALITY AND THE COMPANY IN PRICING OF WATER SUPPLY AND SANITATION SERVICES

6.1. The Company shall prepare applications requesting the review of tariff rates according to the procedure as set by the national regulatory documents and in accordance with the previously developed Strategic Development Program submitting same to the Municipality. The date following the date of expiration of the proposed tariffs promulgation shall be considered their registration date.

6.2. The Municipality shall set tariffs as proposed by the Company for the water supply and sanitation services which would economically and technically cover the Company's costs incurred in connection with its production, financial and investment activities.

6.3. The Municipality shall publicize the proposed tariff rates for the public discussion and shall accept comments and proposals from citizens and enterprises within 20 days following their publication. Immediately upon the termination of the comments and proposals acceptance, the Municipality shall register the name of the company and the establishment of tariffs.

6.4. The Municipality may hold public hearings and meetings with territorial communities during the term provided for in Clause 6.3 hereof.

6.5. The Municipality shall approve the executive committee's decision on setting the proposed tariffs not later than in twenty days following the date of the Company's application registration.

7. PUBLIC INVOLVEMENT

7.1. With the view to ensure broadest possible public involvement in the decision making process as concerns the provision of the Municipality citizens with water supply and sanitation services, as well as the public participation in setting tariffs to these services, an Advisory Board shall be set up pursuant to a respective decision of the City Executive Council.

7.2. The Advisory Board shall comprise representatives of the City Executive Committee, communal utilities and the Municipality territorial communities.

7.3. A procedure of the Advisory Board formation shall be governed by a separate decision of the City Executive Committee while its activities shall be performed subject to the Work Plan drawn up and approved by the Advisory Board.

8. OVERSIGHT OF THE AGREEMENT PERFORMANCE AND TERM OF THE AGREEMENT

8.1. Seeking to ensure the day-to-day monitoring of the Agreement performance, Parties shall conduct joint meetings and consultations at least once per quarter. Outcomes of

deliberations at such meetings and consultations shall be made known to the Advisory Board and publicized through the mass media.

8.2. The Agreement is entered into for the period of authority of the council elected as at the time of the Agreement conclusion. The Agreement shall enter into effect as of the date of its signature while the period of its validity may be extended subject to the Parties' mutual consent thereto.

8.3. If so agreed by the Parties, amendments and additions may be entered into the Agreement.

9. SIGNATURES OF EXECUTIVE OFFICIALS OF THE MUNICIPALITY AND THE COMPANY

(signature and seal)

A.F. Kryvytsky

(signature and seal)

A.P. Bashchuk

City Head, City of Lutsk

Director, Communal Enterprise
"Lutskvodokanal"

Annex 1: COMPANY'S PERFORMANCE INDICATORS

1. Services coverage of the public.
2. Services provision schedule.
3. Wastewater treatment
4. Company's specific energy consumption
5. Adherence to set standards
6. Coverage of the population with metering devices
7. Operational costs ratio
8. Revenues planning and management
9. Costs planning and management
10. Capital planning
11. Company's profitability
12. Payments collection efficiency
13. Labor costs
14. Downtime
15. Networks profitability
16. Water losses
17. Personnel operation productivity
18. Production efficiency

SECTION 3. LVIV

1. CONTRACT DESCRIPTION

1.1. General information on the Contract

The water and sewerage service contract (the "Contract") was developed and concluded by the city administration (the "City") and Lvivvodokanal (the "Company") with the following objectives:

- enhance access to and quality of centralized water and sewerage services while maintaining affordable prices;
- restore public trust in Lvivvodokanal;
- develop the Company as an autonomous business entity with commercial focus, efficient management, quality operations and technology, and secure financial capabilities;
- reduce operational costs;
- ensure rational use of investments;
- sustain customer-focused operations.

Both the City and the Company believe that the existing Contract needs improvement, as at the time of signing the parties lacked sufficient expertise and the requisite information.

In terms of its corporate status, the Company is a 100% communal (municipal) enterprise owned by the territorial *gromada* of Lviv as represented by the City Council. The City Council, in its turn, delegated the organizational and business management of the Company to the City Executive Board.

The Company is a comprehensive, full-production-cycle facility providing water and sewerage services. Fixed assets have been handed over to the Company on unrestricted business management terms as described in its Charter. The assets are run and maintained by hired staff recruited by the Company's director, who is appointed by the city mayor.

The Company holds a license for centralized water and sewerage services issued by the State Committee of Ukraine on Housing and Utilities, which also monitors the Company's compliance with the terms of the license.

Quality control over asset operation and maintenance is administered by the relevant functions of the City Executive Board (the Housing and Utility Department, the Environmental Department, the Communal Property Fund, the Department of Economics). The Company submits its performance indicators to the City Executive Board on a quarterly basis. At weekly meetings, the Executive Board reviews the Company's performance over the elapsed week. Control over the Company's operations is also administered by the Lviv Water and Wastewater Project Implementation Unit.

New investments in equipment modernization are financed by a World Bank loan, from the city budget, the Company's own resources and allocations by the State Fund for Environmental Protection.

Capital investments in Company development will be financed by a \$24.2 million World Bank loan; a \$6 million grant from the Swedish International Development Agency, the Company's investment budget of \$10.8 million; and from the city budget as described in Appendix 2 to the Contract. The Loan will also be used to finance the procurement of goods (71%), work (14%) and services, and consultant training (15%).

No information is available on the correlation between the terms of the contracts and investment loans. We can only assume that they coincide.

Bills are prepared and issued by the Company's Customer Department, which also projects collections.

Tariffs are calculated by the Company and subsequently approved by the Executive Board of the City Council. The City guarantees the approval of tariffs at a level enabling the Company to receive proceeds as necessary for the maintenance and proper operation of networks and facilities.

It is planned to develop and approve a Cost-Effective Investment Program designed to improve the existing system.

Claims for debt collection are filed with courts of general jurisdiction or business courts. Hearings are held at all levels, including local, regional and central courts, depending on the jurisdiction of a dispute and appeal proceedings.

To enforce performance under contracts and advances, suppliers and contractors are required to provide unconditional bank guarantees issued by financial institutions acceptable to the Company.

No special anti-bankruptcy mechanisms are envisaged, other than stipulated by current legislation. No guarantee fund is planned to secure the World Bank loan.

**Annual investments and estimated net book value of fixed assets
(UAH '000)**

Indicator	2001	2002	2003	2004	2005
Annual investment:					
Based on financial analysis	1,503	13,627	16,889	7,363	1,410
Based on economic analysis	1,203	10,902	13,511	5,892	1,128
Fixed assets, original cost	53,641	62,131	73,647	77,486	77,486
Fixed assets, net book value	48,259	54,705	63,825	64,997	62,261

No information was provided on investment and operating costs covered by service charges, or on issued and outstanding bills.

The Company pays the following taxes, mandatory payments and levies stipulated by Law of Ukraine "On the Taxation System":

The Company pays the following taxes, mandatory payments and levies stipulated by Law of Ukraine "On the Taxation System": <i>Tax, levy or mandatory payment</i>	<i>Tax basis, payment terms</i>
Land tax	Area effectively used by the enterprise based on land market value
Communal tax	Average headcount; payable pursuant to Resolution by the City Council
Tax on the owners of vehicles and other self-propelled machines and devices	Engine volume for all vehicles owned by the enterprise, payable at the relevant statutory rates
Levy for special-purpose use of natural resources	Volume of water lifted from Dnieper, payable at the relevant statutory rates
Levy for environmental pollution	Volume of pollutants discharge, payable at the relevant statutory rates
Levy for the use of Ukrainian radio frequency capacity	Radio frequency used, payable at the relevant statutory rates
Levies for obligatory state social insurance	Payroll
Value added tax	20% of value of services rendered over the period or of payments credited to the corporate account, whichever is earlier. The only exception are services to residential consumers or budget-funded enterprises, for which tax liability arises on the date funds are credited to the corporate account
Corporate profits tax	30 % of taxable corporate profit. Services to budget-funded enterprises rendered over the period are included in gross profit when funds are actually credited to the corporate account

Average monthly expenditure per household in Lviv approximates UAH 490 (\$90). 54% and 26% of population spend less than \$90 and \$45 monthly, respectively; 28% spend \$45-\$90.

No information on income is available.

1.2. Technical description of the Contract

The population of Lviv is 830,000. 98% are connected to the centralized water distribution network.

No information is available on the number and qualifications of personnel, broken down by job type.

Drinking water is taken from 172 supply wells spread across 20 intake sites located 10-125 km off the city limits.

Water technology and equipment

From the intake points, water is fed via nine transportation systems, including nine pumping stations and respective water mains. Some of the pumping stations do not have storage tanks. The operation of pumping stations is controlled by valves rather than links, resulting in major energy costs.

Wastewater technology and equipment

Lviv has two catchment basins, one for discharge of water into the Black Sea, and the other for the Baltic Sea. The total urbanized catchment area is 5,300 hectares. The Baltic Sea catchment basin is served by an integral waste and storm water disposal system. The main disposal area is the upper section of the Poltva River that flows underneath Lviv encased in pipes. Storm overflows are only possible at the intake mouth of treatment facilities. The Black Sea catchment basin is served by a separate waste and stormwater disposal system. Wastewater is fed by pumps or free-flows through a large tunnel into the disposal system of the Black Sea catchment basin. Stormwater is discharged into local rivers in the upper reaches of the Dniester river system.

The total length of the water mains is 460 km. According to the Company, approximately 26% (117 km) are in poor condition and 28% (129 km) in critical condition. Lviv receives water from water mains through seven base pump stations located across the perimeter of the city. Distribution networks comprise seven hydraulically interconnected pressure zones.

Average daily water capacity totals 412,000 cubic meters. Water operations are adversely affected by design flaws at intake facilities. Often, pumps with major technical deviations feed water through mains for approximately 40 km to the first booster station. Poor condition of pumps entails high unit energy costs.

The oldest and the newest water intake facilities were built in 1901 and early 1980s, respectively.

The distribution system stretches for approximately 900 km and is classified by the Company into the following three groups:

- cast-iron pipes laid before 1945, condition poor to critical;
- cast-iron or steel pipes laid in 1945-1975, mostly in poor condition;
- cast-iron or steel pipes laid after 1975, condition poor to acceptable.

The Company has an integral wastewater disposal system that originated in 1750s. This system currently comprises 671 km of collector sewers and nine pressure stations. Septic tanks are used only in a small area in the north-eastern part of the city. The oldest sewers use brick, mortar and stone, while the bedding of a closed section in the old town is made of oak as this section is below the underground water level.

The Company classifies sewerage networks into the following groups:

- sections built before 1945 - 375 km, 72 % in poor condition;
- sections built in 1945-1975 - 158 km, about 30% in poor condition;
- sections built after 1975 - 138 km, 1 % in poor condition.

Lifted water is measured using meters. No other information is available on how water consumption is being measured.

Underground water quality complies with the current statutory requirements in Ukraine. However, a 1996 consumer survey and a social evaluation exercise in September 2000 showed that in general consumers have a very limited understanding of water and sewerage service quality matters. According to a sample survey, approximately 72% believe that water quality is low. The most common complaints are rustiness, sediment and high chlorinity.

Guaranteed daily water reserves at intake facilities approximate 508,000 cubic meters, and may be increased by 132,000 cubic meters. Rated capacity is 469,000 cubic meters per day. Average daily water capacity totals 412,000 cubic meters.

Approximately 15% of Lviv residents receive water round-the-clock. According to the Company, 63% of households in the city have rationed cold water supply totaling 6-10 hours daily (in the morning and in the evening). A limited survey showed that about 56% of households have access to water for six or less hours daily.

**2. CONTRACT FOR PROVISION OF WATER AND SEWERAGE SERVICES –
COMPARISON MATRIX⁷⁶**

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
	CHAPTER 1 GENERAL PROVISIONS		
FORMATION OF THE CONTRACT	Identification of the parties and of their competencies	<p>The water and sewerage service contract (the "Contract") was concluded and signed by: on behalf of the city - head of Department of Municipal Engineering Infrastructure (the "City"); on behalf of Lvivvodokanal (the "Company") - by its director.</p> <p>The parties' authority is certified by the Department Regulations and the Charter, respectively.</p> <p>According to current legislation and the Department Regulations, the City is responsible for ensuring adequate management of facilities owned by territorial <i>gromadas</i>, their maintenance and efficient operation, and the requisite level and quality of service.</p> <p>The Company was established by the City to administer the operational and business activities in the process of provision of water and sewerage services to the public. It was established by decision of the assets' owner (City Council) and is subordinate and accountable thereto. No competitive operator selection is in place, as the City is both the incorporator of the Company and its managing/supervising authority.</p> <p>The City Council hands over assets to the Company on unrestricted business management terms, free of charge.</p> <p>In the process of production and provision of services, the Company:</p> <ol style="list-style-type: none"> 1) acts as the sole provider of centralized water and sewerage services in the city; 2) operates and maintains all assets (fixed and current); 3) is entitled to use and dispose of the property in accordance with the Charter and applicable legislation; 4) is responsible for the proper and efficient use of assets; 5) prepares corporate business and profit allocation plans and submits them for approval by the City 	

⁷⁶ Many conclusions and comments presented in the "Information in the service contract" graph are based on the Company's charter.

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
		<p>Council, which determines the portion of profit to be remitted to the city budget⁷⁷;</p> <p>6) issues bills to consumers and collects payments;</p> <p>7) bears commercial risks;</p> <p>8) safeguards assets;</p> <p>9) bears liability under all obligations to third parties;</p> <p>10) is responsible for compliance with the terms of special licenses and environmental requirements;</p> <p>11) approves the corporate accounting policy.</p>	
OBJECT OF THE CONTRACT	General definition of the rights and obligations transferred by the authority to the operator	<p>The Contract is intended to support the provision of the subject services in the city through:</p> <ul style="list-style-type: none"> • developing the Company's technological infrastructure; • securing and sustaining the Company's stable financial condition; • launching a cost-effective investment program. <p>The general rights and responsibilities assigned to the Company by the City are described in the Company's charter. The Contract details the additional rights and obligations of the operator, namely:</p> <p>Effectively use the system; introduce additional operating policies and procedures not contrary to legislation; submit acceptable tariffs for approval by the City; terminate or restrict service in the event of non-payment by consumers; monitor the planning and implementation of investment; communicate financial and technical performance to the City; apply any means to perform its obligations as permitted by law.</p> <p>The Company's performance under its obligations is contingent on two conditions: approval of sufficient tariffs and compliance by the City with its respective obligations. In the event of adoption by the City or any other authority of any enactment preventing the Company from due performance, the Company will be released from its obligations.</p> <p>The City guarantees the Company's right to efficiently operate the system without any interference on the part of the City.</p>	

⁷⁷ Due to financial difficulties experienced by utilities, the practice of partial remittance of profit to the municipal budget is virtually non-existent, and we are unaware of any such instances.

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
PERIMETER OF THE SERVICE	Determination of the service area, within the limits of the authority's territory	The Contract does not address the service area or adjustment of costs and revenues.	
DURATION OF THE CONTRACT	Identification of the starting and expiry dates	The Contract was signed in the summer of 2001 for five years and became effective upon signing. Amendments and additions must be agreed by the parties in writing.	
CHAPTER 2 RESPONSIBILITIES OF THE OPERATOR			
INSURANCE OBLIGATION	Definition of parties' insurance responsibilities	The Contract contains no insurance provisions.	
CHAPTER 4 ASSETS OF THE SERVICE			
TRANSFER OF THE ASSETS AT THE BEGINNING OF CONTRACT	Identification of the service assets and of the conditions of their transfer to the operator, including ownership	<p>At the effective date of the Contract, the issue of asset transfer was irrelevant - by that time, the Company existed as a legal entity, and the assets had already been contributed to its charter capital by the City. The Charter specifies the procedure for obtaining the assets, and for their registration and use on unrestricted business management terms. The relevant Transfer and Acceptance Protocol must be appended to the Charter. The City retains full title to the assets transferred.</p> <p>In accordance with Ukrainian legislation, all fixed assets emerging over the time of a company's activity must be contributed to its charter fund. In practice, however, this is rarely done, and companies simply list newly developed or acquired property and equipment on their balance sheets.</p> <p>The above information is not part of the Contract.</p>	
CHAPTER 5 ORGANIZATION OF THE SERVICE			
OPERATOR'S STAFF	<p>Definition of requirements for staff training, organization</p> <p>Possible conditions of hiring the current utility staff</p>	<p>Not specified in the Contract</p> <p>The statutory and qualification requirements for hired staff are listed in national regulations.</p>	
CHAPTER 6 SERVICE OPERATION AND MONITORING			
SERVICE OPERATION	Definition of result requirements (water quality, continuity of service)	The list of target performance indicators (including continuity of service) is provided in the appendix to the Contract.	Not specified in the Contract
PERFORMANCE	Definition of	The Contract has two	Not specified in the

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
INDICATORS	measurement tools to assess the operator's performance and possibly define performance-based revenues. Provided the current quality of service (water quality, continuity etc.) and nature of assets (absence of meters etc.), only improvements would be measured	<p>appendices: Terms of Reference for Lvivvodokanal Performance Improvement (comprise 10 indicators for the period 2000-2006) and Commitments by the City (three indicators for 2001-2006 with annual breakdown).</p> <p>The Contract requires the Company to develop and adopt a detailed plan of financial and operating performance improvement (incl. corporate structure enhancement, improved collection, implementation of an up-to-date financial system and operating practices, other improvements).</p>	Contract
RELATIONS BETWEEN USERS AND THE OPERATOR	Definition of the documents specifying the relation between users and the operator, of the practical connection means and the limit between the service and private properties	<p>Service provision rules exist only at the national level. No local service ruling is available and, accordingly, specified in the Contract.</p> <p>General service access requirements are stipulated by the national Rules of Service Provision. No local ruling is available and, accordingly, specified in the Contract.</p> <p>There have been no instances of decisions not to collect charges from consumers in financial difficulty, and no such procedure is envisaged.</p> <p>In an emergency or where water resources are limited, the Company may introduce rationed water supply or reduce pressure in outer networks. Such</p>	Not specified in the Contract

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
		<p>decisions must be agreed with the relevant authorities and specify a fixed term of reduced service.</p> <p>The instances where water service may be suspended for repairs are prescribed by national regulations. The Contract contains no additional provisions.</p>	
CHAPTER 8 Maintenance, replacement of assets and new investments			
DEFINITION OF MAINTENANCE, REPLACEMENT OF ASSETS	<p>Establishment of a clear distribution between the municipality and the operator of maintenance and replacement responsibilities, with the aim of sustaining or improving assets value</p> <p>Definition of the above two types of works</p>	<p>The Contract does not segregate the operator's and the City's equipment maintenance and replacement responsibilities.</p> <p>Routine, emergency and capital repairs are governed by national regulations.</p>	
DISTRIBUTION OF MAINTENANCE AND REPLACEMENT WORK AND NEW INVESTMENTS	<p>Identification of the role of each party in the implementation of maintenance, replacement and investment tasks. In the case of replacement and investments, a reference should be made to a projected program</p>	<p>Appendix 2 to the Contract, "Commitments by the City", specifies the amounts of the City's investments (broken down by year up to 2006). These funds may be used only for capital investments.</p> <p>In accordance with its charter, the Company is obliged to operate the assets transferred thereto. However, the Contract does not describe the segregation of responsibilities between the City and the Company in respect of maintenance and capital investments in the Company's infrastructure.</p> <p>The operator performs and accounts for all equipment maintenance and repair work. Fixed asset renewals are funded, among other financing sources, by depreciation charges. However, the Contract does not specify the procedures of the City's control over their designated use.</p>	
CHAPTER 9 FINANCIAL PROVISIONS			
REMUNERATION OF THE PARTIES	<p>Identification of all revenues and subsidies, their collectors and beneficiaries and payment frequencies</p> <p>Definition of the</p>	Not specified in the Contract	

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
	conditions for evolution of estimated costs and revenues (inflation) Definition of tariffs, their settlement and calculation procedure		
CONDITIONS FOR REVISION OF REVENUES	Description of a procedure to renegotiate revenues after a given period of time or after significant changes in the service	Appendix 1 to the Contract, Terms of Reference for Lvivvodokanal Performance Improvement, specifies the targeted annual profit and the ratio of operating costs to operating income (for 2000-2006). However, the Contract does not specify the procedure for modification of these indicators. Appendix 2 to the Contract, Commitments by the City, includes indicators for the Company's overall profitability (for 2001-2006).	
	CHAPTER 11 CONTROL AND ANNUAL REPORT		
CONTROL BY THE AUTHORITY	Definition of the extent of the control by the authority	The Contract includes a general provision to the effect that the City is entitled to monitor and enforce the Company's performance under the Contract.	
ANNUAL REPORT BY THE OPERATOR	Description of the information the operator must provide to the municipality for service intelligence and control. This annual report includes a technical chapter, a chapter relating to users and a financial chapter, giving a global picture of the service and contract enforcement	The designed reporting framework envisages the Company's quarterly and annual reports to the City, which must include a detailed description of factors preventing the fulfillment of any obligations. The reports must also specify the Company's action plans designed to achieve the missed targets. The Company undertakes to submit to the City annual audit reports which must include the balance sheet, the production report and the financial spreadsheet. The City, in its turn, will prepare for the Company quarterly progress reports on its respective contractual compliance, with explanations in respect of outstanding commitments and proposed remedial action.	
	CHAPTER 12 GUARANTEES AND SANCTIONS		
GUARANTEES	Description of the guarantees provided by the operator to ensure contract enforcement and continuity of service	Not specified	
ARBITRATION	Definition of the conditions of conflict settlement	Not specified	
FINANCIAL	Definition of the object and value of penalties in	Not specified	

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
PENALTIES	case of a breach of contract		
EMERGENCY MEASURES	Definition of the procedure to enforce, if the operator shows an incapacity to operate the service appropriately	Not specified	
CHAPTER 13 END OF CONTRACT			
CONTINUITY OF SERVICE AT THE END OF THE CONTRACT	Definition of the terms of assets and obligations transfer at the end of the contract so that to secure service continuity	Not specified	
FATE OF ASSETS AT THE END OF THE CONTRACT	Definition of assets transfer	Not specified	
SETTLEMENT OF INVESTMENT COSTS	Definition of the conditions of settlement in case of unspent investment amounts, so as to achieve sustainability of system assets	Not specified	

3. WATER AND SEWERAGE SERVICE CONTRACT

SERVICE CONTRACT

ON WATER SUPPLY AND SANITATION OF THE CITY OF LVIV

ENTERED INTO BY AND BETWEEN

THE EXECUTIVE COMMITTEE OF LVIV CITY COUNCIL

AND

LVIV MUNICIPAL COMMUNAL ENTERPRISE “LVIVVODOKANAL”

Terms and Definitions

1. *Municipality* — the Executive Committee of Lviv City Council.
2. *Terms* — periods of time specified in this Contract and calculated in years, months and days. The term may also be determined with reference to an event the occurrence of which is inevitable.
3. *Terms Expiration*.
 - 3.1. A term calculated in years and terminating in a respective date and month being the last one in the respective year of the Term.
 - 3.2. A term calculated in years and terminating in a respective date being the last one in the respective month of the Term. Insofar as the end of term calculated in months appears to apply to the month not having a respective date, such term shall terminate as at the last date of the month in question.
 - 3.3. The terms determined in days shall be calculated effective as of the date following the commencement date of the term. In the events that the term expiration coincides with a day-off, the business date immediately following such day-off shall be deemed the term expiration date. The last date of the term shall last until 24:00 hours while in cases when an action must have been performed at an institution where business hours end at an earlier time. The term shall terminate at the time of business closure.
 - 3.4. The duration of the term indicated through the reference to an event the occurrence of which is inevitable shall commence on the date immediately following the date of such event occurrence.

The term shall not be deemed missed inasmuch as the necessary documents were submitted for postal processing prior to its expiration.

4. *System* — the water supply and sanitation system servicing the Municipality.

I. Parties

1.1. The city of Lviv represented by the Municipal Engineering Infrastructure Department hereinafter referred to as the Municipality and acting pursuant to the Regulation On the Department as approved by respective decision of Lviv City Executive Committee of 24 November 2000, #641.

1.2. The Municipal Communal Enterprise “Lvivvodokanal” hereinafter referred to as the Company represented by its Director acting pursuant to its Articles of Association.

II. Objectives of the Service Contract

2.1. To ensure provision of water supply and sanitation services for the Municipality.

2.2. For the purposes of the Service Contract, the Parties agree to pursue the following objectives:

- to promote the comprehensive enhancement of the material, technical and financial capacity of the Company;
- attainment and maintaining by the Company of a sustainable financial standing, namely: introduction of rational tariffs affording the Company to earn revenues adequate for sustaining and proper operation of water supply and sanitation structures;
- putting into effect of a profitable investment program laying particular emphasis on the improvement of efficacy of the existing “System”;

III. Key Principles of the Service Contract

3.1. The Parties shall build their relations in compliance with provisions of Articles 4, 23 – 26, 29, 33, 34, 41, 44, 61 of the Civil Code of Ukraine and Articles 20 and 21 of the Law of Ukraine On Enterprises in Ukraine.

3.2. The Parties recognize that the water supply and sanitation services improvement capacity depends on: a) consumers payments collection rate increase; b) management quality improvement; c) attraction of profitable investments.

3.3. With an eye on raising the services effectiveness and productivity, the Parties decided to implement and ensure the following principles:

- the guaranteed autonomy in all aspects of the Company management and water supply and sanitation system operation including planning, funding and investment utilization (Articles 20 and 21 of the Law of Ukraine On Enterprises in Ukraine);
- adoption of a clearly defined improvement program requiring the provision of high standard water supply services whilst protecting management from political pressures;
- putting in place of a tariffs and payments policy which will ensure the necessary self-financed income for the Company and revenues sufficient for meeting all financial needs (operation, maintenance, investments and loans repayment);
- Company’s development and commitment to the provision of services where prime attention is focused on users;
- promotion of the Company’s access to the lending sources providing a sufficient coverage of investments financing;

- provision of the Company with materials and services, using measures to create competitive market environment;

3.4. Being guided by the above principles and the below division of responsibilities and competences, this Service Contract identifies rights and obligations of the Company in the System operation establishing therewith the rights and obligations of the Municipality assisting the Company in reaching the set goals:

- The Company agrees, in conformance with the policy approved by the local authority and under its supervision, to manage and provide water supply and sanitation services following the principle of autonomous, commercial, consumer-focused and financially self-sufficient Enterprise;
- The Municipality shall determine fundamental rules and oversee the Company's performance in order to protect the public's guaranteed right to receiving services at an optimum price.

IV. Rights and Obligations of the Company

4.1. For the purposes of this Contract, the Company shall have the following rights and obligations:

- 4.1.1. To make efficient use of the System, to perform activities specified in Annex 1 attached hereto;
- 4.1.2. To introduce rules and procedures being compatible with applicable laws and commensurate to the System operation including personnel management;
- 4.1.3. To propose to the Municipality (or another Institution empowered with tariffs approval) the adoption of respective optimum tariffs levels being sufficient to cover the cost of water supply and sanitation services provision to customers and for financing necessary investments in efforts towards maintaining the services quality in the future;
- 4.1.4. To use all reasonable and necessary measures including services reduction and termination to cause customers to repay their debts;
- 4.1.5. To control investment planning, examination and implementation;
- 4.1.6. To notify the Municipality, as required under Para. VII hereof, of its financial and technical accomplishments;
- 4.1.7. In accordance with provisions of applicable laws, to make all such other decisions as are advisable and necessary for the performance of obligations specified herein.

4.2. Conditions essential for the Company's performance of its obligations hereunder:

- 4.2.1. Approval by the Municipality (or another Institution empowered with tariffs approval) of tariffs allowing the Company to provide water supply and sanitation services as specified herein.
- 4.2.2. Performance by the Municipality of its obligations hereunder;
- 4.2.3. Any regulatory act issued by state power authorities or local governments which legally disables the performance by the Company of its obligations hereunder shall relieve the Company of its responsibility for the performance of its obligations hereunder.

4.3. In the event that none of the conditions described in Paras. 4.2.1.- 4.2.3. hereinabove appear to be met, the Company shall not be held liable for the failure to meet its obligations connected with this condition, or the whole of the Agreement (Article 61 of the Civil Code of Ukraine).

In each instance however, the Company shall be obligated to use best of its efforts to meet its obligations in a reasonably best manner under the given circumstances.

V. Rights and Obligations of the Municipality

5.1. The Municipality shall have the following rights and obligations:

5.1.1. To make timely payments for the services provided by the Company to municipal institutions and organizations funded from the municipal budget preventing from the occurrence of more than 30-day arrears.

5.1.2. To compensate to the Company, in a timely manner, possible subsidies and the preferential differential in tariffs incorporated in the price preventing from the occurrence of more than 30-day arrears.

5.1.3. To oversee the performance by the Company of its obligations laid down in this Contract and use all reasonable efforts to cause the Company to meet its obligations.

5.1.4. To guarantee to the Company the right to operate the System effectively and free of interference from the side of the Municipality administration or the city council.

5.1.5. To promote the approval of tariffs being essential for the Company's provision of its water supply and sanitation services meeting the quality standards as required hereunder, as well as to perform all such other obligations as provided for in Annex 2 attached hereto.

5.1.6. To allow the Company to use all reasonable and necessary measure in compliance with applicable laws aimed at ensuring timely payments from customers for the services having been provided by the Company, as well as to otherwise support the Company to extent reasonable practicable.

5.1.7. To promote the creation of condominiums in the Municipality.

5.1.8. To provide reasonably possible assistance to the Company in its performance of its obligations described herein and in the Company's Articles of Association.

5.2. The obligations of the Municipality hereunder shall be subjected to the following conditions:

5.2.1. Performance by the Company of all of its obligations covered by this Contract,

5.2.2. Any regulatory act issued by state power authorities or local governments which legally disables the performance by the Company of its obligations hereunder shall relieve the Company of its responsibility for the performance of its obligations hereunder.

5.3. Should either of the conditions described in Paras. 5.2.1.-5.2.2. hereof appear not to be met, the Municipality shall be relieved of its responsibility for the failure to meet its obligations connected with the condition in question.

VI. System Performance Improvement Program

6.1. In the most of 9 months following the signature hereof, the Company shall submit to the Municipality a detailed action plan envisaging the improvement of financial performance and technical operation accomplishments which will at least cover the following items:

- Company's internal restructuring;
- introduction of the up-to-date financial and business management systems;
- global improvement of revenues levels;
- collection of payments from debtors;
- measures to reduce barter transactions;
- introduction of payments inventory as per meter readings;
- public awareness building and education;
- introduction of demand management techniques;
- programs to reduce network losses in buildings, apartments;
- energy saving measures;
- planning of operation and system development costs;
- preparation of a working model of the System optimization.

6.2. The Action Plan shall include the performance improvement activities designed for a 5-year period.

6.3. In the most of 9 months following the signature hereof, the Company shall submit to the Municipality a detailed Investment Program for the period of 2002-2006 indicating priority profitable investments.

6.4. During the month following the month of monthly plans submission, the Parties shall approve an amended Contract (to include the action plan and the investment program) and its effective date.

VII. Reporting

7.1. Reporting to be prepared by the Company:

7.1.1. Throughout the entire period of effect of the Service Contract, the Company shall prepare quarterly reports by incremental totals from the beginning of the year.

7.1.2. Quarterly reports. The COMPANY shall prepare quarterly written reports. The deadline for a respective report submission shall be set at the 25th date of the month following the last month of the quarter in question. This report shall contain the description of each obligation and the Company's achievements in accomplishing same, as well as complete reasoning of the inability to perform and the Company's action plan providing for the completion of such obligation in the future.

7.1.3. Annual reports. Throughout the entire period of effect of the Service Contract, the Company shall submit to the Municipality audit reports including balance sheets,

production reports and financial statements within the most of 90 days following the end of a respective tax year.

7.2. Reports Prepared by the Municipality:

7.2.1. Throughout the entire period of effect of the Service Contract, the Municipality shall prepare quarterly reports by incremental totals from the beginning of the year.

7.2.2. Quarterly Reports. Throughout the entire period of the Service Contract, the Municipality shall prepare quarterly written reports (within the most of 25 days following the end of each quarter) to the Company on the state of the Contract performance. This report shall contain the description of each obligation and the Municipality's achievements in accomplishing same, as well as complete reasoning of the inability to perform and the Municipality's action plan providing for the completion of such obligation in the future.

VIII. Force-majeure Events

8.1. The Parties shall not be held liable for the failure to meet their obligations in the event of force-majeure events occurrence.

8.2. For the purposes hereof, the force-majeure events shall mean::

- civil war or public unrests;
- wars and warfare;
- complete absence of material and resource support;
- severe climatic conditions;
- any other circumstance beyond the Parties control.

IX. Miscellaneous

9.1. legal successors. This Contract shall remain valid for the Company and Municipality legal successors.

9.2. Period of the Contract: This Contract shall remain valid for 5 years following the date of its signature by the Parties.

9.3. Amendments in the Service Contract: This Contract may only be amended subject to a mutual written consent of the Parties.

9.4. Effect of the Contract: This Contract shall enter into effect as at the time of its signature by the Parties' authorized representatives.

9.5. In all matters not covered herein the Parties shall be governed by applicable laws of Ukraine.

Date of Entering into Contract: 17 August 2001

For the City of Lviv:

For “Lvivvodokanal”

Director, Municipal Engineering
Infrastructure Department
of Lviv City Council

Director,
Municipal Communal Enterprise
Lvivvodokanal

(Signature, seal) V. Sheleviy

(Signature, seal) V. Sulipa

**Tasks of Lvivvodokanal Performance Improvement
(baseline 2001 – 1 US dollar = 5.42 Ukrainian hryvnias (UAH))**

№	Indicator	By the end of 2000	By the end of 2001	By the end of 2002	By the end of 2003	By the end of 2004	By the end of 2005	By the end of 2006
1	24-hour water supply to at least (x%) of citizens	n/a			40%	45%	50%	50%
2	At least 10-hour water supply to (x%) of citizens	n/a			75%	85%	100%	100%
3	Average 24-hour consumption per capita (at buildings connections) (liter/day)	207	198	193	185	178	170	164
4	Unaccounted water not exceeding (x%) of total rise	42%			35%	33%	30%	30%
5	Specific energy consumption (kW*hr/m ³) reduced by at least (x %) vs. 2000	n/a			5%	7%	10%	10%
6	Modern, adequate computerized accounting and financial reporting system introduced as of Dec. 2003	n/a			Xxx			
7	Reduction of consumers complaints by (x%) vs. 2000	n/a			20%	35%	50%	50%
8	Payments collection percentage (actual collection in % of the total annual bills issued) being not less than (x%)	75%	85%	88%	92%	93%	94%	94%
9	Operational ratio (operational costs divided by operational revenues) not exceeding (x)	1.26	1.01	0.85	0.79	0.78	0.76	0.76
10	Water realization (thousand m ³ /year)	72301	72672	70369	69248	67317	65704	64124
11	Annual income (thousand UAH)*	58570	70700	85360	87900	87020	83645	79295

* Amounts of annual income subject to adjustment with account for UAH/USD exchange rate fluctuations.

Obligations of Municipality
(baseline 2001 – 1 US dollar = 5.42 Ukrainian hryvnias (UAH))

№	Indicator	2001	2002	2003	2004	2005	2006
1	Municipality's investments (mn UAH)	—	2.20	2.20	1.10	1.10	—
2	Average combined tariff for water supply and sanitation services before VAT (UAH/m ³)	0.97	1.21	1.27	1.29	1.27	1.24
3	Total profitability level, (%)	10	15	15	15	15	15

The Municipality's investments and the average combined tariff subject to adjustment with account for UAH/USD exchange rate fluctuations.

SECTION 4. ZAPORIZHZHYA

1. CONTRACT DESCRIPTION

1.1. General information on the Contract

The service contract (the "Contract") between the Zaporizhzhya Vodokanal (the "Company") and the Zaporizhzhya City Executive Board was concluded on February 3, 2003 within the framework of the Corporate Development Plan for 2000-2005, designed and implemented in accordance with the relevant section of the Loan Agreement between the Company and the European Bank for Reconstruction and Development. The Contract complies with Ukrainian legislation.

In terms of its corporate status, the Company is a 100% communal (municipal) enterprise owned by the territorial *gromada* of Zaporizhzhya as represented by the City Council. The City Council, in its turn, delegated the organizational and business management of the Company to the City Executive Board.

The Company is a comprehensive, full-production-cycle facility providing water and sewerage services. Fixed assets have been handed over to the Company on unrestricted business management terms as described in its Charter. The assets are run and maintained by hired staff recruited by the Company's director, who is appointed by the city mayor.

The Contract reads in conjunction with the Company's charter and the labor contract with the Company's director.

The Company holds a license for centralized water and sewerage services issued by the State Committee of Ukraine on Housing and Utilities, which also monitors the Company's compliance with the terms of the license.

Quality control over asset operation and maintenance is administered by the relevant functions of the City Executive Board (the Utilities Department, the Environmental Department, the Communal Property Department, the Main Department of Economics). The Company submits its performance indicators to the City Executive Board on a quarterly basis. At weekly meetings, the Executive Board reviews the Company's performance over the elapsed week.

New investments in equipment modernization are financed by an EBRD loan, from the city budget, the Company's own resources and allocations by the State Fund for Environmental Protection.

Contract terms match the duration of investment loans.

In 2002, the Company set up a Customer Relations Office whose employees are responsible for documenting water allocation and wastewater acceptance by the Company. The Office also forecasts collection.

As part of the Program for Investment and Development of the System of Water Supply and Treatment in the City of Zaporizhzhya, the Company designed a tariff methodology (the "Methodology") approved by Decision No. 67 of the Executive Board of the Zaporizhzhya City Council dated February 29, 2002 and endorsed by the European Bank for Reconstruction and Development on January 12, 2002⁷⁸. The Methodology provides for regular revision of tariffs (twice a year, on January 1 and July 1) to timely adjust costs in line with the Company's operations and customer interests.

Claims for debt collection are filed with courts of general jurisdiction or business courts. Hearings are held at all levels, including local, regional and central courts, depending on the jurisdiction of a dispute and appeal proceedings. Where required, the Company may petition the Prosecutor's Office, which is empowered by current legislation to file suits in the name and on behalf of the State (i.e. government authorities at any level, state and municipal entities).

To enforce performance under contracts and advances, suppliers and contractors are required to provide unconditional bank guarantees issued by financial institutions acceptable to the Company.

On July 16, 2003 the Zaporizhzhya City Council adopted Resolution No. 35 "On Non-Applicability of Law of Ukraine "On Restoring the Solvency of Debtors or Their Recognition Bankrupt" to Communal Enterprise Vodokanal". By adopting this Resolution, the City Council effectively undertook to rehabilitate the Company in the event there is a risk that it may be declared bankrupt.

Capital investments in 2002 were as follows:

Capital investments, total – UAH 28,762,100

of these, pipeline reconstruction – UAH 27,295,000

Commissioned fixed assets – UAH 708,000

⁷⁸ As described in the general section of the report (see Section 2.1.3), in August 2001 Ukraine introduced unified Tariff-Setting Rules for Centralized Water Services mandatory for all utilities. The Methodology used at the Zaporizhzhya water utility is applied pursuant to the Guarantee Agreement between Ukraine and EBRD ratified by Ukraine's Supreme Rada in October 1999, before the enactment of the Tariff-Setting Rules.

Construction in progress – UAH 26,054,100

Fixed assets

	2001	2002
Net book value	303,975.6	286,818.9
Original cost	928,768.0	929,922.3
Depreciation	624,792.4	643,103.4

Investment costs in 2002 totaled UAH 1,729,700.

- Operational costs covered by customer payments – 100%.
- Investment costs covered by customer payments – 16,8%.
- As at October 1, 2003 uncollected bills totaled UAH 85.1 million.⁷⁹

The Company pays the following taxes, mandatory payments and levies stipulated by Law of Ukraine "On the Taxation System":

⁷⁹ The official hryvna rate established by the National Bank at November 21, 2003 was UAH 5.3319 per \$1 and UAH 6.34976 per €1.

<i>Tax, levy or mandatory payment</i>	<i>Tax basis, payment terms</i>
Land tax	Area effectively used by the enterprise based on land market value
Communal tax	Average headcount; payable pursuant to Resolution by the City Council
Tax on the owners of vehicles and other self-propelled machines and devices	Engine volume for all vehicles owned by the enterprise, payable at the relevant statutory rates
Levy for special-purpose use of natural resources	Volume of water lifted from Dnieper, payable at the relevant statutory rates
Levy for environmental pollution	Volume of pollutants discharge, payable at the relevant statutory rates
Levy for the use of Ukrainian radio frequency capacity	Radio frequency used, payable at the relevant statutory rates
Levies for obligatory state social insurance	Payroll
Value added tax	20% of value of services rendered over the period or of payments credited to the corporate account, whichever is earlier. The only exception are services to residential consumers or budget-funded enterprises, for which tax liability arises on the date funds are credited to the corporate account
Corporate profits tax	30 % of taxable corporate profit. Services to budget-funded enterprises rendered over the period are included in gross profit when funds are actually credited to the corporate account

The Company receives subsidies from the state budget.

Tariffs for water and sewerage services are established in accordance with the Methodology using statutory statistical reporting data. Water and sewerage tariffs approved and effective as at July 1, 2003 are based on average per capita income of UAH 282.4. Assuming that an average family in Ukraine comprises three persons, average monthly household income is UAH 282.4 x 3 = UAH 847.2.

1.2. Technical description of the Contract

Total service area population is 941,800 persons, including 849,000 in the city of Zaporizhzhya. The Company serves 256,150 individual apartment accounts and 45,589 private house accounts. Industrial consumers total 5,260.

The effective average headcounts during the 9 months of 2003 was as follows:

total staff	2,957
including:	
- workers	2,277

The Company's water supply source is the Dniester River (surface water).

Infrastructure summary:

1. Number of pumping stations – 26
2. Total length of water networks – 2,182 km

3. Classification by age:

10 years or below – 185 km

11-20 years – 376 km

21-30 years – 318 km

31-50 years – 1087 km

over 50 years – 216 km

4. Classification by pipe type:

Cast-iron:

$\varnothing \leq 100$ mm – 346.6 km

100 mm $< \varnothing \leq 200$ mm – 386.0 km

200 mm $< \varnothing \leq 500$ mm – 208.8 km

$\varnothing > 500$ mm – 33.4 km

Steel:

$\varnothing \leq 100$ mm – 459.2 km

100 mm $< \varnothing \leq 200$ mm – 168.5 km

200 mm $< \varnothing \leq 500$ mm – 251.6 km

$\varnothing > 500$ mm – 291.5 km

Reinforced concrete and other – 36.4 km.

5. Total length of 900-1,400 mm water mains – 36 km.

Number of bills based on existing contracts:

legal entities – 63,120

residential consumers, direct-payment terms:

per standard consumption rates – 301,739

per individual meters – 79,102

per house meters – 726

Water production, sales and losses in 2002:

<i>No.</i>	<i>Indicator</i>	<i>Unit of measure</i>	<i>2002</i>
1.	Total lifted water	thousand m ³	174,933.7
2.	Total water used in production	thousand m ³	18,971.8
	Same, %	%	10.8
3.	Total water delivered into the distribution network	thousand m ³	155,961.9
4.	Total losses and unaccounted-for water	thousand m ³	55,335.4
	Same, in % to water delivered	%	35.5
5.	Total effective delivery to consumers	thousand m ³	100,626.5
	including:		
	- residential consumers	thousand m ³	77,467.2
	- other consumers	thousand m ³	23,159.3

The Company maintains round-the-clock service. There are no unscheduled city-wide service interruptions. The annual number of leaks within street networks with local disconnection is 4,500.

2. SERVICE CONTRACT COMPARISON MATRIX⁸⁰

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
	CHAPTER 1 GENERAL PROVISIONS		
FORMATION OF THE CONTRACT	Identification of the parties and of their competencies	<p>The Zaporizhzhya City Council, on behalf of which the <i>city head</i> (the official title of the mayor) signed the Contract, is also chairman of the City Council and the Executive Board. On the Company's side, the Contract was signed by Director whose powers are specified by legislation and the Company's Charter.</p> <p>In accordance with Law "On Local Governance", the city administration (the "City") is responsible for ensuring adequate management of facilities owned by territorial <i>gromadas</i>, their proper maintenance and efficient operation, and the requisite level and quality of service.</p> <p>The Company was established to administer the operational and business activities in the process of provision of water and sewerage services to the public. It was established by decision of the assets' owner (City Council) and is subordinate and accountable thereto. No competitive operator selection is in place, as the City is both the incorporator of the Company and its managing/supervising authority.</p>	
OBJECT OF THE CONTRACT	General definition of the rights and obligations transferred by the authority to the operator	<p>The City Council hands over assets to the Company on unrestricted business management terms, free of charge.</p> <p>In the process of production and provision of services, the Company:</p> <ol style="list-style-type: none"> 1) acts as the sole provider of centralized water and sewerage services in the city; 2) operates and maintains all assets (fixed and current); 3) is entitled to use and dispose of the property in accordance with the Charter and applicable legislation; 4) is responsible for the proper and efficient use of assets; 5) prepares corporate business and profit allocation plans and submits them for approval by the City Council, which determines the portion of profit to be remitted to the city budget⁸¹; 	

⁸⁰ Many conclusions and comments presented in the "Information in the service contract" graph are based on the Company's charter, which is an integral part of the Contract according to its terms.

⁸¹ Due to financial difficulties experienced by utilities, the practice of partial remittance of profit to the municipal budget is virtually non-existent, and we are unaware of any such instances.

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
		6) issues bills to consumers and collects payments; 7) bears commercial risks; 8) safeguards assets; 9) bears liability under all obligations to third parties; 10) is responsible for compliance with the terms of special licenses and environmental requirements; 11) approves the corporate accounting policy.	
PERIMETER OF THE SERVICE	Determination of the service area, within the limits of the authority's territory	The service area map is an appendix to the Contract ⁸² . The Company serves consumers only within the specified territory. The map is subject to annual update to reflect changes in the service area. The Contract does not specify the procedure for modification of costs and revenues (tariffs) in line with changes in the service area.	
DURATION OF THE CONTRACT	Identification of the starting and expiry dates	The Contract was concluded on February 3, 2003 for an indefinite term and became effective on the date of signing.	
CHAPTER 2 RESPONSIBILITIES OF THE OPERATOR			
INSURANCE OBLIGATION	Definition of parties' insurance responsibilities	Not provided for in the Contract.	
CHAPTER 4 ASSETS OF THE SERVICE			
TRANSFER OF THE ASSETS AT THE BEGINNING OF CONTRACT	Identification of the service assets and of the conditions of their transfer to the operator, including ownership	At the effective date of the Contract, the issue of asset transfer was irrelevant - by that time, the Company existed as a legal entity, and the assets had already been contributed to its charter capital by the City. The Charter specifies the procedure for obtaining the assets, and for their registration and use on unrestricted business management terms. The relevant Transfer and Acceptance Protocol must be appended to the Charter. The City retains full title to the assets transferred. In accordance with Ukrainian legislation, all fixed assets emerging over the time of a company's activity must be contributed to its charter fund. In practice, however, this is rarely done, and companies simply list newly developed or acquired property and equipment on their balance sheets. The above information is not part of the Contract.	
CHAPTER 5 ORGANIZATION OF THE SERVICE			
OPERATOR'S	Definition of requirements	The statutory and qualification requirements for hired	

⁸² This map is classified information.

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
STAFF	for staff training, organization Possible conditions of hiring the current utility staff	staff are listed in national regulations. The Contract does not address these matters, with the exception of the Company's responsibility to report to the City on its performance in securing safe working conditions and health protection of personnel.	
CHAPTER 6 SERVICE OPERATION AND MONITORING			
SERVICE OPERATION	Definition of result requirements (water quality, continuity of service)	<p>The Company is obliged, as a minimum requirement, to provide consumers with sufficient volumes of drinking water on a 24-hour basis throughout the year and in any weather conditions. The quality of water must comply with applicable state quality standards or standards that may be enacted in the future.</p> <p>The Contract contains a provision to the effect that other service level indicators are to be specified in the Company's Corporate Development Plan.</p> <p>The Contract also cites mandatory compliance with the terms of special licenses and permits and regular reporting to the City on compliance with statutory requirements for water quality, production volumes and pressure.</p> <p>One of the Contract provisions obliges the Company to adopt a Corporate Development Plan that must contain an action plan to improve operating efficiency and indicators enabling the measurement of the Company's progress.</p>	Not specified in the Contract

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
		Subject to agreement with central executive authorities as prescribed by legislation (or their local representative agencies), the City may adopt decisions specifying the characteristics and requirements regulating service parameters, provision and quality as adjusted for the technical condition of the Company's fixed assets, climate and other local conditions. In doing so, the City must specify the effective terms of such characteristics.	
PERFORMANCE INDICATORS	Definition of measurement tools to assess the operator's performance and possibly define performance-based revenues. Provided the current quality of service (water quality, continuity etc.) and nature of assets (absence of meters etc.), only improvements would be measured	<p>The text of the Contract does not contain any such information.</p> <p>The list of operating indicators enabling the measurement of the Company's progress must be included in the Corporate Development Plan.</p>	<p>The text of the Contract does not contain any such information.</p> <p>The list of operating indicators enabling the measurement of the Company's progress must be included in the Corporate Development Plan.</p>
RELATIONS BETWEEN USERS AND THE OPERATOR	Definition of the documents specifying the relation between users and the operator, of the practical connection means and the limit between the service and private properties	<p>Service provision rules exist only at the national level. The City has not adopted any local service ruling and, accordingly, no such rules are specified in the Contract.</p> <p>General service access requirements are stipulated by the national Rules of Service Provision. No local ruling is available and, accordingly, specified in the Contract.</p> <p>There have been no instances of decisions not</p>	The Contract does not contain any wastewater provisions different from those for water service.

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
		<p>to collect charges from consumers in financial difficulty, and no such procedure is envisaged.</p> <p>In an emergency or where water resources are limited, the Company may introduce rationed water supply or reduce pressure in outer networks. Such decisions must be agreed with the relevant authorities and specify a fixed term of reduced service.</p> <p>The instances where water service may be suspended for repairs are prescribed by national regulations. The Contract contains no additional provisions.</p>	
CHAPTER 8 Maintenance, replacement of assets and new investments			
DEFINITION OF MAINTENANCE, REPLACEMENT OF ASSETS	<p>Establishment of a clear distribution between the municipality and the operator of maintenance and replacement responsibilities, with the aim of sustaining or improving assets value</p> <p>Definition of the above two types of works</p>	<p>The Contract does not segregate routine maintenance and major equipment replacement responsibilities, but specifies that the Corporate Development Plan to be adopted by the Company must contain a section dedicated to its water and sewerage asset renewal program.</p> <p>Routine, emergency and capital repairs are governed by national regulations.</p>	
DISTRIBUTION OF MAINTENANCE AND REPLACEMENT WORK AND NEW INVESTMENTS	<p>Identification of the role of each party in the implementation of maintenance, replacement and investment tasks. In the case of replacement and investments, a reference should be made to a projected program</p>	<p>The Contract does not stipulate the rights and obligations of the parties as relates to capital investments, save for a provision to the effect that the Company's Corporate Development Plan must include an asset renewal program.</p>	
CHAPTER 9 FINANCIAL PROVISIONS			
REMUNERATION OF THE PARTIES	<p>Identification of all revenues and subsidies, their collectors and</p>	<p>Under the Contract, the Company must submit to the City quarterly and annual balance sheets, income statement, financial and statistical reports in the format</p>	

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
	<p>beneficiaries and payment frequencies</p> <p>Definition of the conditions for evolution of estimated costs and revenues (inflation)</p> <p>Definition of tariffs, their settlement and calculation procedure</p>	<p>and within the timeframe established by law. It must also provide, upon the City's request, the necessary detailed current accounting and financial data enabling the assessment of the Company's financial position.</p> <p>The Contract does not include a detailed description of financial arrangements.</p> <p>The Contract includes a separate section describing tariff policy guidelines, the procedure for customer payments for services and the tariff revision process.</p> <p>Tariffs are calculated using the City-approved methodology and are to cover all of the Company's costs per operations and activities relating to service provision. They must reflect the financial costs of water distribution and wastewater disposal, including all production, maintenance and service development costs. Such costs must support the attainment of the minimum service standards specified by the Corporate Development Plan, encourage an efficient and rational use of resources and consider the paying capacity of consumers. The structure of tariffs must factor in the provision of and payment for services both per meters and based on statutory consumption standards, as well as all new customer connections.</p> <p>Should the City fail to approve tariffs in line with the above guidelines, it shall be obliged to compensate the resulting shortfall in the Company's earnings.</p>	
CONDITIONS FOR REVISION OF REVENUES	Description of a procedure to renegotiate revenues after a given period of time or after significant changes in the service	The Contract does not specify a modification procedure other than tariff adjustments (see previous section).	
CHAPTER 11 CONTROL AND ANNUAL REPORT			
CONTROL BY THE AUTHORITY	Definition of the extent of the control by the authority	<p>The City monitors the Company's activities and performance under the Contract through:</p> <p>a) the Corporate Development Plan approved by the Company's management and submitted to the City;</p> <p>b) the Company's annual environmental report that must include information on its compliance with the terms of special licenses and permits, the status of employee health protection and working conditions, administrative sanctions imposed on the Company's officers; and a public relations update;</p> <p>c) the Company's accounting, financial and statistical reports.</p>	

FEATURE	OBJECTIVE	Information in the Service Contract	
		Water	Wastewater
ANNUAL REPORT BY THE OPERATOR	Description of the information the operator must provide to the municipality for service intelligence and control. This annual report includes a technical chapter, a chapter relating to users and a financial chapter, giving a global picture of the service and contract enforcement	Not specified in the Contract, other than as described in the previous section.	
CHAPTER 12 GUARANTEES AND SANCTIONS			
GUARANTEES	Description of the guarantees provided by the operator to ensure contract enforcement and continuity of service	Not specified, except the City's commitment to approve tariffs covering all costs per operations and activities relating to service provision, and the obligation to compensate the shortfall in the Company's earnings in the event tariffs are below the required level.	
ARBITRATION	Definition of the conditions of conflict settlement	No special body is envisaged to monitor the performance of contractual obligations or resolve disputes. The Contract stipulates that the parties shall endeavor to resolve disagreements by way of negotiation. If they fail to resolve a dispute in that manner, the parties may refer the case to the Business (Arbitration) Court of the Zaporizhzhya Region.	
FINANCIAL PENALTIES	Definition of the object and value of penalties in case of a breach of contract	Not specified	
EMERGENCY MEASURES	Definition of the procedure to enforce, if the operator shows an incapacity to operate the service appropriately	<i>Temporary measures</i> Not envisaged <i>Contract termination</i> No contract termination procedure is specified	
CHAPTER 13 END OF CONTRACT			
CONTINUITY OF SERVICE AT THE END OF THE CONTRACT	Definition of the terms of assets and obligations transfer at the end of the contract so that to secure service continuity	Not specified	
FATE OF ASSETS AT THE END OF	Definition of assets transfer	Not specified	

		Information in the Service Contract	
FEATURE	OBJECTIVE	Water	Wastewater
THE CONTRACT			
SETTLEMENT OF INVESTMENT COSTS	Definition of the conditions of settlement in case of unspent investment amounts, so as to achieve sustainability of system assets	Not specified	

3. SERVICE CONTRACT

SERVICE AGREEMENT № 9

City of Zaporizhya

3 February 2003

The Zaporizhya City Council hereinafter referred to as the City of Zaporizhya represented by Mr. Oleksandr Volodymyrovych Poliak, the City Head acting pursuant to the Law of Ukraine On Local Self-government in Ukraine" (№280/97-Verkhovna Rada of Ukraine of 21.05.1997) on the one hand, and the Communal Enterprise "Vodokanal" hereinafter referred to as Vodokanal represented by Mr. Petro Andriyovych Stasiuk, General Director, acting pursuant to the Company's Articles of Association and Order №33d of 16.01.03 on the other hand, have entered into this Agreement on the following:

1 Subject of Agreement

1.1 The subject of this Agreement includes the organization of and support to production and business activity of Vodokanal and interaction with Zaporizhya City Council in providing consumers with centralized water supply and sanitation services.

1.2 This Agreement shall be read in conjunction with the Vodokanal's effective Articles of Association (including same with any amendments to be made therein in the future), as well as with the effective contract entered into by and between the General Director and the City of Zaporizhya.

2 Terms and Formulations

2.1 The terms and formulations as used herein shall be construed in accordance with the Law of Ukraine On Drinking Water and Drinking Water Supply (№ 2918-111, 10 January 2002) and other legal acts of Ukraine.

2.1.1 The term "Articles of Association" shall mean the Vodokanal's Articles of Association currently in effect including all such amendment as may be made in the future.

2.1.2 The term "Contract" shall mean a labor agreement concluded with the General Director with the City of Zaporizhya.

2.1.3 Vodokanal users – enterprises, organizations, institutions and citizens possessing residential buildings or parts thereof subject to private ownership rights in whose names personal accounts have been opened, being subjects of contractual relations with Vodokanal and using services of Vodokanal.

2.1.4 Services Consumer – a legal entity of a physical person using drinking water for the purposes of meeting physiological, sanitary-hygienic, household and business needs.

2.1.5 Services Provider – Vodokanal, an enterprise, organization and institution directly providing communal water supply and sanitation services to consumers.

2.1.6 Services Producer – Vodokanal as a water supply and sanitation services producer.

2.1.7 Centralized drinking water supply – economic activity involving provision of drinking water to consumers making use of the entirety of constructions, structures, distribution water supply networks united within an integrated technological process.

2.1.8 Centralized sanitation – economic activity involving the draining and treatment of communal and other wastewaters making use of facilities, constructions, structures, collectors, pipelines united within an integrated technological process of drinking water production and transportation.

2.1.9 CDP – Vodokanal’s Corporate Development

Plan.

3 Area of Services Provision

3.1 Vodokanal shall provide water supply and sanitation services in line with provisions of its Articles of Association (or pursuant to Contracts with Consumers) within the boundaries of a territory specified on a map attached to the Contract. Such map shall be updated on an annual basis to reflect changes in the area of services provision.

4 Tariffs and Prices

4.1 General Principles

4.1.1 The tariffs system must secure the payments to Vodokanal for any works and activities directly or indirectly associated with provision of services including the cost of connection or disconnection, drinking water supply, wastes drainage, related assets and any other items in accordance with the Articles of Association and requirements of applicable laws.

4.1.2 The tariffs system is based on the following general principles:

a) Prices and tariffs must reflect the financial cost of the services involving the drinking water supply and waste water drainage including all costs associated with production, maintenance and the approved expansion of services. These costs must provide for the attainment of the minimum standard of services required under CDP, and conformity with legal requirements governing the drinking water and environmental quality standards.

b) To stimulate and promote rational and effective use of the services provided and resources available for these services provision.

c) To lend due account to consumers capacity to pay for the services.

4.2 Payment for Services

4.2.1 Vodokanal shall not be held liable for the collection of payments for services. For these purposes, all bills issued for the services provision shall enter into effect immediately while the payments must be effected in compliance with the applicable laws of Ukraine.

4.2.2 The City of Zaporizhyya, all executive power agencies of the city council, institutions and organizations accountable to the city council or its executive authorities or financed in full or in part from the city budget must comply with terms and conditions

of Supply/Service Contracts and must pay respective cost of the consumed services in accordance with effective tariffs.

4.2.3 The tariffs structure must take due account for the consumption as per meters and contain a provision concerning the application of tariffs according to norms as set for the identified categories of consumers.

4.2.4 The tariffs structure must take due account for all new legal obligations and obligations related to services provision (including the obligation to provide services to new communities) as of the time when such obligations enter into effect.

4.3 Tariffs Amendment

4.3.1 Tariffs shall be revised in conformance with the Tariffs Setting Methodology as approved by Decision of the Executive Committee of Zaporizhya City Council № 67 of 28.02.02.

4.3.2 In the event that the revised tariffs calculated as the Tariffs Setting Methodology fail to enter into effect on the scheduled date for reasons within the control of the City of Zaporizhya, the City of Zaporizhya shall be responsible for compensating for the deficit arising in the Vodokanal's revenues.

5 Debts and Disconnection

5.1 Vodokanal shall have the right to, conditional on serving a prior warning and reminder notice, terminate any water supply for the failure to pay (as per the Law of Ukraine On Drinking Water and Drinking Water Supply entered into effect on 10 January 2002) until the time of the arrears repayment. The Vodokanal however must bear in mind the implications of such sanctions for the health, public safety and constitutional rights of citizens.

6 Bookkeeping Information

6.1 [...] to make a decision on the payment collection waiver in case of a complex economic situation [*translators note: the clause abridged in the original*].

7 Information for Public and Relations with Consumers

7.1 The relations between Vodokanal and its consumers shall be based on requirements of the Law of Ukraine On Drinking Water and Drinking Water Supply entered into effect on 10 January 2002 (№ 2918-111).

7.2 Vodokanal shall be responsible for notifying through the official media or by posting a leaflet in a customer service section of the following:

- a) provided services.
- b) tariffs and prices.
- c) business hours.
- d) the procedure of making payments under bills.
- e) the procedure of lodging complaints.
- i) procedures and tools of water meters testing.

g) emergency response actions.

h) services level under the CDP version currently in effect.

7.3 In the event of water quality appears to deviate according to certain parameters from the standard, the services producer is obligated to serve a proper notice thereof to users, providers and consumers through mass media and to obtain the State Standardization Committee of Ukraine, Ministry of Health of Ukraine or Sanitary Epidemiological Service with the jurisdiction over the respective territory.

7.4 Vodokanal must collect, process, store for an indefinite period of time and to transfer, on a free-of-charge basis, to the state monitoring system down the set communication channels primary indicators of drinking water quality, pollutants concentrations in industrial wastewaters according to its own data and the data reported by enterprises making use of the municipal sanitation networks, as well as pollutants concentrations on wastewaters after treatment facilities. Said data shall be provided on a free of charge basis.

8 Services Standards and Levels

8.1 Vodokanal shall, as a minimum, continuously provide consumers with drinking water in a sufficient amount to meet the demand throughout the year and under any climatic conditions. The water quality must meet set standards (effective state standards 2874-82 and any new standards that may be enforced in the future).

8.2 Other services levels are defined in the CDP in effect as at the given point in time.

9 Unaccounted water

9.1 Vodokanal shall have developed and followed a plan for reducing unaccounted water amounts, either separately, or as part of CDP, in order to ensure the unaccounted water assessment and control. Goals that must be achieved in regard to unaccounted water shall be agreed to by and between Vodokanal and the City of Zaporizhyya with consideration for the Networks Rehabilitation Program.

10 Corporate Development Plans

10.1 Vodokanal shall have adopted and promote the implementation of the Corporate Development Plan which shall contain at least the following items:

- (a) Financial and operational indicators improvement program including:
 - (1) activities aimed at receipts management improvement (billing, payments collection, debts management and bad debts reduction);
 - (2) financial management improvement;
 - (3) activities aimed at operational efficacy improvement; and
 - (4) operational indicators enabling measurable progress assessment.
- (b) Environmental indicators improvement plan.
- (c) Public awareness building program.
- (d) Program of restoration of assets sufficient for ensuring the compatibility with applicable compulsory levels of water supply, collection and treatment.

- (e) Progress report covering goals set for the previous year.

11 Provision of Information to the City of Zaporizhya

11.1 Vodokanal shall submit to the City of Zaporizhya a copy of CDP referred to in Para. 10 above within the most of 30 days following its approval by Vodokanal management.

11.2 Vodokanal shall submit to the City of Zaporizhya an annual report on environmental issues within 60 days following the end of reporting year. The report shall contain the following data:

- (a) status of approvals, licenses and other permits in the environmental field and in regard to the health and safety of personnel being essential for the Project, and governing Vodokanal's performance of its activities under laws and regulations of Ukraine;
- (b) information concerning the facts of Vodokanal's failure to comply with its obligations of applicable laws and regulations governing environmental protection and provision for personnel health and safety (including fines levied on Vodokanal or any existing claims in connection therewith whether civil, or criminal, or administrative or others), and concerning efforts used or proposed by Vodokanal to address any problems arisen in these fields.
- (c) initiatives aimed at increase of personnel health and safety protection.
- (d) information concerning cooperation with the public in addressing environmental challenges.

12 Other Rights and Obligations of Parties

12.1 The City of Zaporizhya shall control Vodokanal's operations in accordance with applicable laws and the Articles of Association.

12.2 Subject to approval of the Ministry of Health of Ukraine, Ministry of Labor of Ukraine, State Standardization Committee of Ukraine, State Committee for Construction of Ukraine and other local agencies, the City of Zaporizhya shall have the right to adjust parameters and norms of consumer properties, services provision modes, and to set a guaranteed quality level with account for a capacity, composition and level of wear-and-tear of capital assets owned by water supply and sanitation enterprises, climatic and other local conditions.

12.3 [...] to make a decision on the payment collection waiver in case of a complex economic situation [*translators note: the clause abridged in the original*].

13 Special Conditions

13.1 Any amendments hereto may only be possible subject to the Parties mutual written consent thereto, or in case of changes in the law having substantial effect on the material clauses hereof.

14 Disputes Settlement

14.1 The Parties hereto shall endeavor to settle arising controversies by means of bona fide negotiations.

14.2 Disputes that may not be settled through amicable agreement shall be brought to the Commercial Court of Zaporizhya region as per a lawsuit initiated by an interested Party.

15 Responsibility of the Parties

15.1 The Parties shall be held liable under the law of Ukraine for the failure to comply with their respective obligations hereunder.

16 Effect of the Agreement

16.1 This Agreement shall enter into effect as at the time of its signature by the Parties and shall be valid for an indefinite period of time.

17 Legal Address of the Parties

City of Zaporizhya

206 Lenina Str., City of
Zaporizhya 69105, Ukraine

(Signature, seal)

O. Poliak, City Head

Communal enterprise
“Vodokanal”

61 Artema Str., City of Zaporizhya

69002, Ukraine

(Signature and seal)

P. Spasiuk,

Acting General Director

SECTION 5. DONETSK

1. CONTRACT DESCRIPTION

1.1. General information on the Contract

On May 5, 1997 Joint Stock Company Donuglevodokanal (hereinafter, the "Donuglevodokanal") and the Donetsk Regional Branch of the State Property Fund concluded a contract for the lease of state property. At the time, the water and sewerage networks and facilities operated by Donuglevodokanal were owned by the state. In subsequent years, Donuglevodokanal took over the water and sewerage networks transferred into communal property of the territorial *gromada* (municipality) of Donetsk by various enterprises and institutions. State-owned water and sewerage infrastructure was also assigned the status of communal property.

The contract aimed to legally formalize and streamline the relations between the Donetsk *gromada* and Donuglevodokanal.

The contract for technical operation of communal property was concluded on August 20, 2001, for a term of five years from the date of signing, with renewal for another five years in the absence of the parties' notification to the contrary.

The contract is based on Law "On Local Governance in Ukraine", Law "On Enterprises" and Law "On Business Entities".

Corporate status of water utility

Donuglevodokanal form of ownership – collective.

Organizational and legal structure – open joint stock company.

Share of the state in charter capital – none.

Owner of the water and sewerage infrastructure – Donetsk territorial *gromada*.

Water and sewerage networks and facilities operated and maintained by – non-state enterprise Donuglevodokanal.

The condition of assets and their designated and effective use are monitored by the owner represented by the City Department for Utilities. Equipment upgrades and renewals are partially funded from regional and municipal budgets, however such financing is irregular in nature.

Investment credits - none.

User bills are issued by Donuglevodokanal which also projects collection levels.

Collection is provided by the central settlements office under a contract with Donuglevodokanal (payments are made using a single paybook for all housing and utility services).

The current tariff system in Donetsk provides for cross-subsidizing of residential users at the expense of industrial consumers.

The company has prepared and submitted its proposals on changes in water and sewerage tariffs in accordance with the Tariff-Setting Rules for Centralized Water and Sewerage Services.

The major types of claims arising between the parties to the contract are considered by the Commercial Court of the Donetsk region and courts of general jurisdiction in Donetsk.

No special anti-bankruptcy mechanisms are envisaged. In the event of the Company's bankruptcy, the general procedure will apply as described in Law of Ukraine "On Restoring the Solvency of Debtors or Their Recognition Bankrupt".

Original cost of water and sewerage infrastructure fixed assets – UAH 91,439 thousand.

Net book value of water and sewerage infrastructure fixed assets – UAH 20,225 thousand.

Original cost of the company's fixed assets – UAH 9,938 thousand.

Net book value of the company's fixed assets – UAH 4,226 thousand.

Investments in 2001 – UAH 3,327 thousand.

Investments in 2002 – none.

Operational costs covered by customer payments –86%. Investment costs are not presently covered by user payments.

Uncollected bills for 9 months of 2003 (in monetary terms) totaled 3%.

In terms of the number of consumers, outstanding accounts for 9 months of 2003 constituted 21%.

Accrued taxes for 9 months of 2003 are as follows:

Tax/levy	Amount payable, '000 UAH	% of income
VAT	572	2.2
Profits tax	---	---
Levy for special-purpose use of water resources	1,780	6.7
Land tax	138	0.5
Communal tax	13	0.05
Levy for environmental pollution	8	0.03
Tax on the owners of vehicles	38	0.1
TOTAL	2,549	9.6

The company receives subsidies from local, regional and state budgets.

The company has not researched average income per "standard" user or household. According to approximate estimates (by statistical agencies), average monthly income per "standard" user and household is UAH 506 and UAH 1,50, respectively.

1.2. Technical description of the Contract

Number of users/customers by category (residential/industrial) and total population in the service area

Number of individual accounts (customers), total	140,073
of these, residential	138,480
of these, industrial	1,593
Total population in the service area (approximate)	350,000

Staffing (by job type)

Total headcount - 1,003 persons

Breakdown of personnel by job is presented in the table below:

Job	Number (persons)
Emergency repairmen	104
Machine operators	31
Gas arc welders	23
Pump unit operators	70
Screen operators	30
Repair crew workers	90
Drivers	119
Inspectors	21
Guards	81
Controllers	72
Dispatchers	21

Resource profile (quality and volume) for each facility: source (ground, surface water), main quality parameters in line with international standards or norms (chemical and microbiological properties), capacity.

The source of water supply in Donetsk is surface waters incoming via the Seversky Donets-Donbass channel. The channel is operated by GPP Ukrpromvodchermet, a state-owned company that also provides water treatment and conditioning. From two filter plants, water is fed through the main waterway network to water distribution facilities (relift pump stations) run by Donuglevodokanal.

Infrastructure

Production: description of technology and equipment for each production facility

Distribution: amount and capacity, number of pump stations, length of pipelines broken down by age and material, length of main waterways, number of meters.

Donuglevodokanal operates three water distribution facilities (relift pump stations), each with clean water tanks, an engine room and chlorination facilities. From filter plants, water is fed through a main waterway system to water distribution facilities in the city that supply water to end users in city districts. At the distribution facilities, water is first pumped into clean water tanks and following additional chlorination is fed further to in-house pump units.

Water distribution facility	Designed daily capacity, '000 m³	Actual daily capacity, '000 m³	Tanks, '000 m³	Number of pump units
6-Krasnaya Zvezda	75	50	20	8
DKZKhI	14	4,5	5	3
Mospino Waterworks	9.0	3,0	5	2

Geographically, Donetsk stands on the natural Donetsk ridge. Residential areas are extensive and combine private one-story houses and local council housing (predominantly two, five and nine-storied). Depending on local topography and altitude of residential areas, intercity networks may be equipped with booster pumps. The Company operates a total of 17 booster stations with aggregate daily capacity of 21,000 m³.

A base pump station feeds sewage to the city's centralized treatment facilities. The city's layout is such that it is impossible to arrange for all domestic and industrial sewage to free-flow to the base pump station. Accordingly, there is an extensive network of sewage pump stations, situated in round structures with an intake header and a screen section co-located vis-à-vis the engine room. Engine rooms are of the semi-submerged type with horizontal pump layout. All pumping rooms are automatic and equipped with local control units. Currently the company is implementing an automated control system based on TRASE MODE 5.0 software.

The major issue affecting the operation of water and sewerage facilities is their age, resulting in low efficiency of equipment and high energy inputs.

Due to lower water consumption by coal mining companies and other industrial users, the utilization of water and sewerage facilities stands at 30–60% of designed capacity, which also drives up the energy intensity of operations.

To resolve these issues, more efficient and lower-energy equipment is required as well as a wider use of frequency drive controls.

Sewage station	Designed daily capacity '000 m³	Actual daily capacity '000 m³
No. 1	50.0	22.0
No. 3	8.5	1.0
No. 4	23.0	9.0
No. 6	12.0	5.5
No. 7	32.0	5.0
No. 9	40.0	16.0
No. 10	9.0	1.5
No. 11	9.0	1.5
No. 13	9.0	1.0
No. 14	8.5	1.0
No. 15	7.0	1.0
Central Coal Preparation Plant	11.5	1.0
TOTAL	244.5	65.5

Pipe material (approximate data due to extensive scope of networks taken over from various organizations)

Pipes	Length, km
Steel	1,670
Cast iron	800
Asbestos-cement	11
PVC	47

Network length (age data approximate due to extensive scope of networks taken over from various organizations):

Network age	Networks	
	Length, km	% of total
10 years and below	108	4.3
10-20 years	150	5.9
20-30 years	400	15.8
30-40 years	570	22.5
Over 40 years	1,300	51.4

Techniques and equipment used for measuring water consumption, how often readings are taken (where meters are available)

The company uses the following metering equipment to monitor and register water consumption:

diaphragm gauges;

electromagnetic meters;

ultrasonic meters;

waterflow meters (turbine and fan-type).

Readings from meters at points of connection to supplier networks are taken each hour and transmitted via radio modem to the dispatch office controller.

Readings from inlet and outlet meters at water distribution facilities are taken hourly and transmitted via radio modem and by telephone.

Reading from user meters are taken visually by consumer department staff once a month.

At present the company is testing a user metering system that employs electromagnetic meters and is able to collect and store readings.

Annual issued bills – 1,620 thousand.

Water production, consumption and sales, unaccounted-for-water, water losses

	2002	9 months of 2003
Water supplied, '000 m ³	82,914	60,334
Water sold, '000 m ³	50,247	40,380
Losses and unaccounted-for-water, '000 m ³	32,667	19,964
Losses and unaccounted-for-water, %	39.4	33.1
Daily losses and unaccounted-for-water, '000 m ³ per km	48	39

Water service schedule in Donetsk – round-the-clock.

Quality of distributed water (principal chemical and microbiological properties in line with international standards or norms)

Water quality complies with GOST 2874-82 "Potable water".

Parameter	Value
Residual active chlorine	0.8–1 mg/dm ³
Color	5 ⁰ –10 ⁰
Turbidity	0.58–1.00 mg/dm ³
Hardness	6.8–7.0 meq/ dm ³
Fe, total	0.10–0.15 mg/dm ³
Ammonia	0.05–0.15 mg/dm ³
Nitrites	None found
Nitrates	6.5–8.5 mg/dm ³
pH	7.0–7.3
Coli index	< 3
Coliphage	None found in samples

C O N T R A C T
For Technical Operation of Communal Property

Donetsk

August 20, 2001

The Donetsk City Council, hereinafter referred to as the "Owner", represented by First Deputy Mayor A. A. Lukyanchenko, acting on the basis of Law of Ukraine "On Local Governance in Ukraine", and Joint Stock Company Donuglevodokanal, hereinafter referred to as the "Company", represented by Chairman of the Board V. N. Maslak, acting on the basis of the Charter, have concluded this Contract (hereinafter, the "Contract") on the following:

1. SUBJECT OF CONTRACT

1.1. The Owner shall transfer to the Company, and the Company shall accept for technical operation, water supply and wastewater networks and facilities (hereinafter, the "Assets") relating to the social infrastructure of the City of Donetsk and owned by the territorial gromada of Donetsk.

1.2. The list of items transferred shall be established by Appendix 1 and supplementary agreements to this Contract, which shall be an integral part hereto. In the event of changes in the Assets, their lists shall be provided in supplementary agreements hereto.

1.3. The transfer of the Assets to the balance sheet of the Company does not entail the transfer of title to the Assets. The Assets transferred to the Company hereunder shall not form part of the Company's charter fund and shall not be its property.

2. TERMS OF ASSET TRANSFER AND RETURN

2.1. The Owner shall transfer the Assets to the Company within ten days of the date of signing of this Contract or a supplementary contract under a transfer and acceptance certificate.

2.2. The Company shall return the Assets to the Owner within ten days of the date of expiration hereof.

2.3. In the event of early termination hereof the Company shall return the Assets to the Owner in good order within thirty days of the date of termination.

3. RIGHTS AND OBLIATIONS OF THE PARTY

3.1. The Company shall:

3.1.1. Use the Assets exclusively in accordance with their designated use and pursuant to the terms hereof, and ensure proper operation and safekeeping of the Assets.

3.1.2. Maintain the Assets in working condition;

3.1.3. Independently or with the assistance of third parties, conduct running and major repairs of the Assets;

3.1.4. Ensure that Assets are operated in compliance with the current sanitary/epidemiological, environmental and other rules and regulations;

- 3.1.5. Abstain from handing over the Assets to third parties without the Owner's consent;
- 3.1.6. Use depreciation charges for replacement and reconstruction of the Assets transferred hereunder;
- 3.1.7. In the event of termination hereof, return the Assets in good order subject to normal wear.
- 3.1.8. Ensure unimpaired access of the Owner's representatives for verification of the Asset's proper use.

3.2. The Company shall be entitled to:

- 3.2.1. Independently carry out business activities relating to the operation of the Assets;
- 3.2.2. Make changes in the composition of the Assets, reconstruct and reequip the Assets to improve the quality of user services and the technical characteristics of the Assets, as agreed with the Owner;
- 3.2.3. Issue technical specifications for user connection;
- 3.2.4. With the Owner's consent, decommission and write off depreciated or obsolete Assets;
- 3.2.5. Represent the Owner before various state authorities and enterprises of all types of ownership structure in matters associated with proper operation of the Assets and the performance of the terms hereof.

3.3. The owner shall be entitled to:

- 3.3.1. Control the presence and condition of the Assets, and the designated and efficient use thereof;
- 3.3.2. Initiate amendments hereto and demand early termination hereof should the Company operate the Assets in contravention of this Contract or the Assets' designated use, or permit, through willful action or negligence, any deterioration in the Assets, or if the Company, without the Owner's consent, hands over the transferred Assets to a third party.

4. ASSET RECORDS

4.1. The Company shall maintain accounting records of the Assets in accordance with current Ukrainian legislation.

Depreciation charges shall remain at the disposal of the Company and shall be used for Asset replacement. Any improvements to the Assets funded by depreciation charges shall be the property of the Territorial gromada.

4.2. The Company shall maintain separate analytical accounting records for the Assets.

5. LIABILITY OF THE PARTIES

5.1. For non-performance or improper performance of obligations hereunder, the Parties shall bear liability envisaged by the legislation of Ukraine.

5.2. All disputes and disagreements shall be resolved by the Parties by negotiations.

If a dispute or disagreement may not be resolved by negotiations, either Party shall have the right to refer it to a court of arbitration.

6. TERM AND TERMINATION. AMENDMENTS

6.1. This Contract shall become effective upon signing. The deemed date of signing hereof shall be the date written in the upper left-hand corner of the first page of this Contract.

6.2. The term of this Contract shall constitute five years from the date of signing.

6.3. This Contract may be amended or terminated as agreed between the parties.

Any amendments must be considered by the parties within one month's time. Unilateral renunciation of contractual obligations shall not be allowed.

6.4. This Contract may not be terminated except in instances and on grounds envisaged by current legislation.

In the event of recurrent non-performance or improper performance of the terms hereof, the Parties may initiate the termination of this Contract. In doing so, the Parties shall take governance from Clause 2.3 hereof.

6.5. In the absence of a notification from either Party on the termination or amendment of this Contract one month before its expiration, the Contract shall be deemed extended for the same period of time and on the same terms as were initially specified herein.

6.6. This Contract has been drawn in two copies having equal legal effect, one copy for each Party.

7. LEGAL ADDRESSES AND DETAILS OF THE PARTIES

THE COMPANY:

THE OWNER:

_____ N. V. Maslak

_____ A. A. Lukyanchenko

Annex 3

**CONSIDERATIONS FOR THE DESIGN OF
PERFORMANCE AGREEMENTS WITH PUBLIC UTILITIES
IN THE WATER SUPPLY SECTOR**

Guillermo Yepes

November, 2002

1. Introduction

Performance agreements between the government and a public water utility⁸³ are instruments designed to help define sector development goals and resources and the roles of government institutions to reach them.

Such agreements should be the outcome of a shared vision between the government and the utility of what these services should become, which in turn will define the resources and the financing needed to reach them. International aid agencies and donors can be instrumental in providing financial and technical assistance to help frame these agreements on solid principles and in sharing their broad experience with similar types of contracts in other countries and sectors.

2. Background

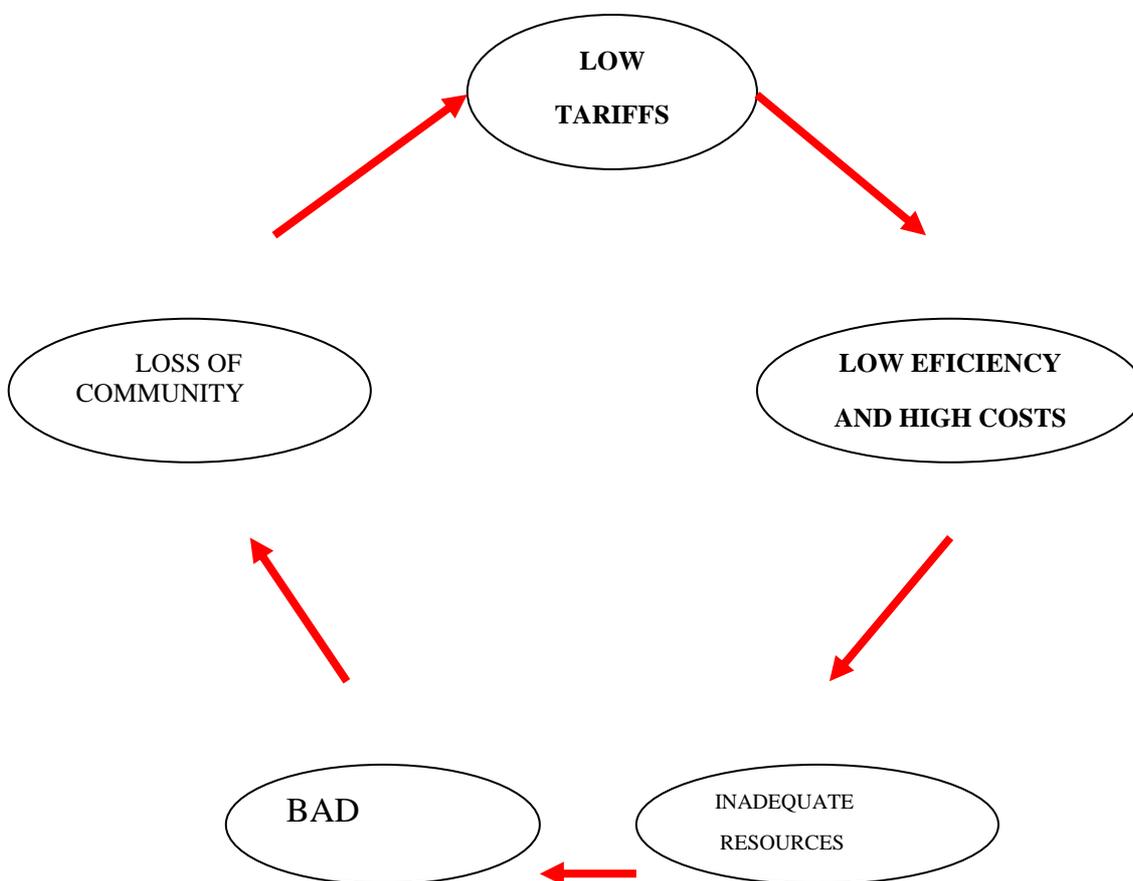
Inefficient and outmoded water supply and wastewater collection and disposal (WSWW) systems are counterproductive as they hinder local economic growth as a result of their adverse effects on the quality of life of the community and on the environment.

Most WSWW public systems in the newly independent states (NIS) inherited many of the problems of a centralized conception of the economy, as market forces and a consumer approach to services were mostly absent. These included inadequate tariffs to cover for operation and maintenance, let alone to provide the resources to timely expand supply to accommodate a growing demand for these services. As a result, many WSWW systems have reached a “low level equilibrium”⁸⁴ and public utilities are trapped in a “vicious circle” of low tariffs, low productivity and hence unnecessary high costs, deficient services including low coverage all of which lead to loss of community and political support for higher rates.

⁸³ As used in this paper, the term government can be a local, regional or central body that owns the utility. In turn, a utility is a public agency or department in charge of the provision of water services.

⁸⁴ Savedoff, W. & Pablo Spiller. “Spilled Water. Institutional Commitment in the Provision of Water Services”. Interamerican Development Bank. Washington DC, 1999.

Figure No. 1. Low level equilibrium or vicious circle



Government authorities (central and local) are becoming more familiar with good practices and contractual arrangements in other countries, which have proven conducive to improve accountability and to promote good quality and efficient services. This demonstration effect is leading their search for organizational models, including private sector participation options that could help improve services. One way is through a formal agreement that explicitly defines the obligations of the government, as owner of the service, and the expected goals to be achieved by the utility. These agreements rest on the assumption that it is also necessary for utilities to have reasonable autonomy in the day-to-day management and operational decisions and adequate resources to pursue agreed development objectives.

Many industrialized country governments use various forms of contracts or agreements to improve the performance and effectiveness of public sector agencies. They are intended to establish greater clarity over what public agencies will achieve and on the broader environment in which they operate⁸⁵. They range

⁸⁵ OECD. Performance Contracting. Lessons from performance contracting case studies. 1999

from internal managerial agreements, to contracting out arrangements. A substantial segment of recent literature on performance agreements for the provision of WSWW services focuses on contracts including some degree of private participation⁸⁶. Performance agreements, between a ministry or board and senior managers of the utility are found in the management of state-owned enterprises in many OECD countries.

These agreements break down overall strategic goals into specific, often detailed operational, processes and output-oriented targets in exchange for increased operational autonomy to achieve them and performance related remuneration or incentives (Box 1.). The desired form of a performance agreement depends on the nature of the agreement and on the overall country environment in which it takes place.

Most water utilities (vodokanals) in the former USSR countries are trapped in this low level equilibrium. On numerous occasions, performance agreements with vodokanals have been disappointing, as they have failed to produce expected results. This outcome can be traced, to a large extent, to the failure of governments to recognize and abide by the basic principles that guide the formulation of such agreements. In particular, that lack of a reasonable degree of autonomy by the utilities to pursue agreed upon goals, and inadequate tariffs are two of the major dead weights that firmly held them hostage to this vicious circle. Moreover, contractual obligations that define the rights and obligations of the government (as owner of the utility), the public utility and the users of the services are often not well defined and resources not consistent with goals.

Box 1.

Chile (1). Performance agreements between the central government and all public water and wastewater utilities during the 1990s are a success story, though the rules and institutions in place highlight the difficulty of replication.

The regulatory framework mimicked the design of a private concession:

- A professional, well-paid independent regulator;
- A price cap-like tariff formula with a 10% profit sharing bonuses to non-civil service staff provided strong incentives;
- Tariff adjustments, with predictable increases linked to efficiency gains, that allowed utilities to recover all costs;
- The right to appeal to an arbitration panel which increased the credibility of the contract; and
- A means-test subsidy, outside the tariff, administered by the central government in cooperation with the municipalities, that reduced political pressure against tariff increases.

Today, water and wastewater services in Chile are the best in Latin America and comparable to those found in industrialized countries.

(1) After Dutz (cited).

⁸⁶ Dutz, Mark. Service Contracts: Structure and context for EBRD operations. An overview note. April, 2001.

3. Elements of a performance agreement

A performance agreement, as understood in this paper, reflects the consensus reached between the government, as owner, and the public utility managers on water supply service development objectives and resources to reach them.

While the lack of legal status of one of the parties to the agreement (e.g. a municipal water department) can be problematic, many countries across OECD have successfully implemented performance contract regimes on this basis. In some countries, authorities have purposefully kept performance contracting with public utilities or agencies away from relying on formal legal contracts. They are reluctant to introduce legal rules into the way the relationship between ministers and chief executives, or departments and agencies, are managed. Others argue that legal contracts, between government and its agencies, would soon lose their focus on efficiency and management improvement and descend into a legal quagmire of legal disputes over language, intent (“fine print”) and compliance⁸⁷.

Regardless of the form of the agreement, whether a legally binding contract or a less formal contractual document, the agreement should take into account:

- The legal framework that defines:
 - The relationship between the central government, the municipality and the public utility;
 - The rights and obligations of the utility and the users; and
- The specific condition of the infrastructure.

These responsibilities and conditions should be clearly understood and reflected in the agreement to ensure that it has a solid base and hence a reasonable possibility of being successful. This paper elaborates on the main elements to consider in preparing such an agreement. To facilitate the analysis these elements have been divided into seven topics (Table No. 1):

⁸⁷ OECD. Cited

Table 1. Main elements and topic to be considered in a performance agreement

Main element	Topics
Institutional	<ul style="list-style-type: none"> ○ Parties to the contract <ul style="list-style-type: none"> ○ Internal complementary agreements ○ Transparency ○ Conflict resolution
Project scope	<ul style="list-style-type: none"> ○ Objectives ○ Time frame ○ Project site, access and easement ○ Operation of the infrastructure ○ Construction of works ○ Maintenance and capital costs
Performance	<ul style="list-style-type: none"> ○ Indicators ○ Benchmarking
Financial	<ul style="list-style-type: none"> ○ Tariff setting and adjustment process ○ Financial obligations of the government <ul style="list-style-type: none"> ○ Non-revenue and low revenue users of water
Incentives	<ul style="list-style-type: none"> ○ Remuneration of the utility ○ Staff salaries and bonuses ○ Performance penalties
Risks	<ul style="list-style-type: none"> ○ Construction ○ Operational ○ Financial ○ Regulatory ○ Performance of the utility
Customers	<ul style="list-style-type: none"> ○ Quality and level of services ○ Rights and obligations ○ Consumer satisfaction ○ Consumer campaigns

3.1 Institutional

Political and historical factors tend to inhibit many governments from stating clearly what they expect from the utility, but the performance of the utility and quality of services have often deteriorated to the point where they become willing to take this difficult step⁸⁸.

Government authorities should take the necessary actions to clarify their relationship with the public utility and between the utility and the users of services, and to provide an enabling environment within which the utility can operate and users are protected.

The creation of this enabling environment should be part of the initial effort and strategy to improve services to acceptable levels of quality and universal access in a cost effective manner. It often calls for meaningful reforms of the legal framework to ensure that entrepreneurial, financial and manpower resources respond to the right incentives to improve services. Institutional issues focus on the need for trust, flexibility and operational autonomy and on ways to resolve differences of opinion that may arise during the life of the agreement.

Parties to the agreement. A cardinal rule of an enforceable performance agreement is that the parties to the contract should have the necessary authority and control over the resources needed to honor their commitments that are part to the agreement. Therefore, utilities must have a reasonable degree of autonomy; that is an arms-length relationship with the government. Micro management of the utility, by the government, can lead to interference in the daily operations and hence to a loss of accountability that will likely affect the outcome of the agreement.

There are usually two parties to a performance agreement: the government (central, regional, local or even the board of the utility) as owner of the utility, and the managers as representatives of the utility. However, local governments in particular, and utility managers are also bound by central government regulations that may limit their ability to provide and control the resources or managerial instruments needed by the utility to reach desired goals, in particular:

Conditional or limited access to funds for capital expansion;

- Limited authority to set water tariffs; and
- Authority to hire, promote and fire staff.

In Uzbekistan and Armenia for instance, tariffs are approved by regional or central government agencies or ministerial committees, which are not necessarily parties to the contract. Moreover, most financial resources for investments are provided by the central government and local or regional governments have little control over the allocation of these resources.

In some situations, the utility may not control all the inputs to the water service and has to rely on other government agencies for these inputs. For instance, in Uzbekistan the Khorezm vodokanal, relies on another government agency for the provision of bulk water⁸⁹.

⁸⁸ Shirley, Mary and John Nellis. Public enterprise reform. The lessons of experience. World Bank. EDI Development Series, 1991

⁸⁹ KHPM Suvukava. Khoresm Vodokanal. Corporate Development Plan. First updated version. February 2002.

In addition, environmental and water resource agencies, while not parties to the agreement, can make decisions or set priorities that affect the cost of services and investments. Similarly, labor laws and central government salary guidelines often constraint the ability of utility managers to streamline staff or to retain or attract qualified personnel to improve productivity.

These constraints need to be fully understood and reflected in the agreement. Otherwise, it is likely that the agreement will be disappointing to both the government and utility managers.

Internal agreements. Public utility managers should seek to translate the goals of the main agreement into specific goals and complementary commitments with different department heads of the utility. The underlying principles of the main agreement should guide this effort. In addition, adequate resources to meet them should support department goals.

Transparency. A performance agreement should be the product of a meeting of the minds of the government and the utility on service goals and not of impositions by the former. This meeting of the minds will help make a realistic assessment of the conditions of existing services, and to define development objectives and costs and a realistic time frame to reach them. This iterative dialogue process will help strengthen the commitment of both institutions to reach desired outcomes.

But even if the spirit of cooperation exists, negotiators face several hurdles in preparing this assessment:

- The lack of reliable management information systems and information about the existing condition of the services, limits the ability of both parties to set realistic goals and cost estimates to reach them and to assess trade-offs;
- Local governments are often at a disadvantage during negotiations, as they know less than utility managers about the condition of the infrastructure, (information asymmetry), and hence about the costs needed to reach desired goals; and
- Utility managers are often not adequately aware about macro economic conditions that can affect utility performance and availability of funds. For instance, utilities in these countries are facing raising energy prices, which are being realigned as part of broad central government economic adjustment goals.

Experience has shown that investing significant resources and time to overcome the information gap, in preparing the agreement, is seldom cost-effective. In most cases, governments and public utility managers have opted to start negotiations fully aware of these shortcomings to take advantage of a political window of opportunity to move forward. What is important in such situations is to acknowledge these information gaps and to develop a strategy to overcome them over the medium term. Moreover, in preparing the first performance agreement, it is prudent to set realistic and pragmatic goals and seek advice from outside experts or consultants to help overcome some of the limitations of the information gap.

Conflict resolution. Setting medium and long-term goals and the resources to reach them is a trial and error exercise, particularly in utilities in most NIS countries where reliable information on the condition of the infrastructure is precarious at best. Moreover, goals and resources can be affected by outside unforeseen events not under the control of the parties to the agreement. The uncertainty of such events and outcomes grows towards the outer years of the agreement. Therefore, the agreement should acknowledge that differences of opinion will likely to arise during its lifetime, and therefore include agile procedures to settle these differences and to help redefine goals and resources.

A common conflict resolution scheme is an arbitration panel. However, arbitration panels might not be an acceptable form of conflict resolution among public agencies in many countries as disagreements could become highly visible and thus politically unacceptable⁹⁰. Direct dialogue and negotiations should be the preferred conflict resolution option, as this will reinforce a more collegial and likely more productive approach to problem solving. However, there are cases where an outside expert can best mediate the issue under dispute. This would be the case, for instance, of an assessment of the trade-offs and costs to replace/repair aging pipes as part on a program to reduce water losses.

A performance agreement needs to clearly indicate the type of problems to be resolved under different conflict resolution procedures and, to the extent allowed by law, that the findings and recommendations of the conflict resolution mechanism would be final.

3.2 Project Scope

In broad terms the project scope reflects the expectations of the parties to the performance agreement. In this sense the “project” encompasses all institutional, construction, operational and financing actions needed to make the agreement a reality.

Objectives. Political priorities, strategic goals in key areas of the services, and improved service standards provide the basis for setting objectives.

Local governments and utilities will likely have diverging opinions about the priority of operational goals and investments as they can see them through different perspectives. For example, utilities would like to reduce operating costs, in particular energy costs, often the result of past engineering and investing decisions, as they affect their operating costs. But reduction of energy costs may imply costly investments to install high efficiency pumps or gravity systems. The utility may fail to appreciate the cost of capital, particularly if investments are perceived as “free” (e.g. paid by the government). The government, on the other, may be reluctant to finance such investments, as there can be other investment priorities in the same or other sectors of the economy.

Setting objectives presents the challenge of how to measure and monitor them. In addition, objectives and resources should be reassessed periodically to adjust them, if necessary, to changing conditions and to incorporate lessons learned. The review period is often linked to the country’s budget cycle of resource planning and allocation.

Last but not least, the need to set realistic objectives and indicators (par. 3.3. Performance Indicators) should always be high in the minds of those who set them. Otherwise, they face the risk of becoming no more than an expression of good intentions or even wishful thinking but otherwise meaningless as a result-oriented tool.

Time frame. The time frame of a performance agreement should reflect a realistic assessment of the time needed to reach agreed upon goals. This time frame often extends over several years, but probably no more than three to five.

Uncertainties and risks work against long time frames due to the inherent difficulties in setting distant goals and assessing the resources to meet them. A short time frame may prove inadequate to reach desired goals, particularly if service conditions are in a precarious situation and deep sector reforms are needed. Irrespective of the time horizon, performance agreements should include provisions for formal periodic reports and reviews and for amendment mechanisms.

⁹⁰ OECD. Cited

Project site, access and easement. The area of responsibility of the utility should be carefully defined, as municipal geographical boundaries often do not correspond with those of the utility. Moreover, water intakes, wastewater treatment facilities and final disposal sites are often outside city limits and, as such, can possibly fall under the jurisdiction of a different local or regional government.

Municipal governments often impose restrictions on the use of the city's public facilities, such as roads or parks, particularly if access to them by the utility can perturb city life and traffic. However, utilities frequently need to make temporary use of the urban infrastructure and city facilities to promptly and effectively discharge their operational functions. For instance, the time required to remove a sewerage blockage or to repair a pipe leak depends on the availability of adequate maintenance equipment and access to make these repairs.

These restrictions can affect operational and construction timetables and costs and hence should be clearly reflected in the agreement. In addition, it is important to define *ex ante* how these restrictions apply in emergency situations, and the steps to be taken by the utility to remedy the situation and to promptly inform the government of the nature of the emergency.

Operation of the infrastructure. Defining goals pertaining to the operation of the infrastructure presents a challenge due to the close linkages that exists between investments and operations.

These linkages and possible trade-offs should be clearly understood when operational goals are being defined. For example, an intermittent water service is often the result of lack of metered consumption and very low rates that encourage wasteful consumption. This is the case, for example, in Dushanbe, Tajikistan⁹¹. In this city water supply, on average, is about 10 hours a day even when water production, on a per capita basis, is over 1,400 liters per day, and domestic water rates (in 2000) are less than US\$ 0.01 per cubic meter. In addition, interruptions to the normal supply caused by failures in pump systems – the outcome of many years of maintenance neglect - are common occurrence and can last from a few hours to several days. Therefore, goals related to increasing hours of service need to take into account complementary investments and tariff adjustments. If in similar situations, government officials are not eager to address these issues it is unlikely that the utility will be successful in improving hours of service goals.

Construction of Works. Responsibility for design, construction and financing of new works in many NIS countries often falls outside the responsibility of the utility. This is the case, for instance, in Uzbekistan where vodokanals do not have responsibility for the design and construction of large capital projects. Moreover, construction budgets have to be approved by central ministerial decree.

Therefore, in addition to the linkages between operation and investments, construction of new infrastructure needs to consider several factors:

- Who is responsible for the scope, construction, financing and cost overruns of the project;
- Who is responsible for project implementation delays. These delays can affect other goals that the utility has agreed to and its operational costs; and
- Who is responsible for the quality of the works. Shoddy construction or inadequate equipment will add to operational costs when the facilities become operational and thus affect the finances of the utility.

⁹¹ World Bank, personal communication.

Many of these construction risks can be minimized if the utility has adequate voice over most of these factors or, better yet, if it can be given sole responsibility over the scope and supervision of the project and responsibility of construction is entrusted to reputable private contractors that can provide adequate performance guaranties.

The agreement should reflect these construction responsibilities and course of action to be taken in the event that related problems (cost overruns, delays and poor workmanship) emerge.

Maintenance and capital costs. The distinction between these two is often a blurred one. What constitutes a routine maintenance or a capital cost is frequently a matter of debate. A solution to this debate is to define maintenance and capital costs in a pragmatic way. For instance, maintenance expenses can be defined as those that fall below a certain expenditure level or a physical parameter such as the replacement of less than (xx) meters of pipe per event, and capital costs are those that exceed these limits. Such a definition was used in Antalya, Turkey in the management contract with a private operator⁹².

3.3 Performance. While the main objective of a performance agreement is to define goals and resources to reach them, it is equally important to be able to measure them.

Indicators. Performance indicators provide the tools to measure objectively how well the utility is operating and is reaching desired objectives⁹³. The challenge to the parties to an agreement contract is to clearly define these indicators and how they are measured, particularly when information is not readily available or its quality is not good. Indicators should also be meaningful operational tools for different departments and levels of management of the utility. A suggested list of performance indicators is presented:

- Financial performance
 - Operating ratio (operational expenses w/o depreciation/ operational revenues)
 - Return on fixed assets⁹⁴
 - Collection efficiency
 - Accounts receivable
 - Salary or energy costs as a percentage of total operating costs
- Efficiency of operations
 - Staff per thousand water connections or persons served
 - Unaccounted for water⁹⁵
 - Pipe breaks in the distribution system per year per kilometer
 - Stoppages or breaks in the sewerage system per year per kilometer
 - Response time to complete repairs
 - Metering coverage (connections with meters)
 - Metering effectiveness (number of meter read per meters installed)
 - Free water distributed and beneficiaries

⁹² World Bank. Personal communication

⁹³ Yepes, Guillermo & Augusta Dianderas. Water and Wastewater Utilities. Indicators, 2nd edition. TWUWS, The World Bank. May 1996.

⁹⁴ Quite often this is not a meaningful indicator if the book value of fixed assets is substantially below replacement costs.

⁹⁵ In the absence of metering of both production and consumption the use of the use of this indicator is highly questionable.

- Operating parameters
 - Population served by different service modes
 - Average water production (per capita or type of user)
 - Average consumption by users (metered and unmetered)
 - Average pressure or pressure range in the distribution system
 - Average hours of service (total city or in particular neighborhoods)
 - Water quality parameters of interest
 - Percentage of wastewater treated to agreed discharge standards
- Customer service
 - Number of complains per month per 1000 water connections
 - Type of complaint
 - (billing, meter error, quality of service, in house plumbing problems)
 - Time response to satisfactorily address a complaint

This list does not intend to be comprehensive or to fully apply to any utility. For instance, if a development plan does not envision a realignment of the work force, the staff per population served indicator might not be important. Conversely, if improving the quality of service is an important goal, then indicators that can track the evolution of this goal, such as the average number of hours of water service and pressure in the distribution system and the listing of the districts where these improvements will take place should be included in the agreement. Most likely the initial list of indicators will be much shorter and evolve over time to reflect changing conditions and progress made. Moreover, all indicators used should be clearly defined in the agreement.

A frequent problem found in performance agreement in NIS countries is that they tend to contain too many performance indicators. One case in point is the 2002 corporate plan of two vodokanals in Uzbekistan⁹⁶. Their nine-year plan includes over 60 indicators most of which to be reported on a quarterly basis. There is the danger that by using too many indicators the sense of priorities can be lost as it is not likely that all of them have the same relative importance. Moreover, even in the best of circumstances, the collection and analysis of too many indicators can be an expensive exercise and distract human resources from more important activities.

Negotiators should then exercise caution, particularly when preparing the first agreement, in using too many indicators or to pressure the utility to produce them for the sake of completeness and regardless of cost. This observation is even more pertinent when the utility does not have a reliable management information (MI) system that can capture the data needed to produce them in a routine fashion.

In most situations, it is desirable to provide the resources to develop a reliable and comprehensive MI system tailored to the needs of different levels of the utility organization and the government. As this system evolves initial rough estimates, such as water losses, should become more reliable and incorporated in the outer years of the agreement or in future agreements. This is the case, for instance, in the management contract for water and sanitation services in Guyana⁹⁷ between the central government and a private operator. In this contract, seven major indicators have been defined (hours of service, water losses, collection efficiency, metering coverage, disposal efficiency, response time to consumer complaints and service coverage in small towns). As the available information on most of these indicators is scant at best, the operator will develop an MI system during the first year of the contract and based on agreed

⁹⁶ KHPM and KKPE cited.

⁹⁷ Yepes, G. and Augusta Dianderas. Rapid assessment of the water and sanitation sector in five Caribbean Countries. Interamerican Development Bank. October 2002.

procedures, will determine a reliable base line for each of them. For example, specified water service continuity parameters will be measured during months 9 through 11 of the first year of the management contract. In subsequent years, all these indicators are projected to improve according to a preset schedule built on the base line. This approach seems sensible to be used in similar situations in NIS countries, as it avoids the trap of setting goals based on unreliable information.

The government nonetheless, faces the challenge of relying on indicators provided by the utility to measure progress. The utility produces the indicators based on its operational data, hence information asymmetry, as mentioned earlier, is an inherent part of “doing business”. This limitation can be partly overcome by the use of outside consultants or experts to verify the information provided. If this option is adopted it is important to assess its costs and benefits.

Benchmarking. Benchmarking can be defined as “the systematic process of searching for best practices, innovative ideas, and highly effective operating procedures that lead to superior performance – and adapting these practices, ideas and procedures to improve the performance of one’s own organization”⁹⁸. Benchmarking techniques can be broken into metric and process benchmarking; the former helps answer the question “what should be improved” while process benchmarking helps answer the question “how it can be improved”.⁹⁹

Benchmarking originated in the private sector and has been extended to the public sector with promising results. Benchmarking is being used extensively by regulatory agencies in many sectors to introduce competition and accountability where otherwise they are difficult to establish. One of the most comprehensive metric benchmarking systems is that of OFWAT, the water regulator in England.

While benchmarking is a powerful and useful tool it also has its limitations, in particular:

- **Definition of indicators.** Definitions vary across countries and utilities even when the same terminology is used. These differences are not always easy to detect in published data. For instance, some financial indicators may or may not include depreciation charges or fail to take into account subsidies received by the utility. Some utilities, mistakenly include water wastage on private dwellings or properties as part of the unaccounted for water.
- **Operating practices.** Utilities in eastern European countries often have substantially different operational practices as compared to their western counterparts. For instance, a water connection in an eastern utility often serves hundreds of residential apartments, while the trend in most western countries is towards individual metering. As a result, it is difficult to compare some indicators, such as staff per 1000 connections between utilities in these two groups of countries. But proxies can often be found; in this case staff per population served.
- **Comparability.** Benchmarking across countries of substantially different levels of economic development is fraught with difficulties as:
 - Many indicators are affected by economies of scale (for instance, staff per connections), which cannot be easily taken into account; and
 - Cost related indicators (e.g. production cost per cubic meter) are sensitive to currency exchange rates, particularly in countries where there are foreign exchange controls.

⁹⁸ AWWA. Performance benchmarking for Water Utilities, 1996

WEF. Benchmarking wastewater treatment plant operations, 1996

⁹⁹ Liner, Barry, L. Blanken and Nora Freeman. Benchmarking. The first step toward improving operating performance. Water Environment & Technology. July 1998.

- **Economies of scale.** There are large economies of scale in the development of a benchmarking system. As a result, it is seldom cost-effective for a local government or utility to develop a comprehensive benchmarking database.

The parties to the agreement should be familiar with the limitations of metric and process benchmarking before adopting performance indicators and operating practices from a different country or utility. If they are not, it is advisable to seek outside expertise.

International aid agencies are well positioned to provide technical assistance in metric benchmarking by sharing information on utility performance and in documenting good practices conducive to effective process benchmarking.

3.4 Financial

The provision of good services, demand a financially sound utility. Reliance on government transfers or subsidies has proven to be an unreliable source of funds over the long run. Adequate and predictable tariffs are the most important source of revenue to ensure this viability.

As a minimum, tariffs should cover all operational costs, including adequate maintenance of the infrastructure, to ensure that services are efficiently and adequately provided and that the value of fixed assets of the infrastructure is preserved.

The outcome of failing to achieve financial viability has invariably been higher operational costs due to the rapid deterioration of the infrastructure and, no less important, growing customer dissatisfaction.

Tariff setting. Tariffs must reconcile several goals: a) economic efficiency (use of resources); b) financial viability of the utility; c) social objectives, and d) transparency and simplicity. It is often necessary to strike a compromise to meet them. For instance, a tariff that satisfies economic and financial criteria may preclude the poor from accessing the services and a tariff based solely on social objectives is not likely to meet the other objectives.

To ensure financial viability of the utility, a good tariff setting should meet the following criteria:

- The level of tariffs should be predictable. That is, they should be based on predefined transparent and sound criteria;
- Tariffs should also be forward looking and set in response to an agreed development program and include:
 - An automatic adjustment formula or coefficient to compensate for the loss of purchasing power due to inflation, particularly when inflation forecasts are high (say, higher than 10 % per annum); and
 - A productivity gain factor to pressure the utility to reduce costs.
 - The inflation adjustment and productivity gain coefficients could be blended into one. This is, for example the practice of OFWAT in England where a tariff adjustment factor (the “K” coefficient) for each utility incorporates these factors in response to service development and improvement goals over a five-year period.

It is worth mentioning that the tariff structure in most NIS countries is based on a cross subsidy system by which some customers (often residential consumers) pay below cost (however cost is defined) or average tariff and others pay above cost. The Nukus vodokanal¹⁰⁰ provides a good example of such tariff system.

¹⁰⁰ KKPE. Suu Akaba Corporate Development Plan. First updated version. February 2002.

Residential consumers, which account for over 98% of all users pay less than US\$ 0.10/m³, while industrial consumers pay a rate almost 12 times higher. As the utility is not recovering all costs and needs to increase revenues, this tariff system is not sustainable (18).

Many have championed this tariff structure as being pro-poor and help conserve water. While there is no doubt that these objectives are worthy goals, on a closer analysis this tariff system has often failed on both counts¹⁰¹. Moreover, many question the effectiveness of using the tariff as an effective mechanism to address social goals and several countries have opted to pursue them through special government programs (Box 2).

Recognizing the problem is a first and positive step; but no less important is to design a tariff realignment program that most likely will take a several years to be fully implemented as the Chile experience has demonstrated (Box 1).

Box 2. Subsidies

There are three basic ways to provide a subsidy to poor families to ensure access to basic services:

- **Direct payment.** From the government to the needed family to improve its disposable income to satisfy this and other basic needs. This system is used in many European countries.
- **Payment to the utility.** The government pays the utility the difference between the cost of providing service and the price charged to the consumer. This system is used in Chile.
- **Cross-subsidy.** Some users, (often industrial and commercial) are levied higher rates to compensate for the lower rates that other, mostly households pay. This system is used by many utilities in developing countries, often with disappointing results.

Low tariffs also serve to highlight the issue of diverging objectives between the government and the utility. This would be the case when the benefits of postponing construction of additional production facilities, the result of lower consumption due to metering and adequate pricing, do not accrue to the utility and the government is responsible for the cost of capacity expansion.

It is important to emphasize that a good understanding of the tariff structure is a first and important step to assess the problems it may be creating and the wrong signals is sending to consumers and the utility. Once these problems are well understood the challenge is then to find a pragmatic and politically acceptable solution. Most performance agreements in NIS countries will certainly benefit from incorporating a tariff realignment program as part of the sector reform and improvement process.

Financial obligations of the government. Governments are often responsible for financing wholly or in part the capital expansion program. As this program almost always has an impact on operations, it can also affect the performance and revenues of the utility.

¹⁰¹ Yepes, Guillermo. Do cross-subsidies help the poor to benefit from water and waste water services? Lessons from a case study. World Bank, Infrastructure Note WS-18, April 1998.

Responsibility for construction raises other concerns (par. 3.2 - Construction of works) and hence, the importance of understanding the effects of the capital expansion program on the utility's finances and performance. In addition, the government should be concerned, if not responsible for:

- **Low revenue water.** If a cross-subsidy mechanism is in place, water services are often provided at well below cost to some consumers.

One drawback of very low tariffs to some groups is that they can discourage the utility to pursue efficiency. The utility may find that it is not cost effective to read or install meters, and bill and collect, as related costs might be substantially higher than expected revenues. All these factors work against efforts to reduce unaccounted for water.

Another outcome of low tariffs observed in many in Latin American countries is that the utility fell less committed to provide a good service to these customers

- **Non-revenue revenue water.** Some municipal departments such as fire fighting or street cleaning often use water from the utility's system for their operations. In some cases water is also provided free to other users.

Another important source of non-revenue water is the non-payment of bills by some customers, often government agencies. Legal fees to force payment may also exceed expected revenues. Moreover, utilities are often constrained to act, as disconnection of non-paying consumers is often not a palatable political option.

An effort should be made to assess this volume of consumption and, if important, to find ways for the government to pay the utility for this use.

3.5 Incentives

Command and control and incentives are the two main instruments available to the government to make the utility move forward to reach desired development goals. While neither one alone is likely to produce the desired results, the recent trend has been towards using incentives as the preferred policy instrument. Incentives can be designed to influence the behavior of the utility, its personnel (management and labor force) or both.

Remuneration of the utility. The performance of the utility is closely linked to pricing and resource signals that affect outcomes. For instance, the incentive that drives a good maintenance program is likely to abate if operating funds are not adequate or if the government is responsible for funding rehabilitation projects. These problems serve to highlight the importance of a financially viable utility. As a first step, financial viability could be for the utility to cover all its operating and maintenance costs from tariffs. But achieving this modest but important financial goal is likely to require several years, as inefficiencies will also need to be removed in the process. The mixed water and sewerage company (private-public) of Gdansk has followed the latter approach with positive results.¹⁰² Many water utilities in Latin America, for instance Quito, have implemented substantial rate increases linked to noticeable service improvements and supported by consumer campaigns

Staff salaries and bonuses. Well-qualified staff is key to the delivery of an ambitious development program. To retain or attract this staff depends, to a large extent, on the remuneration package offered by

¹⁰² Rinsgkog, Klas. Private Sector Participation in Water and Wastewater; opportunities and risks. World Bank seminar in Ankara, Turkey, 2002

the utility. This is a complex issue, particularly when utility's salaries are below comparable government and private sector pay scales.

Utility's employees are often one of the victims of the "vicious cycle" as inadequate services and low tariffs lead to low salaries. When this is the case, incentives can be built to raise salaries to more competitive levels in response to productivity gains. For instance, if net cash revenues (collections less operational costs) exceed a certain level, an important part of this surplus could be allocated to improve salaries. In similar form, top management salaries and perks can be tied to comparable pay scales or adjusted in relation to productivity gains. Salary adjustments linked to productivity gains are a win-win situation as it motivates staff and improve the utility's bottom line.

Salary bonuses linked to productivity gains are not allowed in many countries (e.g. Latin America), and when allowed they can have some drawbacks if they cannot be spread out throughout the organization. In such cases, it is likely the departments and staff left behind might not cooperate and even undermine the actions taken by other utility's departments in pursuing development goals.

South Korea has used with some success, in addition to salary bonuses, non-cash incentives to motivate staff and managers of public enterprises¹⁰³ (Box 3).

Box 3. Korean non-cash incentives ⁽¹⁾

"The ranking of state-owned-enterprises is published in the press and has become the subject of intense competition, and for the top level executives the ranking of the company is considered as, if no more, important than bonuses. Because the targets are based on improvement over past performance, the top ranked enterprise may not be the most efficient firm,....but rather the one showing the greatest progress".

(1) Shirley, cited

Performance penalties. Penalties for failure to reach agreed goals are the flip side of bonuses. One without the other is not likely to produce desired outcomes. As bonuses are often tied to specific productivity gains, penalties could also be linked to shortfalls in reaching agreed goals.

Financial penalties to public utilities are also debatable if not counterproductive. These utilities operate under a soft budget constraint (e.g. goals and resources are not closely matched) and, therefore, any penalty imposed on the utility is ultimately paid by the consumer, either through higher rates or offset by budget cuts that can lead to inadequate services.

On the other hand, it is often difficult to impose financial penalties on or to demote personnel for failings of the utility to reach desired goals. In most situations, firing is the only option and even then it should be used sparingly.

Some water regulators (e.g. OFWAT) have introduced penalties to compensate users for lapses in services, which are paid automatically by the utility to the affected customers. This system has the advantage that it

¹⁰³ Shirley, Mary M. Improving Public Enterprise Performance. Lessons from South Korea. World Bank. Country Economics Department. October 1989.

compensates to end-user and tacitly forces the utility to admit the mistakes made. However, it is not likely that this system can be applied in the early stages of a performance agreement, particularly when quality of service is a dire situation; nonetheless it is worth to keep this idea in mind.

3.6 Risks

A contractual relationship, particularly a long-term one, inevitably involves risks for the parties involved¹⁰⁴. Risk is a measure of potential loss when the performance agreement fails to perform as expected. Therefore, risk can be translated into a cost in terms of money or higher morbidity rates due to poorer services, or any other measure of failure¹⁰⁵.

It is not likely, however, that risks associated with underperformance of public utilities can be translated into commensurable financial penalties. Nonetheless, during the due diligence process while preparing a performance agreement, it is important to identify and understand the nature of the risks and how to allocate and mitigate them. A cardinal rule in risk allocation is that the agency that has better control over the risk should assume it.

The most important risks associated with a performance agreement are likely:

- To the utility:
 - Financial, and regulatory
- To the government:
 - Performance of the utility

Financial risks. Are primarily those that can affect the cash flow of the utility, among them:

- **Construction delays.** Operations and capital expenditures (e.g. construction) are closely linked. Failure to deliver capital works on time is likely to affect the cost of operations (see par. 3.2 Project scope- Construction of works).
- **Block sales.** Some utilities sell bulk raw or treated water to other communities or utilities, which in turn are responsible for collecting payments from users. Quite often, water purchase agreements are rather informal and prompt payment from these communities is not always the case. For example, the Aspheron regional water company of Greater Baku in Azerbaijan sells bulk water to several vodokanals, which are often late in their payments. This situation puts a strain in the utility's finances, as the option to shut off the water supply to an entire community to pressure payment is often politically not acceptable or enforceable. To avoid this problem in some countries, such as Mexico, government transfers and utility or municipal revenues are pledged to secure these payments.
- **Payment from users.** Some governments limit the power of the utility to demand prompt payment from users for services rendered, including the ability to cut services. If such limitations exist, it is important to explore ways to remove them and, if not possible, then the government should take responsibility for these payments.

In addition, many government agencies do not pay for services or payment is often late. This should be an unacceptable practice and in some countries a satisfactory solution has been found. The cost of services is

¹⁰⁴ The World Bank. Tool kits for private sector participation in water and sanitation. Washington, 1997

¹⁰⁵ Howard, Charles D.D. Sustainable Development – Risk and uncertainty. Journal of Water Resources Planning and Management. ASCE, Volume 128, Number 5. September/October 2002.

made explicit in their budgets and the treasury pays directly to the utility. Reconciliation of payments and cost of services provided is made around budget approval time.

Regulatory risks. As mentioned earlier, the parties to a performance agreement may be constrained in setting goals and defining investments by other government agencies that have the power to set priorities in areas like the environment or water resources. Quality standards or goals imposed by these agencies can affect the finances of the utility. It is therefore, important to understand how the dynamics and the implications of their decisions on the performance agreement.

➤ **Tariffs.** Perhaps, one of most significant risks that a utility will face is the failure of the responsible government agency to approve tariffs in a timely fashion. To minimize this effect, tariffs can be automatically adjusted according to a predetermined schedule, during the lifetime of the performance agreement.

Utility performance. The government always faces the risk the utility will not be able to deliver its end of the agreement. As penalties to compensate the government are difficult to impose or even questionable, most likely to only recourse available to the government is the dismissal of key utility officials for failure or incompetence or, at the extreme, to reorganize the utility. The real threat of dismissal or restructuring can be a powerful instrument to induce a positive behavioral change.

3.7 Customer services

The overarching goal of any utility is to provide a service that satisfies its consumers. Consumer satisfaction depends on service factors under utility's control such as reliability and quality of services, and effectiveness and expeditiousness in handling consumer's complaints. But customers' perceptions of fair practices and of "just" tariffs are also important.

Quality and level of service. The public is always interested in those aspects of the service that affects them most: quality and cost. Quality service attributes include type of service, reliability and hours of service, pressure and water quality.

All users often do not benefit equally from these quality attributes and, under some circumstances, it will take time to provide good quality services to all. The public needs to understand these problems and the need to set priorities, concomitant with resources. Acceptance of these priorities can be enhanced by tariffs that are linked to service improvements. For instance, significant tariff adjustment could be implemented once service is improved.

Rights and obligations. It is important to define the rights and obligations of both the utility and the users. These are often reflected in the service contract between the utility and the user. The utility should have the right to be paid promptly and the obligation to provide a good service. The user should have the right to non-discriminatory access to services and to see their complaints courteously and promptly resolved. But they should also have the obligation to pay promptly and not to harm the infrastructure by careless acts (like discharging harmful substances into the sewerage system).

Consumer satisfaction. One important consideration in setting goals related to consumer services is how to measure consumer satisfaction. One indicator could be the number of complains, or indirectly the time response by the utility to address complaints. However, care should be taken in interpreting results (See Box 4).

Box 4. Consumer complaints.

Cartagena, is an historic Colombian sea port on the Caribbean, with a population of some 800,000.

Soon after services were transferred, under a long-term management contract to a private operator, consumer complaints increased almost exponentially. A closer look revealed that customers, for the first time, found that the new management and staff were willing to courteously listen to their complaints and resolve them within a reasonable time. Previously, the municipality-owned utility treated the customers badly and problems were seldom resolved. Customers found little value in complaining and hence complaints were few. Under the new private sector management, consumers found that their queries were promptly answered and therefore found it worthwhile to file a complaint. When service conditions began to improve, the number of complaints decreased to comparable levels in well-run utilities.

Consumer campaigns. Consumer perceptions, whether they are valid or not, are important as they determine the support that the public is willing to give to the utility in implementing reforms. Many reforms, likely to be at the center stage of a performance agreement, can span for several years and affect the cost of services to some users or put pressure on utility personnel to be accountable for results. Reforms therefore, imply that there will be winners and losers and the public needs to understand these trade-offs.

The utility through well-designed information campaigns should keep the consumer well informed of the reforms being pursued, who the beneficiaries and losers will be and the associated costs. These public information campaigns should be designed with the help of communication experts and avoid making promises that the utility cannot reasonably keep. Otherwise, there is a high risk that public opinion will turn against the utility.

4. Conclusions

The main elements of a performance agreement should provide a road map to the design of such instrument. They should be determined on the basis of a due diligence process to assess the local framework and where the utility is coming from and where and how fast the government would like services to improve.

Not all the listed elements of a performance contract are necessarily relevant to a particular situation. Nonetheless, it is likely that a performance agreement will include at least the following:

- *Institutional.* Parties to the agreement with a clear description of their roles and obligations;
- *Project scope.* Statement of project scope and realistic goals and resources to reach them;
- *Performance.* Selection and definition of performance monitoring indicators and scope and frequency of reporting requirements; and
- *Financial.* Predictable tariff setting mechanisms and financial obligations of the government.

These basic elements common to a performance agreement are a necessary but not a sufficient condition for success. As the experience with performance agreements in NIS countries has shown, the need for parallel substantive sector reforms has to be considered.

While it is appealing to use a blue print or template that have proven satisfactorily in other countries or sectors when preparing a performance agreement, there is the danger that the local context of the model agreement (local conditions which include the legal framework, public service tradition in dealing with customers that make the agreement work, etc.) might not be well understood or even replicable to a particular situation in another country (Box 1). For instance, the model French affermage (leasing) contracts¹⁰⁶, might look simple but behind them there is a supportive legal framework and civil service tradition that is not at all evident to the occasional reader and which may not be applicable or relevant in another country. Similar recommendations have been made by other organizations such as the Department of the Environment and Local Government of Ireland in its policy framework for public-private partnerships: “it is not possible to anticipate all relevant issues in pre-packaged standard documentation and contract forms, ...there is a learning process that must be gone through”¹⁰⁷. International finance institutions such as the World Bank¹⁰⁸ and private operators¹⁰⁹ are also reluctant to the use of “model contracts”.

There is no substitute for due diligence in the preparation of a performance agreement and model contracts, can easily be misused by inexperienced, albeit well intentioned, practitioners. Nonetheless, there is value in the careful study of other performance agreements and similar instruments such as management contracts with private operators, as they can provide useful ideas that can be adapted to the local situation. In doing so, it is important to become familiar with the conditions of the “model” contract and its underlying assumptions before adopting it to a particular situation.

¹⁰⁶ Cahier des Charges Type. Pour la exploitation par affermage de un service de distribution publique de eau potable. Ministry of the Interior, France, 1980.

¹⁰⁷ Department of the Environment and Local Government, Ireland. A policy framework for Public Private Partnerships. 2002.

¹⁰⁸ World Bank. Tool kits for private sector participation (cited)

¹⁰⁹ OECD, personal communication.