



Environmental Policy and Technology Project

For the New Independent States
of the former Soviet Union

Prepared for
Bureau for Europe and the New Independent States
U.S. Agency for International Development

By
A USAID Project Consortium Led by CH2M HILL

Environmental Policy and Technology Project _____

Contract No CCN-0003-Q-09-3165

UKRAINE
**Report: Strategic Policy &
Institutional Strengthening for
Lviv Vodokanal**

September 1997
Delivery Order 9 - Task U2

Prepared for
Regional Mission to Ukraine, Belarus & Moldova
U S Agency for International Development

Prepared by
Ukraine, Belarus & Moldova Regional Office
Environmental Policy and Technology Project
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PREFACE

Under the 1992 Freedom Support Act, the United States Congress initiated a program to provide various forms of assistance to new independent states (NIS) of the former Soviet Union. Cooperative Agreements were signed between representatives of the U S government and each country in which assistance was to be undertaken. The U S Agency for International Development (USAID) was given the responsibility to coordinate all U S government assistance to the NIS under the Act.

Through competitive bidding, USAID awarded a multi year contract to a team managed by CH2M HILL International Services Inc (CH2M HILL) to support implementation of an environmental assistance program to republics of the former Soviet Union. Under this contract, termed the Environmental Policy & Technology (EPT) Project, CH2M HILL is to assist USAID's missions in Moscow, Kyiv and Almaty undertake a program to promote environmental improvements in the NIS. The USAID mission in Kyiv supports environmental, and other, assistance programs to Ukraine, Belarus, and Moldova. CH2M HILL established an office in Kyiv from which to perform services in these countries under the EPT Project.

This report was prepared as a contractually required deliverable under a contract between USAID and CH2M HILL. Although work on this report was conducted in cooperation with the assisted governments and USAID, the findings and recommendations are those of the CH2M HILL team. They do not necessarily represent official positions of the governments of the assisted countries nor of the United States of America.

The CH2M HILL team includes the following organizations:

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- Clark Atlanta University/HBCUMI Environmental Consortium
- Consortium for International Development
- Ecojuris
- Environmental Compliance, Inc
- Harvard Institute for International Development
- Hughes Technical Services Company
- International Programs Consortium
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NOTIFICATIONS

NOTE ON TRANSLITERATION

Ukrainian personal, institutional, and place names used in EPT documents are transliterated into English from Ukrainian (not Russian), according to the modified U S Library of Congress standard for Ukrainian-to-English transliteration that has been adopted by many Western organizations and publications, including the *Encyclopedia of Ukraine* (University of Toronto Press, 5 vols, 1984-1993) and O Subtelny's authoritative *Ukraine A History* (University of Toronto Press, 1988, 2nd edition 1994), as well as by the Ukrainian Commission on Legal Terminology (Resolution No 9 dated 19 April, 1996)

NOTE ON COST ESTIMATES

The opinions of cost shown, and any resulting conclusions on project financial or economic feasibility or funding requirements, have been prepared for guidance in project evaluation and implementation from the information available at the time the opinion was prepared. The final costs of the project and resulting feasibility will depend on actual labor and material costs, competitive market conditions, actual site conditions, final project scope, implementation schedule, continuity of personnel and engineering, and other variable factors. As a result, the final project costs may vary from the opinions of cost presented herein.

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ABBREVIATIONS, ACRONYMS & GLOSSARY

BAH	Booz, Allen and Hamilton
CH2M HILL	CH2M HILL International Services, Inc A U S -based international environmental engineering consulting firm under contract to USAID to implement a large component of the EPT Project
COWI	COWI Consultants (Denmark)
DO	Delivery Order
e g	for example
EPT	Environmental Policy & Technology (Project) A USAID-funded program to provide environmental assistance to New Independent States of the former Soviet Union
ICEA	Council of Associated Engineers and Economists (France)
kbv	karbovanets
konto	Vodokanal customer account based on a water supply connection
LVK	Lviv Vodokanal (municipal public water utility)
NIS	New Independent States (of the former Soviet Union)
No	number
Nos	numbers
oblast	A government territorial-administrative unit in the former Soviet Union that is still in use following Ukraine's independence A U S analogue would be something between a state and a county
PADCO	Planning & Development Collaborative, Inc A U S -based consulting firm under contract to USAID to implement part of the U S government's assistance program to Ukraine's housing and communal services sector
US \$ or USD	United States dollar
USD/h	dollars per hour
USD/d	dollars per day
USAID	U S Agency for International Development
vodokanal	A quasi-government agency responsible for municipal water supply and wastewater collection and treatment A U S analogue would be a water utility
WB	World Bank (International Bank for Reconstruction & Development)
ZhEK	A municipal entity responsible for operation and maintenance of houses and multi-apartment buildings owned by city administrations, as well as water, sewerage, gas, electricity, and heating systems within them

Section 1 INTRODUCTION

As part of a United States government bilateral assistance program, the U S Agency for International Development (USAID) is supporting environmental management in Ukraine. Under direction from USAID, a consortium led by CH2M HILL International Services, Inc (CH2M HILL), is implementing part of USAID's Environmental Policy & Technology (EPT) Project by undertaking various tasks that have been agreed to by representatives of the governments of both countries.

Under Delivery Order 9, Task U2, the EPT Project is providing technical assistance and equipment to the city and vodokanal of Lviv in order to develop technical and management model methodologies that will serve as a model for nationwide implementation of municipal water and wastewater sector economic reforms.

Subtask 4.1 required CH2M HILL to

draft a proposed Strategic Policy for the consideration by the Lviv Vodokanal, the purpose of which shall be to define the type of organization the City and the Lviv Vodokanal want the utility to become, including its capabilities, financial self-sufficiency and its relationships with other entities, particularly the City of Lviv [and] work with the officials in the Lviv Vodokanal to apply a program of institutional strengthening of their management system

Subtask 4.2 required CH2M HILL to

[determine] the legal basis for the Lviv Vodokanal, appropriateness of the organizational structure, include an examination of the legal and historical role of the Zheks in managing the affairs of public housing units, evaluate the status and adequacy of computer hardware and software

Subtask 4.3 required CH2M HILL to

develop a program for institutional strengthening that will transform the Lviv Vodokanal into a water supply utility which is operated in a manner similar to commercially and service-oriented businesses, in accordance with modern utility management practices, which will become capable of providing a quality service at an affordable price while being financially self-sufficient

This report presents the results of implementing the abovementioned requirements.

Section 2 STRATEGIC POLICY

The LVK like every other vodokanal in Ukraine was dependent on the central government for its capital funds. The operating and maintenance funds were to come from the consumers in the community. This latter income was heavily weighted towards revenues from industrial enterprises with the communal and residential sectors paying considerably although they got the majority of the services.

The current problem with finances and infrastructure has occurred for a number of reasons. For the past 10 to 15 years there has been insufficient funding of rehabilitation so that much of the infrastructure, under any economic system was reaching the end of its useful service life. In addition with the restructuring of the economy after independence, the central or even the municipal government was no longer able to provide any funds for capital improvements and the industrial base that formerly paid the bills were no longer able to support the water and wastewater system.

Tariffs were modified to move more of the burden on the communal and residential consumers but these too suffered from insufficient income to really contribute to the revenue of the LVK. With the shift in the revenue system, slow improvements are being seen as residents and communal organizations begin to understand and plan to help pay for water and wastewater services.

There is considerable discussion as to how institutional changes could change the economic situation with the LVK. To be realistic, it is doubtful that just restructuring the LVK could bring about the changes needed. In fact it is possible that a rapid change in the institutional structure could make things worse. Restructuring needs to be carried out thoughtfully so that the good parts of the old system are retained and new changes added carefully so as to introduce needed improvements to the institutional structure.

The key to successful operation in the future is to make income equal or exceed expenses. This can occur, or not occur, under any organizational structure. The significant part of the consideration of institutional strengthening is to agree upon a strategic objective. It is suggested that the strategic corporate objective for the LVK should be to have

A vodokanal that is organized and operated so that it can

- Provide proper water and wastewater service to its customers
- Operate as a financially self-sustaining basis

Since the LVK currently has infrastructure that is physically worn-out and an organization that is severely undercapitalized it will mean that considerable funds will need to be invested in order to provide proper service.

Only by being financially self-sustaining can a vodokanal be assured of operating while providing suitable service for its customers in the long term.

The most important policy should be that the vodokanal is organized and operated to be financially self sufficient. This can be done in any of the methods of institutional strengthening that are mentioned in this report. The key is the will to operate in this fashion and the leadership to carry it out.

Institutional strengthening should be an evolutionary process that develops as the system improves internally to meet the new conditions in the community. In the end the strength of a vodokanal will be dependent on the strength of the economy of the community it is associated with as this will be the ultimate source of funding to keep it in business.

Section 3 INSTITUTIONAL STRUCTURE OF LVK

3.1 DESCRIPTION

3.1.1 Legal Basis

The Lvivvodokanal Municipal Communal Enterprise (LVK) is an independent state self-financing enterprise responsible for maintenance and operation of water and wastewater systems, including water distribution and wastewater systems, well fields, pump stations, and a treatment plant

Certificate No 04174, registered on 26 November 1992 at the Lviv Executive Committee, states that the vodokanal is a municipal communal enterprise, founded by the City Council, in the person of the housing and communal services department of the Lviv Executive Committee. Legal relations between LVK and the Lviv City Council, in the area of ownership and control of fixed assets, are specified in the vodokanal's charter

The charter of the Lviv vodokanal specifies that the Lvivvodokanal Municipal Communal Enterprise is under the communal ownership of the Lviv City Council (Paragraph 1.1). In accordance with Paragraph 2.1 of the charter, the main objective of the enterprise is to supply the city with water, receive and treat wastewater, and provide services to the population, enterprises, organizations, and institutions. In its production activity the enterprise has the right to take any decision in accordance with current legislation of Ukraine. State, public, or cooperative bodies and political parties or movements are not allowed to interfere with the production or other activity of the enterprise, except in cases stipulated by current legislation of Ukraine (Paragraph 6.1). Losses inflicted on the enterprise by other bodies or officials who have violated the rights of the enterprise or performed their duties badly (responsibilities stipulated by law) in regards to the enterprise, shall be indemnified by them.

3.1.2 Management Structure

The management structure of an enterprise determines the efficiency of production. Therefore it should be simple and economical in order to ensure

- continuous and reliable production
- complete monitoring and management of production
- continuous technical and organizational upgrading of production
- quality technical services and efficient work of auxiliary and servicing departments
- logical hierarchy of management subdivisions
- logical interrelations between management subdivisions
- effective circulation of documents

The management structure of Lvivvodokanal is presented in Figures 3-1 and 3-2

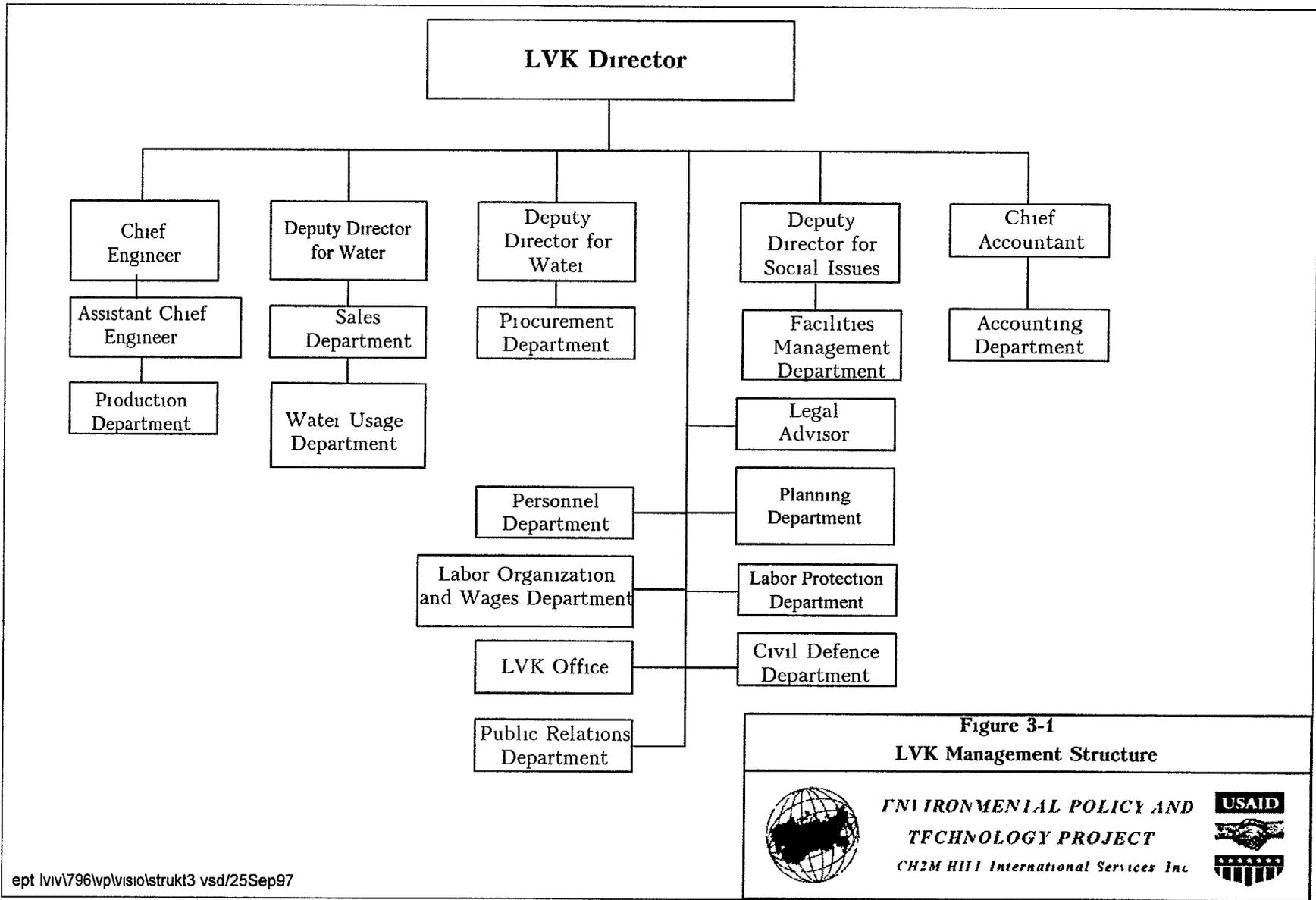
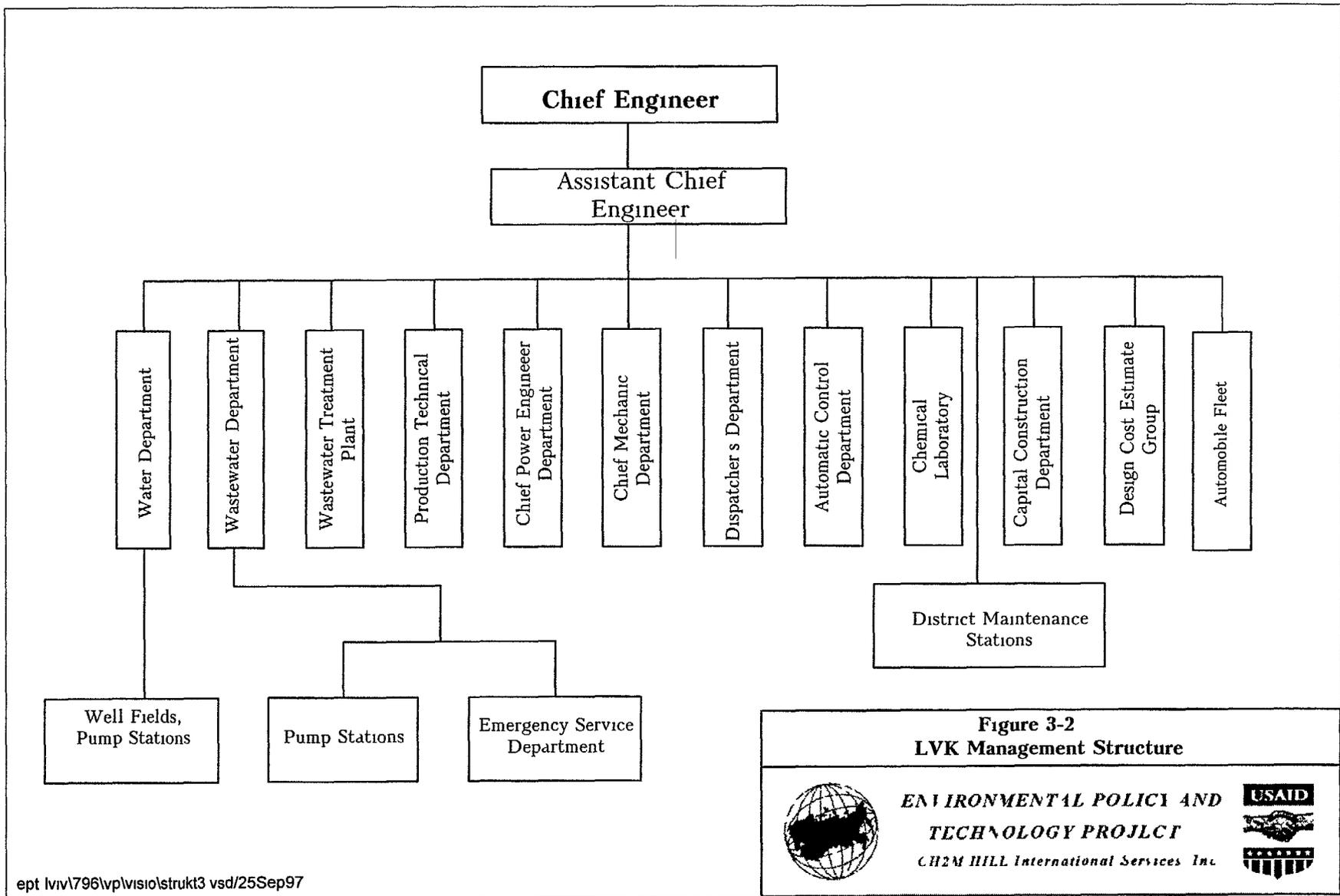


Figure 3-1
LVK Management Structure



*ENVIRONMENTAL POLICY AND
 TECHNOLOGY PROJECT*
 CH2M HILL International Services Inc.





3 1.3 Administrative Structure

The Director and his deputies are responsible, within their authority, for overall management of LVK

The LVK Director is ultimately responsible for the results of the production activities of the vodokanal. He is in charge of monitoring and resolving ongoing production, economic, and financial issues, determining long-term development potential of the enterprise, working with the staff, giving orders and instructions, and taking part in city conferences

The chief engineer is the first deputy director of the enterprise. Together with the director, he is responsible for the effective management of production and technical matters. As chief engineer, he is in charge of the production activity of the enterprise, and responsible for implementing progressive technical policies

The recently-established department of public relations is responsible for rapid response to questions, complaints and published articles concerning LVK activity, it also conducts informational and educational campaigns using the mass media

3 1.4 Relations with ZhEKs

Until the beginning of 1997 the residents of Lviv (except those living in privately-owned houses) paid for communal services, including LVK services, into a single communal account at ZhEKs (municipal public housing bureaus). This arrangement is shown in Figure 3-3. The LVK sales department was responsible for billing, while payments were collected via the

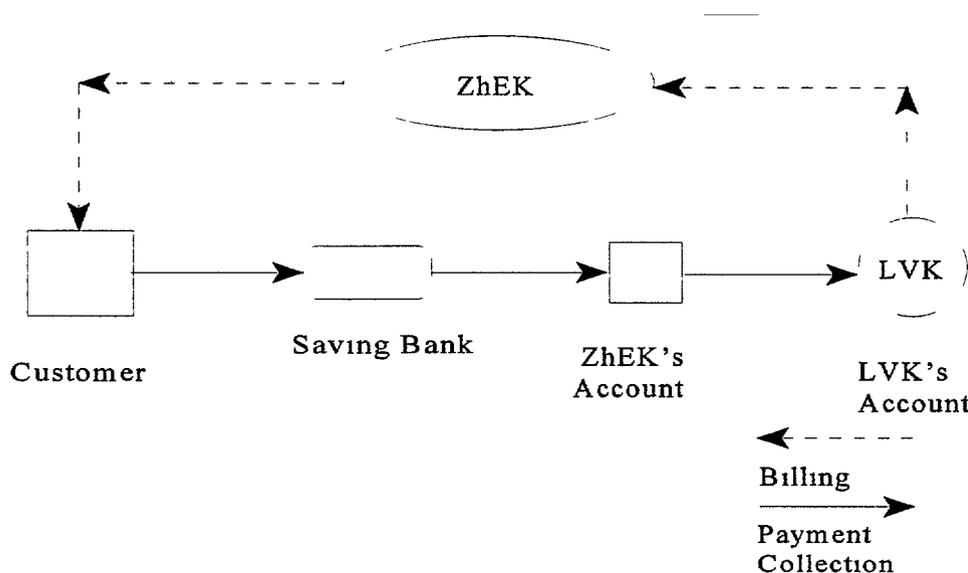


Figure 3-3 LVK Billing and Payment Collection via ZhEKs (under a single account including other communal services)

banks LVK would write out bills for water and wastewater services for each primary customer account, and the ZhEKs were responsible for issuing bills to each individual consumer, and collecting payments. During a monthly billing procedure ZhEKs were supposed to provide LVK controllers/inspectors with the latest data on the apartments under their authority, so that LVK could make appropriate recalculations.

Analyses carried out by LVK showed the inefficiency of this procedure. Payments for water and wastewater services into a single account, together with other communal services, had the following considerable drawbacks:

- Many families could not afford to pay a single large bill for all communal services (of which LVK charges were about 10 percent), thus, they failed to pay for LVK services.
- ZhEKs did not transfer the payments in full to the LVK bank account. An audit carried out by the revision department, taxation inspectorate, and financial bodies revealed that as of 1 January 1996 the residential sector had paid 63.7 percent of the amount billed, while the ZhEKs had transferred only 38.5 percent to the LVK bank account, thus, the ZhEKs were holding back 25.2 percent of the amount LVK billed.
- payments that the ZhEKs did transfer were significantly delayed.

Therefore, in January 1997 LVK started introducing customer pay-books so that the residential group could pay for water and wastewater services directly to the LVK account (see Figure 3-4). According to a PADCO report, the residential customer category consumes approximately 53 percent of the total amount of water billed to all four groups (*Lviv Vodokanal: Improvement of Cost Recovery*, pg. 15/3).

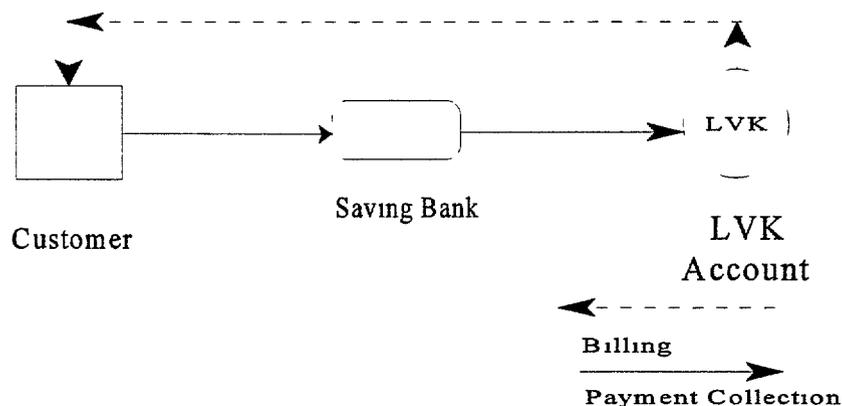


Figure 3-4 Direct Billing and Payment Collection by LVK Sales Department

As a result, during the 1st half of 1997 LVK received 4,022,000 UAH from the residential sector, which had paid only 4,015,000 UAH for the whole of 1996.

3.1 5 LVK Computerization

LVK has recently been actively introducing computers into its administration activity, under the management of the Automatic Control Systems Department. Presently, there are about 30 computers in various LVK departments. The computers in most departments are stand-alone, but in some departments the computers form a network. Computers are installed in the following LVK departments:

- Automatic Control Systems
- Sales (computerization bureau)
- Personnel
- Accounting
- Dispatch
- Water Usage and Wastewater Discharge Monitoring
- Public Relations

3 1 5 1 Description of Present LVK Computer Functions

Sales Department

The sales department has 13 computers. Compared with other LVK departments it has the largest number of computers because it has to process data on a large number of customers. Installation of computers has allowed improvement of both maintenance of data on all LVK customers and of the billing process. Direct access to the data also allows for improved work with debtors.

Industrial enterprises have been mainly paying for LVK services by barter or mutual clearing of debts. Accomplishing these operations requires accuracy and efficiency, and this can be achieved by using computers. LVK was able to start direct billing of the residential sector mainly due to computers. Work with the residential sector involves large amounts of data on billing, payment collection, and monitoring and analysis of revenues.

Accounting Department

LVK accounting processes a great amount of economic information, and quite often it is necessary to obtain various data on the enterprise's status for different documents. However, this department has a shortage of computers and complete computerization is planned for the future. Presently, computers are used for automating wage calculations and accounting.

The accounting department has two computers for filling in accounting journals. So far, only the filling of journals 1, 2, 6, 7, 11, 12, and 15 is done with computers. Automated filling of the Principal Book has already been started.

Two other computers form a workstation for wage calculations. One of the computers contains a database, while the other one is used for calculating wages. These two computers are part of a network which also includes three computers in the personnel department. They are used for automated records on personnel, and also for a database on current legislation.

In the near future one more computer should be installed in the accounting department and another one in the procurement department. Subsequently it is planned to set up a network based on these computers, connecting LVK's three warehouses, the accounting department, the procurement department, and the deputy director for procurement. In addition, the network will also be connected with the sales department. The purpose of creating such a network is to improve inventory, circulation of materials at the enterprise, and their effect on production costs.

Water Usage and Wastewater Discharges Monitoring Department

This department has six computers, used mainly for calculating fees to be charged for booster pumping, and for keeping records of payments. In addition, the computers are also used to generate the following documents: norms of wastewater discharges, agreements between LVK and ZhEKs on booster pumping, and agreements between LVK and Teplokomunenergo on heating water and pumping hot water to customers.

Automatic Control Systems Department

There are three computers in this department (working closely with Dispatch). Presently, the main objective of the ACS department is computerizing LVK transmission mains. All information received on leakage in the transmission mains is transferred to the dispatcher department, and then to district O&M stations. After elimination of the leakages, the related information is transmitted back to Dispatch and the ACS Department. All the information is also submitted to the Chief Engineer, who has a computer connected to the ACS computer network.

Dispatch Department

There are six computers in the department. They display ACS data on the water supply network, with parameters of pump station performance and valve status along the transmission mains.

— 3 1 5 2 Future Phases of LVK Computerization

In the future it is planned to connect the LVK Automatic Control Systems with those of the Teplokomunenergo heating utility, in order to receive reliable information on water pressure at boiler houses and heating stations. The exchange of information will permit solving a number of long-term controversies between LVK and Teplokomunenergo, and will also improve payment collection by LVK.

LVK is expecting to receive another three computers for Phase 2 of computerization, i.e., to install radio communication systems at all pump stations. Thus, an effective system for obtaining information will be created, allowing rapid response to all the changes that occur in the water supply system.

Phase 3 of computerization aims to connect the 72 most-elevated nodes of the network, with pressure sensors for automatic control of water supply. This will allow to improve the water supply of the city in general, and will allow to bring the level of service to the residential sector into line with demand and payment for services. This phase should significantly

improve LVK's financial condition, since the present low payment rate by residents is accounted for not only by inability to pay but also by poor service on the part of LVK

Phase 4 anticipates setting up a control system covering the entire city water distribution system. However, LVK's financial problems are currently hindering introducing this system.

3.2 ADVANTAGES OF THE EXISTING LVK INSTITUTIONAL STRUCTURE

LVK's existing institutional structure is determined by the current legislation of the country, but it is still in accordance with management regulations that were in effect under the command economy system. Under conditions of a stable economy and legislative basis, the established institutional structure had certain advantages. Since Ukraine has become an independent state, the structure has been affected by some changes in legislation. LVK's current institutional structure has the following characteristics:

- monitoring of a vitally important branch of the national economy by central governmental bodies, exerted via the State Committee for Construction, Architecture, and Housing Policy of Ukraine¹
- implementation of state policy concerning integrated development of housing-communal infrastructure, including water and wastewater systems
- development and approval of regulations on operation and maintenance of communal facilities that are mandatory for water and wastewater enterprises, and monitoring their observance
- activity of City Councils aimed at efficient usage and protection of water resources and their replenishment
- monitoring of usage and protection of water resources and their replenishment
- establishment of regulations on general usage of water resources
- reducing or temporary banning (halting) of the activity of enterprises or facilities violating the provisions of water legislation
- organizing work involved in the elimination of after-effects of accidents and natural disasters resulting in deterioration of the quality of water or its harmful effects
- providing the residential sector with information on the condition of water resources

¹ The State Committee for Construction, Architecture, and Housing Policy of Ukraine was created by Order of the President of Ukraine No. 773/97 of 11 August 1997, on the basis of the former State Committee for Urban Planning and Architecture of Ukraine and the former State Committee for Housing and Communal Services of Ukraine. This Committee has inherited all rights and responsibilities of the eliminated committees.

Current legislation does not allow the inclusion of capital investments and loans into vodokanal tariffs for services. The capital investment funds are to be allocated by city councils. However, under the present condition of economic and legislative crisis (laws are drawn and approved by the Verkhovna Rada, but not adhered to), these characteristics have some disadvantages.

3.3 DISADVANTAGES OF THE EXISTING LVK INSTITUTIONAL STRUCTURE

Under conditions of ongoing economic reforms in Ukraine, one of the areas which has encountered great difficulties is the housing and communal sector including its water and wastewater subsector. Following are the main problems at LVK, indicative of those being felt by the subsector as a whole.

- Presently LVK is not financially and economically independent, even while state support is practically nonexistent. Relations between LVK and the local governments are not grounded in common economic interests, and have not been formalized under an agreement, as was stipulated by Decree of the President of Ukraine (dated 12 March 1994) and by Letter No. 45-11-593 of the State Committee for Housing and Communal Services (SCHCS, dated 11 April 1994).
- After the law *On Local Councils of People's Deputies and Local and Regional Self-Government* was passed (26 March 1992) the existing hierarchy was disrupted, and interactions of the SCHCS with enterprises and organizations weakened. Information exchange along the chain linking oblast associations or enterprises, oblast housing and communal services departments, and the Housing and Communal Services Department of the SCHCS were activated only in emergency cases. The reasons are based on a lack of reporting. Irregularity in checking operations of vodokanals and the lenient attitude to reporting from the field prevented the SCHCS (and its successor, the SCCAH) from implementing state policy in the water/wastewater sector.
- There is no control over the application of capital investments, compliance with the operating rules of water and wastewater systems, the state of fixed assets, etc.
- Many years of the government policy of setting economically unrealistic tariffs for water services have led to the unprofitability of most vodokanals. Tariff raises for residents to 29 percent on 1 January 1996, and 76 percent on 30 July 1996, of actual water and wastewater service production costs seem to have exceeded the user's ability to pay. LVK's total debt receivables in 1996 constituted 29.7 percent of sales. At the same time, residents paid only 31 percent of the bills issued to them.
- Part of the residents' debt is to be compensated from benefits and subsidies, but tariffs increase faster than compensation for subsidies is received. In 1996 subsidies were not repaid, and only 19 percent of residential discounts were covered from the budget.

- Budget organizations paid only 9 percent of their debts to LVK in 1996. This is to a large extent caused by the fact that the budget of these organizations is drawn up once a year, and they are not able to pay for services if tariffs are increased during the year.
- Most of the payments of industrial enterprises are in the form of barter. In 1996, 76 percent of payments to LVK were done as barter operations. As a result of the low level of payments by customers and a substantial share of barter in these payments, LVK has very little cash-on-hand.
- LVK's large payables for energy for production purposes is explained by both a large share of energy in production costs and the large receivables debt. By the end of 1996, the vodokanal's unpaid energy bill amounted to 15,240,000 hryvnias. Unlike industrial enterprises, LVK is not entitled to a discount tariff during the night. Such a tariff would allow to lower the cost of services since, on average, energy accounts for 48 percent of the total production cost.
- Lack of state financing for LVK system expansion and technical improvement of the water and wastewater systems leads to a great number of breakdowns and, as a result, to substantial losses in the city distribution system.

The problems mentioned above are caused not only by deficiencies of the existing institutional system but also to a large extent by the crisis of the country's economy. Therefore these problems are typical of all vodokanals in Ukraine, and need to be resolved at the national and sectoral levels. While implementing market reforms in the country, there may be several ways of solving such problems, including

- Strengthening state regulation in the water/wastewater sector. Considering the fact that vodokanals will have a monopoly on water supply for a considerable period of time, the SCCAH could encourage the raising capital funds and supporting realistic regional water and wastewater policies. An information system should be set up, capable of monitoring conditions in the sector and sharing financial and other technical information between vodokanals.
- Contractual relations should be set up between owners of communal facilities and tenant organizations, according to which the enterprises are to provide required levels of system operation and services, and local government authorities are to invest in the development of water/wastewater systems, as well as guarantee timely bill payment.

In the present situation, when this extremely important sector is receiving next to no state support, resolving these problems can be assisted to some degree by structural changes in water and wastewater systems.

3.4 LVK RELATIONS WITH THE CITY ADMINISTRATION

The most important law regulating relations between vodokanals and local authorities is the aforementioned Law of Ukraine *On Local Councils* (No. 2234-XII dated 26 March 1992).

This law separates responsibilities between the city councils with their executive and directive organs, on one side, and entities of the housing and communal sector, on the other side. Applied to cities, this law gives authority on certain issues to the city councils, and on other issues to the city executive committees. Relations between Lvivvodokanal and the Lviv municipal administration are shown in Figure 3-5.

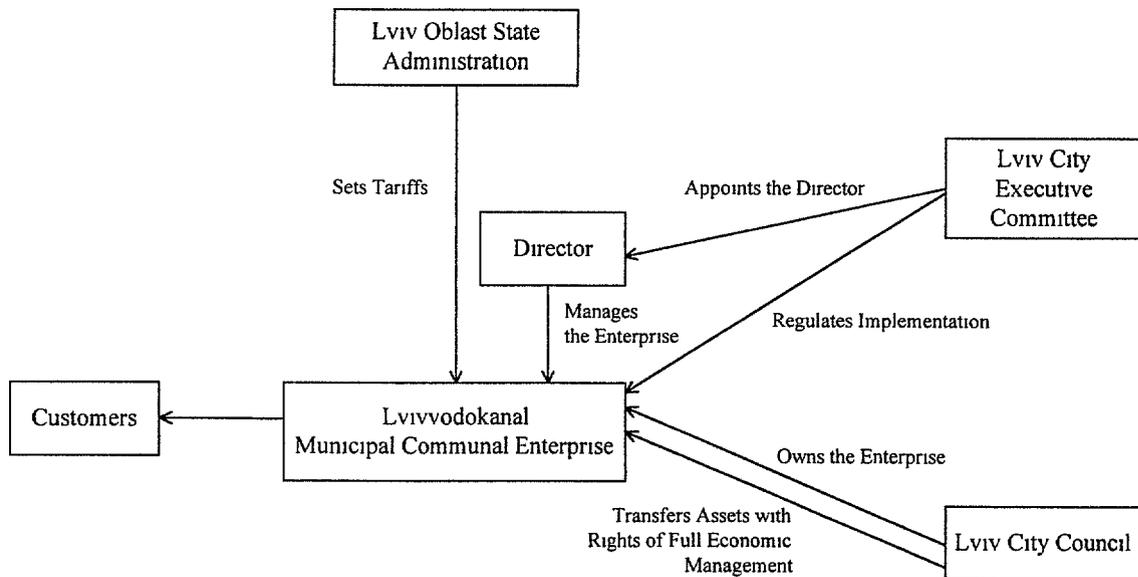


Figure 3-5 Existing Relationship between LVK and the City Administration

Relations between Lvivvodokanal and the Lviv City Council

According to the law on self-government, the responsibilities of city councils include “keeping a list of local enterprises, and approving a list of facilities under communal ownership and their status” Such a list can contain both facilities constructed or purchased from city funds and facilities belonging to state executive authorities.

Article 10 of the *Water Code of Ukraine* (No 213/95-BP) adopted on 6 June 1995, establishes the responsibilities of city councils in the area of regulating water relations

- implementing measures on the rational usage, protection, and renewal of water resources
- control over the usage, protection, and renewal of water resources
- setting rules of public usage of water resources, in accordance with the Procedure specified in Article 47 of the Code
- within their jurisdiction, temporarily banning or halting activities of enterprises and other entities in cases of violation of the requirements of water legislation
- organization of relief activities after accidents or natural disasters, in case of water quality deterioration or adverse effects

- informing the population on the state of water bodies and facilities

The Lviv City Council approved *Temporary Rules for Water Usage in Lviv* dated 9 April 1993. Article 4 of these rules determines types of Water Inspection activities. Water inspection staff regularly monitor water supply and water usage by customers, mainly enterprises and organizations. Apart from that, if a breakdown occurs in the water supply system which affects water supply to the population, the Water Inspectorate informs either the ZhEK or LVK's repair teams, depending on the size of the breakdown.

Article 5 of the *Temporary Rules* introduces a Certificate for concluding agreements on water supply. The certificate is statement of permission (or absence of permission) from the City Administration for using water from the communal water supply main. Certificates are issued to water customers (each connection to the system) by the Water Inspectorate for concluding agreements with LVK on water supply.

The owner of Lvivvodokanal's assets is the Lviv City Council. The property is transferred to LVK with the right of full economic management, including the rights of possession, usage, and disposal, at its own discretion.

In accordance with Article 10 of the *Law On Enterprises in Ukraine* (27 March 1991), "an enterprise, unless otherwise specified by law or by the Charter of the enterprise, has the right to sell, transfer to other enterprises, organizations, and institutions, exchange, lease, give free of charge for permanent use or lend its buildings, structures, equipment, vehicles, inventory, raw materials, and other material values, as well as write them off balance sheets"

However, LVK and other vodokanals can manage assets transferred by the city for their usage only upon prior agreement from the Department of Municipal Communal Property.

The land on which vodokanal's facilities are situated, including protection zones around well fields, is transferred to vodokanal for permanent usage. Vodokanal's facilities situated outside the city are under land usage regulations of Councils or executive committees of administrative and territorial units where these facilities are situated. In each case a *State Act on the Right of Land Usage* is issued.

All issues related to production process and enterprise operations, including materials and equipment purchasing, are within the vodokanal's competence. This independence is reinforced by the following articles of LVK's charter:

- Article 4.5 stresses that "the enterprise itself plans its activities and determines perspectives for its development, based on its existing facilities, demand for products and services."
- In accordance with Article 5.6, "the director himself decides matters of the enterprise's activities, apart from those which are in the competence of the Staff Council. The property owner has no right to interfere with operational activities of enterprise's director."

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According to Chapter 1 of the Law of Ukraine *On Taxation*, "imposing and cancellation of taxes, deductions, and other obligatory payments to budgets and contributions to earmarked funds, as well as concessions to payers, are done by the Verkhovna Rada of Ukraine, [and] by local councils of people's deputies, according to this law and other legal acts of Ukraine on taxation. Local councils of people's deputies can grant additional tax concessions, within the measure of the sums which they receive to their budgets" A similar norm is included in Article 19, Paragraph 19 of the Law of Ukraine *On Local Councils* (op cit)

In accordance with Article 64 of the Charter of Lvivvodokanal, "the enterprise shall keep operating and accounting records, and produce statistical reports, the procedure of keeping accounting and statistical records is determined by appropriate legislation"

Every quarter the LVK Accounting Department prepares a quarterly accounting report (balance, information on accounts payable and debts receivable, and information on expenses and revenue) for submitting to the tax inspection and statistics board of Lychakiv district in Lviv. LVK also submits a quarterly balance sheet to the bank and to the accounting department of the Communal Assets Administration of the city Engineering Department

Relations between LVK and the Lviv City Executive Committee

Authority of the Lviv City Council's Executive Committee in regard to the vodokanal is determined by the legislation on local self-government

The authority of the Executive Committee in the area of budget and finances includes, according to Article 34, Paragraph 8, funding from the budget of expenses related to the development of housing and communal services

The Lviv Executive Committee ensures that design requirements for housing and communal facilities are observed. The Committee can terminate construction if it violates construction plans for the area, or approved designs, or can be harmful for the environment. The authority of the Executive Committee in the area of communal property management and municipal development is explained in Article 35 and includes

- management of assets which are under communal ownership, management of property funds of the housing and communal sector, and other assets for satisfying the needs and requirements of residents
- settlement of issues concerning creation, purchasing, usage, lease, or free transfer of assets under communal ownership
- ensuring of implementation of plans approved by the Lviv City Council concerning privatizing communal property

According to Article 38, Paragraph 4, "the City Executive Committee is in charge of organizing the operation of water and wastewater networks and facilities, and controls the construction and operation of wastewater treatment facilities and equipment"

In accordance with Article 38, Paragraph 11, "the City Executive Committee can appoint or dismiss managers of communal enterprises, or determine different procedures for their assignment or dismissal, according to the Law"

All construction funded from the municipal budget is done by the city's Capital Construction Department. Design is done by the Lviv Communal Design & Construction Institute. After their completion, "possession, management, and disposal" of the facilities are taken over by the vodokanal.

Section 4

METHODS FOR LVK INSTITUTIONAL STRENGTHENING

4.1 OBJECTIVES

The Charter of the Lviv vodokanal defines that the Lvivvodokanal Municipal Communal Enterprise is under the communal ownership of the Lviv City Council. LVK is an independent economic statutory unit having the rights of a legal entity. The enterprise acts according to its Charter as a self-financing unit, and has its own balance sheet.

At first glance, LVK and other vodokanals seem to be quite free, having rights of possession, management, and disposal of its fixed assets. Nevertheless, the City Council, being the owner, keeps control of them.

Reform of LVK's institutional structure is aimed at

- making LVK more financially independent, including more encompassing powers over its own fixed assets
- increasing the effectiveness of production and internal operations
- strengthening material and technical provisions
- meeting the needs of the population in high-quality water supply and wastewater services

4.2 POSSIBLE LVK INSTITUTIONAL STRUCTURES

Institutional strengthening of LVK can be achieved by its corporatization. In Ukrainian legislation, corporatization is defined as transformation of state enterprises into joint-stock companies. In this definition, corporatization is the first step to privatization. Privatization means transfer of state or communal ownership to a physical entity or non-government legal entity. But, according to the Law *On Privatization of Assets of State Enterprises* (4 March 1992) privatization of the principal production assets of enterprises such as vodokanals is forbidden. Thus, corporatization in this case can be taken to mean a number of measures aimed at

- increasing LVK independence from the influence of local, oblast, and national authorities in making management decisions
- allowing LVK to determine its own corporative management structure
- granting LVK more powers in setting tariffs for services

- defining the extent of control on the part of LVK over the means of production that are in its operation but remain under the ownership of the Lviv City Council

Possible corporatization alternatives

- LVK remains a state utility, created based on the *Law On Enterprises in Ukraine*, but amendments allowing the maximum possible corporatization are added to its Charter
- A joint-stock company is organized that leases the principal production assets and becomes the owner of other existing means of production. The new company should be able to lease all the means of production, and would inherit all the obligations of the present vodokanal

Several options for LVK restructuring were worked out by the USAID-sponsored PADCO consultancy in Lviv. They were reflected in the memoranda *On the Corporatization of Lviv Vodokanal*, *On the Lease of Vodokanal-Operated Assets*, and *On the Establishment of a Local Regulatory Body*. These Memoranda are based on the general provisions of the memorandum *On Lviv Vodokanal Restructuring and Private Sector Participation* prepared by a World Bank consultant, Mr. Leszek Stachow, and signed by Lviv Mayor V. Kubida, V. Kravtsiv, Director of the Lviv City Executive Committee's Engineering Department, and V. Sulypa, Director of Lvivvodokanal.

Each of the possible alternatives for corporatization has its advantages and disadvantages.

4.3 OPTION 1. REORGANIZED STATE ENTERPRISE

4.3.1 Description

State enterprise restructuring implies creation of corporate management, and it needs to be done in accordance with the *Law On Enterprises in Ukraine*. Restructuring of the Lvivvodokanal state enterprise, aimed at gaining more financial independence, would entail setting up an agreement between the Lviv City Administration and LVK on rendering services (a.k.a. Performance Agreement). It would clearly define the range, price, and quality of services rendered by the vodokanal. Service tariffs would be the same for all categories of customers, and sales revenue should ensure sustaining production. The defined responsibilities of both parties might include the following:

Lviv City Administration

- 1 Assist the vodokanal in payment collection
- 2 Allocate money, if available, from the local budget for partial repayment of the vodokanal's capital expenses
- 3 Regular transfer of subsidies to the vodokanal, etc

Lvivvodokanal

- 1 Render acceptable water supply and wastewater services to all customers
- 2 Introduce service payment rates based on actual consumption

- 3 Carry out projects aimed at elimination of water losses and energy saving, in order to decrease production costs, etc

The agreement should also define measures to be imposed in case the parties do not fulfill their responsibilities. The City's employment contract with the LVK Director can be simplified to a single demand -- to execute the Performance Agreement.

In order to strengthen LVK's material and technical base, which is badly needed, the agreement can be supplemented with a five-year investment plan for LVK, approved by both parties and agreed with the Oblast Administration. The plan should be based on the principle of getting maximum benefits from the funds invested. Both the Performance Agreement and the five-year investment plan should be initiated by LVK.

Corporatization would entail adding the following Articles to the present Charter of LVK:

- recognizing the performance agreement between the city and the enterprise, that would be reviewed and supplemented annually upon agreement between the parties, after public hearings
- defining the general layout of the performance agreement
- creating a Board of the enterprise with comprehensive management powers delegated by the property owner, i.e., the Lviv City Council
- determining the number of Board members and how they are elected
- empowering the Board to specify company policy (within the parameters of the Performance Agreement), to manage LVK operations, to hire and dismiss the Director, etc
- creating a body meant to represent the interests of employees
- creating other ruling bodies (e.g., review committee, etc.) and determining their powers, as well as the number of their members, and how they are elected
- creating a regulatory body to control relations between the city and the vodokanal
- defining the powers and functions of the regulatory body
- determining the legal status of the regulatory body, the number of its members and how they are elected, who it reports to, sources of funding, etc
- defining how LVK profit is distributed

All amendments to the Charter of the Lvivvodokanal Municipal Communal State Enterprise should be approved by the assets owner (Lviv City Council) and endorsed by the employees.

If the Board exists, the enterprise director and his deputies should be elected from among the Board members. The employees should be empowered to approve the procedure for appointing the enterprise director.

Since the *Law On Enterprises in Ukraine* does not allow vodokanals, being state enterprises, to lease the fixed assets owned by the city councils, it is suggested to make an amendment to the charter concerning vodokanal control over fixed assets, as follows:

- clarify LVK's rights as to disposal and possession of those assets transferred by the owner with the right of full economic management
- stipulate LVK's right to lease, mortgage, or sell such assets, and also to make investments, by resolution of the Board, without approval of the City Council
- the right of full economic management may be canceled only in the following cases:
 - 1 LVK does not fulfill the Performance Agreement
 - 2 Any successor of the enterprise does not fulfill the Performance Agreement

Reorganizing LVK has its advantages and disadvantages, in particular as compared to creating a joint-stock company on the basis of the vodokanal.

4.3.2 Advantages

Advantages of reorganizing LVK

- Taking into consideration the vital importance of the vodokanal in the every day life of the city, the reorganized state enterprise still retains local government control over its operation at the first stages of its withdrawal from state ownership
- A reorganized state enterprise, as the first step of major institutional reform, may seem more acceptable for the City Council, the State Committee for Construction, Architecture, and Housing Policy, and other governing bodies
- A reorganized enterprise would make it possible to take certain mechanisms of institutional reform and further apply them within a joint-stock company
- The national government could grant state enterprises grace periods for debt repayment, or debt cancellation

4.3.3 Disadvantages

Disadvantages of reorganizing LVK

- Even a reorganized vodokanal enterprise cannot lease the assets that are at its disposal, because Ukrainian legislation (the *Law On Enterprises*) reads "Assets under state ownership assigned to a state enterprise belong to it with right of full economic management" This is the existing legal status, and the only way to transfer the rights

of possession and usage of assets under communal ownership to LVK allowed by the Law *On Enterprises* Lease of these assets by vodokanals is not allowed

- Even a reorganized state enterprise will remain under the complete ownership of the City Council
- By the Law of Ukraine *On Local Councils* , the Vodokanal director is still to be appointed by the City Council
- The Law *On Enterprises* regulates possible alternatives of restructuring and corporative management
- The Law *On Enterprises* sets limits on independence of state enterprise management from the impact of city, oblast, and national ruling bodies

4.4 OPTION 2. JOINT-STOCK COMPANY

4.4.1 Description

According to the Law *On Enterprises in Ukraine*, enterprises can be incorporated into unions, economic associations, and other corporations based on industrial, territory, or other features, in order to improve the effectiveness of their operations

In creating normal conditions for enterprise activity, special consideration should be given to the following measures (1) denationalization and (2) involving citizens' funds by pooling their financial contributions in order to perform economic activities on a self-sustaining basis These problems can be resolved through setting up joint-stock companies

The Law of Ukraine *On Economic Associations* (19 September 1991) stipulates the possibility to form different types of companies The possible choices are the following

- open joint-stock company
- closed joint-stock company
- company with limited liability
- company with additional liability
- company with full liability
- company with mixed liability

The most suitable form for corporatization of the vodokanal is a joint-stock company The possible management structure of a joint-stock vodokanal company is depicted in Figure 4-1, and Table 4-1 shows the advantages and disadvantages of this type of incorporation

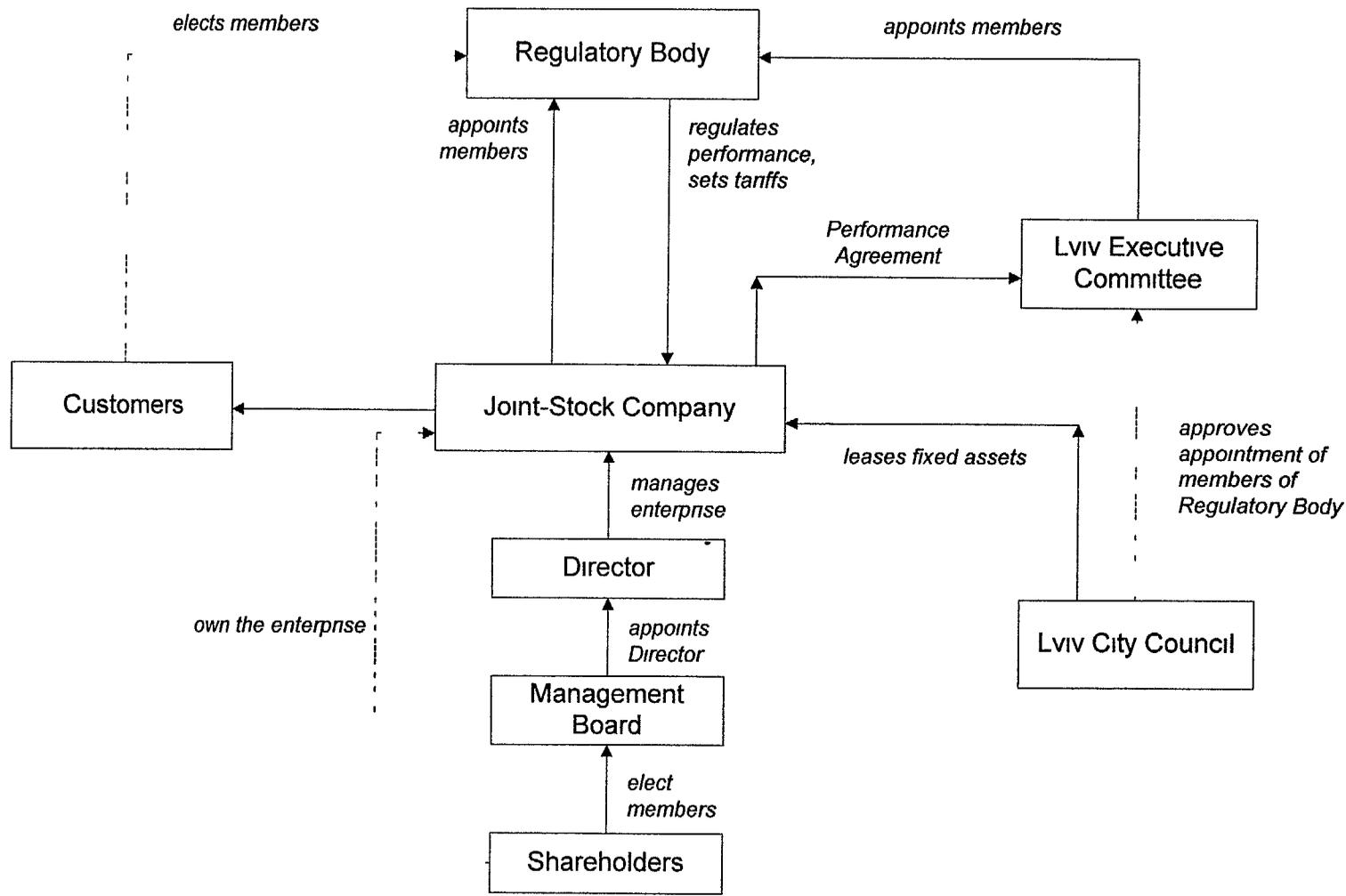


Figure 4-1 Possible Management Structure of a Joint-Stock Vodokanal Company in Lviv

Table 4-1 LVK Joint-Stock Company Considerations		
	Advantages	Disadvantages
Open joint-stock company	- clear corporate structure of governance	- the City Council or other governmental body cannot be a shareholder - free distribution of shares is premature LVK (PADCO opinion)
Closed joint-stock company	- clear corporate structure of governance - limited distribution of shares	- the City Council or other governmental body cannot be a shareholder

LVK and the City administration together should choose the most suitable type of company from those mentioned above, taking into account these advantages and disadvantages

Parties of the possible Lease Contract would be the Lviv City Executive Committee (Lessor) and the newly established joint-stock company (Lessee) Lessor may lease all or some portion of the fixed assets operated by the enterprise Therefore Lessor may cede to the Vodokanal the right to lease its assets

If all of the fixed assets are leased to the vodokanal, it ceases to exist as an independent state enterprise and is reorganized through joining with the Lessee In this case the Lessee

- acquires the Vodokanal's rights and obligations
- purchases the Vodokanal's circulating assets
- borrows cash and securities from Lessor based on credit terms
- if the sum of the Vodokanal's cash and accounts receivable exceeds its accounts payable, the Vodokanal borrows such cash and accounts receivable from Lessor

Apart from the lease of all the asset complex there exists the possibility to lease a structural subdivision In this case the subdivision is extracted from the enterprise and allotted to the Lessee as of the date of issuing the appropriate order by the body authorized to manage the state property Thus, the Lessee becomes an assignee of the rights and obligations of the state enterprise pertaining to the activity of its structural division

Generally, only assets characterized as 'fixed (or basic) assets' may be leased Lease of such assets may be granted by either the City Council or, if only part of the asset complex is the subject of the lease, by the vodokanal Movable assets must be purchased by the Lessee at prices established in accordance with the Law *On the Lease of State Property* and *Regulations on the Purchase of Circulating Assets by Lessee* Movable assets are sold by the Lessor to the Lessee pursuant to a purchase contract which is executed simultaneously with the Lease agreement

Cash and securities are to be loaned by the Lessor to the Lessee on credit terms consistent with those established by the National Bank of Ukraine If accounts payable exceed the sum of cash and accounts receivable, then only securities are loaned to the Lessee Cash and securities are loaned to by the Lessor to the Lessee pursuant to a credit contract which is

executed simultaneously with the Lease agreement Interest payments are deposited to the Lessor's budget

4.4 2 Advantages

Generally, the joint-stock company has significant advantages over a reorganized state enterprise They are the following

- Current Ukrainian legislation (the aforementioned Law *On Economic Associations*) provides substantial flexibility in the choice of corporate form and corporate governance of joint stock companies
- A closed joint-stock company may, in the future, be converted to an open joint-stock company
- The prohibition of the City or any other government body to own shares in the joint-stock company protects from direct political interference in the activity of the company The City would be able to exercise appropriate indirect control through the lease of operating assets and through the performance agreement with the company

4 4.3 Disadvantages

Making Lvivvodokanal into a joint-stock company would have the following disadvantages

- From the City's viewpoint, it may be a disadvantage that no government body can be a founder or "owner" of a joint-stock company To promote the city's interest in setting up a joint-stock company the shareholders (vodokanal management and employees, private operators, outside investors, etc) can provide in the Charter of the company that a specified number of seats on the company's managing body will be held by persons appointed by the City The owners can agree by contract with the City not to alter this aspect of the Charter without the City's approval Also the City would not be able to vote in the general meeting of shareholders Again, the shareholders may agree with the City by contract to cast a certain proportion of their votes at the general meeting that will represent the interests of the City, or they can accept a proxy for the City for a certain proportion of their votes
- A joint-stock company would inherit all the liabilities of the existing vodokanal, e g the debt for electricity Such a company owned by private individuals and institutions might be forced by its creditors into bankruptcy It might also not benefit from any deferral or forgiveness of such indebtedness that may granted to state enterprises by the central government in the future
- Such a company will attract the attention of the Antimonopoly Committee, which must review any lease of property to an organization that would be a monopolist upon conclusion of the lease, and which has continuing jurisdiction to review prices and tariffs charged by monopolists Thus far, the Antimonopoly Committee has not exercised this jurisdiction over the vodokanals as state enterprises, although this might

change if private operators are brought in. Other state bodies such as the Tax Inspectorate and the Oblast Pricing Committee (which plays the leading role in approving vodokanal tariffs) might also scrutinize a joint-stock company more closely than they would a reorganized state enterprise.

- The license for special water use now held by the existing LVK would have to be reissued to the new joint-stock company. This might open opportunities for imposition of undesirable conditions by the Oblast office of the Ministry of Environmental Protection and Nuclear Safety.

4.5 OPTION 3. JOINT VENTURE

4.5.1 Description

Since the central government lost its former control in many areas, the actual control over communal water supply and wastewater collection was transferred to municipal and oblast authorities, and to the management of vodokanals.

Economic difficulties in the country significantly decreased the financial capabilities of Ukrainian water utilities. Nowadays these enterprises are suffering from considerable lack of available funds, which not only interferes with their rehabilitation and replacement of fixed assets, but also prevents these enterprises from doing proper maintenance and operation. The lack of financial resources has almost completely stopped investment in the water and wastewater sector. There is no reason to expect an improvement of the economic situation in the near future. This is a reason to encourage the creation of a joint venture.

Creation of joint ventures is regulated by the laws of Ukraine *On Economic Associations* and *On Enterprises*. Creation of a joint venture for vodokanals foresees the involvement of foreign capital and management experience for their development and capital improvement. Examples of such a form of institutional strengthening are vodokanals in Gdansk (Poland), Brno (Czech Republic), and others.

Main Conditions for Creating a Joint Venture

The stages of preparing proposals for creating of a joint venture are as follows:

- definition of the main goals for creating a joint venture
- looking for and selecting a foreign partner
- preparation and signing of letters of intent
- development of technical and economical grounding and calculation of economic efficiency of a future joint venture
- preparation of draft documents for founding of the enterprise
- agreement of proposals on joint venture creation with higher management authorities and local government
- signing of founding documents together with foreign partners
- registering the joint venture with the state

Current laws do not limit joint economic activities. After a foreign partner has been chosen a protocol of intentions is prepared which has to reflect the following ideas

- objectives and type of activities of a future joint venture
- responsibilities of parties involved
- approximate economical and organizational requirements which are considered by partners as necessary for joint venture creation (such as limit of a prospective investment share into the statutory fund of an enterprise by a foreign partner, etc)

The joint venture's statutory fund is created out of the partners' contributions. Shares of local and foreign partners in the statutory fund of a joint venture are determined according to the agreement of involved parties

Issues of determining amounts for transferring into enterprise funds are discussed at the stage when proposals for creation of a joint venture are prepared, since funds formation and usage order are stated in founding documents, and a joint venture's success in future will depend on it to a large extent

Forming and Distributing of Joint Venture's Profit

Profit distribution is preceded by a number of consecutive stages: calculation of balance profit, calculation of profit share to be taxed, determining of remaining profit and its distribution between partners. According to the Law of Ukraine *On Foreign Investments* joint ventures are free from tax over a period of five years from the time of their announcing profit

Features of Joint Venture's Activities

- joint venture assets are mutually owned by Ukraine and outside entity (could be a foreign company)
- statutory fund can be supplemented from joint venture's profit and additional contributions of its participants
- equipment, materials, and other assets brought into Ukraine by foreign participants in a joint venture are free from customs duties
- if necessary joint ventures can use loans, a reserve fund and other funds necessary for joint venture's activities are created
- foreign partners are guaranteed that their share of profit funds will be transferred to the country of foreign partner's origin
- when a joint venture is created, land, water and other resources are allowed to be temporarily used in return for an appropriate rent payment

Joint ventures can be terminated in cases and according to procedures stipulated by the founding documents, or by the decision of the government of Ukraine if their activity does not correspond to stated objectives and tasks. When this happens (or when foreign partners

pull out) the foreign partners have the right to withdraw their contribution in cash or goods based on residual value of their contribution at the moment of the company's elimination

To establish a joint venture on the basis of an existing vodokanal enterprise, LVK would purchase that portion of fixed assets which is permitted by the Law of Ukraine *On Privatization of Assets of State Enterprises* from the owner — the City Council Simultaneously, the vodokanal would make an agreement with the City Council on the lease of those fixed assets not subject to privatization, in accordance with established procedure

Based on this property, the open joint-stock vodokanal company would be established Shares would be issued on the cost of purchased fixed assets, and a specified portion of shares would be bought by a foreign partner The joined capital of the vodokanal and the foreign partner would form the basis to establish the joint-stock company's statutory fund

Basic principles of the joint-stock vodokanal company's activity would correspond to those of a leased vodokanal enterprise (see Section 4.4)

4.5.2 Advantages

At the present stage of national economic development the formation of joint-venture companies have great advantages The main advantages may be the following

- introduction of advanced foreign technologies and managing experience
- utilization of additional material and financial resources
- exemption from paying profit tax for the first five years

4.5.3 Disadvantages

The following aspects hinder foreign investments into the economy of Ukraine

- unstable economic situation
- instability of legislation and legal nihilism
- worn out system infrastructure
- poor financial status of vodokanals (huge receivables and payables)

Facing these aspects, potential foreign partners, if they were interested at all, would be likely dictate difficult (for the municipality) terms when making an agreement with the vodokanal

4.6 APPLYING INSTITUTIONAL STRENGTHENING EXPERIENCE TO LVK

Reform in the housing and communal sector should be carried out gradually, because of the social importance attributed to this sector of society In order to maximize effectiveness of this process, implementation mechanisms for upcoming stages should be refined at each stage of the reform process

Before any significant institutional changes are attempted in LVK, the organization must drastically improve its financial status so that, at a minimum, the operating expenditures are fully met by actual income. If this can be done LVK should conclude a performance agreement between it and the Lviv city administration, clearly defining responsibilities of both parties (see Section 4.3). Terms of the agreement may change taking into consideration the problems that arise in the course of its execution. The timing of this is not known at this time. If LVK decides to take a World Bank loan then the financial situation will need to improve rapidly and the agreement could be executed at that time.

After a period of time (at least a year) operating in a positive financial status then preparatory work for the transformation of the state-owned enterprise into a joint-stock company could be started. The contract for lease of the principal infrastructure between LVK (Lessee) and the City Council represented by the Executive Committee (Lessor) could be drawn up.

Thus, the first stage of the structural reform should be considered a preparatory phase that would further transit into the stage of sweeping reforms. The next stage could comprise the creation of a joint-stock company by means of making necessary amendments in the performance agreement, and concluding a contract for the lease of fixed assets used to execute its cycle of production. An alternative could be that LVK continues as an independent state enterprise.

If it is decided that a joint-stock company should be formed then upon the lease of all fixed assets, the vodokanal would cease to exist as a self-sustaining state enterprise and would be reorganized into a joint-stock company. The part of the state-owned assets that can be privatized, according to privatization laws, can be included in the statutory fund of the joint-stock company: administrative buildings, repair shops, equipment, mechanisms, instruments, etc.

It is most expedient to create a closed joint-stock company at the initial stage of turning an enterprise into a joint-stock venture. In this case shares are allocated among the vodokanal staff, and LVK would receive shares of the created joint-stock company equal in value to the cost of assets owned by LVK.

As new management gains experience the closed joint-stock company, if needed, may be converted to an open joint-stock company by registering its shares in accordance with the laws of Ukraine *On Securities and Stock Exchange* (18 June 1991) and *On Privatization of Assets of State Enterprises* (op. cit.). Additional shares may be issued after the open joint-stock company is created. The value of this issue would depend on the amount of financial resources needed for construction of new facilities or introduction of new technologies that could bring a measurable increase in the quality of services rendered and the revenue of company.

4.6.1 Regulatory Body

It is recommended that a local regulatory body be established to supervise the relationship and to settle disputes between the City and the reorganized enterprise or new joint-stock company. The following major principles would govern regulatory body activities:

- keep to a review (versus a management) role
- keep to legal guidelines
- appropriately reflect the interests of the principal stakeholders in water and wastewater services in Lviv
- decisions should be fully binding on the participants of lease contract and performance agreement

The regulatory body should operate under a clear set of legal guidelines that define its powers and functions, its decision-making procedures, and the manner of enforcement of its decisions. Main functions of the regulatory body would be as follows

- supervise compliance by the parties with their respective obligations under the lease
- resolve disputes between the parties regarding performance of the contract obligations
- supervise compliance by the parties with their respective obligations under the performance agreement
- resolve disputes between the parties regarding performance of these obligations

The membership of the regulatory body should be representative of the principal stakeholders in water and wastewater services in Lviv

- 1 the city
- 2 the water and wastewater joint-stock company
- 3 customers

The regulatory body should have a neutral chairman who does not represent any of the stakeholders. The members of the regulatory body should have the necessary experience and skills to perform their functions. In order to ensure that the regulatory body is representative of all major stakeholders in water and wastewater services, and small enough to function effectively, it is suggested to have no less than six and no more than ten members

4.6.2 Contracts

In order to include some outside (foreign) experience in managing and improving effectiveness of the vodokanal, LVK has agreed that as a condition of the World Bank loan that they would sign some type of a Management Contract. This is stated in a Memorandum signed by the Lviv City Administration together with LVK executives and the World Bank, represented by their consultant, Mr Leszek Stachow. The Management Contract would cover a period of three to five years.

The Management Contract would provide for some type of general management assistance to the enterprise by a private company.

The terms of the Management Contract will be worked out during the latter part of 1997 by a French consulting firm, ICEA, which is assisting the World bank

Experience gained by both parties in the course of the assistance by the private firm could be used when preparing a possible long-term institutional plan such as creation of a joint-venture or concession contract

If there was a concession contract, a private contractor would control the water supply and wastewater disposal systems, which would be leased from the City Council. Lease rent would be paid from the funds received as payments for rendered services, according to set tariffs. The private contractor would pay the lease rent to the City Council and have the right to all profit received by the vodokanal for rendered services.

In one type of a concession agreement City Council would have to provide financing and make all capital repairs and construction, with the exception of some types of repairs and capital investments which, under terms of the agreement, are to be implemented by the private contractor. Set tariffs would reimburse operating expenses as well as loan repayment and depreciation deductions from capital investments undertaken by the private contractor. Other options are also possible.

Further cooperation may be implemented in the form of a joint venture. At present, it is not expedient to create joint-stock company with foreign participation, or to concede vodokanal assets. The reasons for this include the following:

- Most of the private operators who would be interested would consider a concession or other long-term agreements only after an initial familiarization period under a less risky Management Contract.
- Some local officials are concerned that they would be forced to cede too much control over the water supply and wastewater disposal systems to a concessioner. Such an attitude is backed by the example of Gdansk (Poland) vodokanal. Water supply and wastewater disposal systems in Gdansk are operated by a foreign enterprise under a concession contract. Signing the long-term concession agreement deprived the Gdansk vodokanal of advantages inherent in the transition period. Thus, a short-term agreement like a Management Contract is considered to be possibly more attractive.
- Constant changes in legislation that regulates the activities of joint ventures in Ukraine do not inspire the interest of foreign investors to participate in these forms of long term investment and cooperation.

4 6.3 Khvyliya Water Utility in Horlivka Town

When conducting the reform of LVK it is important to look at ways of improving its institutional framework in order to increase its effectiveness. When doing so, it would be expedient to make use of the experience gained in the town of Horlivka (Donetsk oblast) when organizing and managing the Khvyliya Water Utility as an open joint-stock company.

Alongside other issues that needed to be resolved when organizing the open joint-stock company, a new system of institutional relationships between management subdivisions was formed. The institutional framework of the Khvyliia Water Utility comprises several subdivisions that can be combined, according to the function performed, into four major production groups:

- main production
- auxiliary production
- control service
- management, procurement, and sales

Clear division of functions between the subdivisions is a positive practical result achieved from the reform in the system of institutional relationships between Khvyliia's management subdivisions. The structure of the subdivisions forming the production groups of the Khvyliia Water Utility also underwent changes and improvements. For example, independent status was given to subdivisions that execute clearly defined production activities (e.g., motor transport service, mechanical repairs service, design office, etc.).

Apart from its main production activity, individual subdivisions of the company render services to residents and enterprises in Horlivka. This practice helps the enterprise to survive and ensures its development under the conditions of a market economy. The share of revenue yielded by these additional orders (termed "external revenues") in the total service production costs and costs for other works varies substantially and depends on the subdivision. The highest proportion is observed in the Industrial and Trade Division, which comprises 12 independent subdivisions, having different production types and purposes, that are not directly related to the main production activity of the Khvyliia Water Utility.

Taking the example of the Khvyliia Water Utility, separate subdivisions (e.g., motor transport unit, district maintenance teams, etc.) may be taken out of the integrated complex and converted into independent enterprises when organizing Lvivvodokanal in a joint-stock company. Relations between such independent enterprises and LVK would be regulated by concluding appropriate agreements, as between a client (LVK) and a contractor (the given subdivision-enterprise). This type of relationship could provide the following advantages:

- responsibility of the contractor for the quality of work will be increased
- production activities of the subdivisions will be expanded, which will also improve their effectiveness, this could be achieved by contracting additional work, and rendering additional services to enterprises, institutions, and residents

A joint-stock company managing the share of fixed assets it owns has the opportunity to resolve technical, institutional, and financial issues independently in order to improve production efficiency. Reduction in leakage, due to better operation and maintenance of the water supply network, will reduce the total water demand. This, in turn, will allow the reduction of the operating load on the major production facilities and distribution system. More efficient operation will eliminate the necessity for building new production facilities.

(for a certain period of time) This will reduce expenditures for the major production activity of the joint-stock company, and may allow a reduction in tariffs, or at least halt their increase

In the existing situation of an incompletely formed market economy, and under current legislation, this model of transition to a joint-stock company will give a free hand to take significant institutional and engineering measures in order to improve tariff policy, accounting for water consumption, and settling accounts with customers

In order to draw on additional funds for the renewal of LVK's fixed assets, internal reserves should be found and used. One of the possible ways to make use of such reserves is to conduct marketing research that would identify the groups of customers who are ready to pay at higher tariffs for higher-quality services (e.g., for extended hours of supply, for 24-hour water supply, etc.) Based on this research, tariffs for such groups of customers could be set at a level adequate to the amount and quality of rendered services

Section 5 CONCLUSIONS

In the post-war years in Ukraine almost all housing and utilities, especially heat and water supply and wastewater facilities, under the responsibility of local radas, were largely constructed using state budget funds, and also some funds generated from shared participation of ministries and agencies. Enormous funds were used to create the existing infrastructure. Over the years this infrastructure became obsolete and technically outdated and now, in addition to capital repairs, it requires extensive reconstruction and construction of some new facilities. In the previous centrally planned economy these issues, although not easily, were almost always resolved using centralized funds.

Nowadays the centrally planned economy does not exist. Nevertheless the housing and communal sector exists and operates, as before, according to the centralized economic principles. If not restructured, the housing and communal sector will cease to exist due to the conflict between its operating and financial structure and the reality of current conditions.

At this time, when the Ukrainian economy is transforming itself into a mixed-type economy based on transferring state-owned property and privatizing industrial enterprises. The issue of finding a methodological grounding for structural changes in regional industrial complexes, and determining an economically efficient balance of ownership of different types of production means, has gained particular importance. Not the least important in terms of institutional change is the issue of partially transferring of state-owned municipal utilities, including those involved in water supply and wastewater collection. They are among the most complex when it comes to determining the future of municipal communal property.

According to the current Ukrainian legislation on privatization, most of these facilities are not subject to privatization (i.e., facilities belonging to engineering infrastructures, including networks, facilities, and equipment for supplying users with water, natural gas, heat, as well as wastewater collection and treatment), or can be only partly privatized.

In the situation when state financial support of this vital sphere is practically nonexistent, the emerging problems in the water and wastewater sector can be at least partially resolved by institutional changes.

The LVK is an independent state self-sustaining enterprise which operates water and wastewater systems. At first glance, LVK has considerable freedom in terms of possession, management, and disposal of fixed production assets. However, the City Council, as the actual owner, has the right of ultimate control over LVK. Within these limiting conditions, the reform of LVK's institutional structure aims at gaining it more financial freedom, including expanded rights over its fixed assets.

In LVK's case, institutional strengthening could be accomplished by its corporatization. There are the following options for corporatization:

- remain as it is as a state communal enterprise

- remain a state communal enterprise, while its charter would be amended to include a number of private service subdivisions
- convert to a joint stock-company, which would be a lessee of fixed assets and owner of other production means
- convert to joint venture company with financial help from an outside (probably foreign) company

Before the LVK makes any significant change in its institutional structure it must make some meaningful change in its financial condition. No matter what form of institutional structure it decides to become, it cannot be successful if it is operating with its expenses far exceeding its income. The current large amounts of accounts receivable and creditor debt would destroy any new organization before it got started. Until that time there is a lot of merit in remaining a state communal enterprise where it is reasonably protected from bankruptcy.

The LVK is seriously considering undertaking a large WB loan, in the order of 30 million USD that would be used to repair part of the worn-out infrastructure to reduce leakage and overall energy use. As part of this loan agreement the LVK will need to agree to several peripheral conditions. These include

- Balancing income and expenses on a cash basis
- Raising sufficient additional revenue to repay the loan and interest
- Making a Management Contract with an outside (foreign) organization

If all of these actions are undertaken and fulfilled, then the LVK will be in a new position where it will have both a physically improved system, a positive cash flow and the potential to gain experience in working in a market oriented economy using the best of both the past in-country knowledge and practices along with those appropriate ideas from Western Europe or the USA.

It is at this time, preferably after operating a number of years (at least one) in this condition, that the LVK should consider institutional restructuring.

It should be remembered that any of the institutional structures can work. There are examples of all of them around the world that are successful. The key to all the successes are financial stability, a management that balances financial management with water services, a management team that is focused on positive goals and an economic and legal climate in the country and municipality that will permit a business to succeed.

The key is to have a management and climate where the utility can operate as a business where income equals or exceeds expenses (including loan repayment). Eventually it must be done anyway if Lviv is to have a functioning water and wastewater system. Although this process will be very painful, once done it means that the water system will steadily improve (instead of steadily degrading) and the municipal government will have a self-supporting operating public service.

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Appendix A
LEGISLATIVE ACTS RELEVANT TO VODOKANALS

- Law of Ukraine *On Prices and Pricing*, No 507-XII of 3 December 1990
- Law of Ukraine *On Property*, No 697-XII of 7 February 1991
- Law of Ukraine *On Private Enterprises*, No 698-XII of 7 February 1991
- Law of Ukraine *On Enterprises in Ukraine*, No 887-XII of 27 March 1991
- Law of Ukraine *On Securities and Stock Exchange*, No 1201-XII of 18 June 1991
- Law of Ukraine *On Investment Activities* of 18 September 1991
- Law of Ukraine *On Economic Associations*, No 1576-XII of 19 September 1991
- Law of Ukraine *On Privatization of Assets of State Enterprises*, No 2163-XII of 4 March 1992
- Law of Ukraine *On Local Councils of People's Deputies and Local and Regional Self-Government*, No 2234-XII of 26 March 1992
- Law of Ukraine *On the Lease of State Property*, No 2269-XII of 10 April 1992
- Law of Ukraine *On Land Lease* of 3 July 1992
- Cabinet of Ministers Resolution *On the Procedure of Issuing Permits for Special Usage of Natural Resources and Setting Limits on the Usage of Resources of National Importance*, No 459 of 10 August 1992
- Cabinet of Ministers Resolution *On Applying the Contract Form of Labor Agreement with Management of Enterprises under General State Ownership*, No 203 of 19 March 1993
- Temporary Rules for Water Usage in Lviv* of 9 April 1993
- Cabinet of Ministers Decree *On Privatization of Integrated Property Complexes of State Enterprises or their Structural Subdivisions*, No 57-93 of 20 May 1993
- Decree of the President *On Corporatization of Enterprises*, No 210-93 of 15 June 1993
- Decree of the President *On Strengthening Economic Underpinnings of Self-Government of Cities of Ukraine*, No 84/94 of 12 March 1994
- Cabinet of Ministers Resolution *On Pricing under Conditions of Reforming the Economy*,

No 733 of 21 October 1994

Cabinet of Ministers Resolution *On Approving Basic Statements of Production Costs at the Enterprises and Organizations*, No 759 of 10 November 1994

Order of the State Property Fund and the Ministry of Economy of Ukraine *On Approving the Typical Charter of the Open Joint Stock Company*, No 787/177 of 12 December 1994

Typical Charter of the Open Joint Stock Company approved by the Order of the State Property Fund and the Ministry of Economy of Ukraine, No 787/177 of 12 December 1994

Law of Ukraine *On Taxation of the Profit of Enterprises*, No 334/94-BP of 28 December 1994

Cabinet of Ministers Resolution *Methodology for the Valuation of Assets which are Subject to Privatization*, No 36 (36-95-n) of 18 January 1995

Law of Ukraine *On Amendments to the Law of Ukraine 'On the Lease of State Property'*, No 98/95-BP of 14 March 1995

Water Code of Ukraine, by Verkhovna Rada Resolution, No 213/95-BP of 6 June 1995

Rules for Applying the Law of Ukraine 'On Taxation of the Profit of Enterprises', by Verkhovna Rada Resolution, No 247/95-BP of 27 June 1995

Rules for Operation of Communal Water Supply and Sewage Systems in Cities and Villages in Ukraine, issued by State Committee for Housing and Communal Services of Ukraine 1 July 1995

Regulations on the Purchase of Circulating Assets by Lessee, approved by Cabinet of Ministers Decree No 629 of 10 August 1995

Law of Ukraine *On Conditions for Foreign Investments*, No 93/96-BP of 19 March 1996

Law of Ukraine *On Introducing Changes to the Law of Ukraine 'On Privatization of Assets of State Enterprises'*, of 19 February 1997

Law of Ukraine *On Local Self-Government in Ukraine*, No 280/97-BP of 21 May 1997

Law of Ukraine *On Amendments to the Law of Ukraine 'On Taxation of the Profit of Enterprises'*, No 283/97-BP of 22 May 1997

Cabinet of Ministers Resolution *On Inventorying State Owned Assets not Included into Statutory Funds of Joint Stock Companies Established in the Course of Corporatization and Privatization*, No 757 of 15 July 1997

Decree of the President *On Establishing the State Committee for Construction, Architecture,
and Housing Policy of Ukraine*, No 773/97 of 11 August 1997

Law of Ukraine *On Foreign Investments*



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