

ANNEX D:

Two Case Studies

of

“Domestic” Companies active in

Water Utility Management

Eastern – Central Europe and Central Asia

EXECUTIVE SUMMARY

The Organisation for Economic Cooperation and Development (OECD) conducted two case studies of domestic companies active in the water utility management of the ECA (Eastern/ Central Europe and Central Asia) region, as part of a region wide market development study. The purpose is to assess the market opportunities and performance of domestic companies in the execution of private water utility management contracts.

Case Study No. 1: Former Utility Members form Private Service Company

The case study in Piaseczno, Poland illustrates the ability of former utility staff members to convert the country-wide political transitions into a local entrepreneurial opportunity. According to Polish legislation to transfer centrally owned infrastructure to the local government, the community of Piaseczno chose to seek an external, private operator, rather than expand its bureaucracy into an unknown area: water & wastewater service.

A key manager of the former Warsaw utility department serving Piaseczno founded a company, which gradually secured contracts for wastewater and then drinking water operations. The private company has successfully (satisfactory service levels in compliance with national quality standards) served the community under service contracts from 1989 through 2002 and commenced a 10 Year lease in 2003.

Yet, the unsophisticated starting point on the path to privatisation is clear, likely having been of greater advantage to the private company than the local government and citizens over the past decade. The government still provides a subsidy on the price of water. However, the situation appears to be improving. For example, the new lease contract shifts greater burdens to the private company (such as, billings and collections). To dispel possible external perceptions of favouritism, further reforms appear necessary in contracts, procurement, and especially the development of state regulators to oversee the interests of the community and citizens.

Case Study No. 2: Transformation of a Utility Division into a Private Operator

The case study in East Bohemia, Czech Republic, presents a similar scenario as in Poland. While the progression of privatisation is somewhat more advanced nationally, with most of the country serviced by domestic or international operators, and locally, with greater levels of cost recovery allocated to reinvestment in system assets, many of the deficiencies in the implementation of privatisation are similar. Attention is necessary in areas such as procurement, transparency, contracts and regulation, to ensure a viable and competitive private market for water utility management.

Conclusions:

The case studies prove the market development study premise:

- **Yes**, domestic companies are able to enter the market for water utility management
- **Yes**, domestic companies can also perform as water utility managers, even to the point of financial contribution to asset renewal.

The experiences and results of the companies in each case study serve as basic examples of domestic company entry and participation in the water utility management market of the ECA region. While a “introduction” period was necessary after the political transitions to introduce private sector participation in the water sector, key reforms are now necessary in procurement, contracts, central regulation & oversight, etc. to ensure long-term customer confidence and value in the ECA region. This is a significant area where international financing institutions and donors can provide assistance in terms of institutional strengthening at the national and local level.

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1. CASE STUDY METHODOLOGY

1.1. Purpose

The study team conducted two case studies to gain an “in-depth” perspective of domestic company activities in the ECA water utility management markets. The case studies were used to check and calibrate the general findings of the market survey (results of the questionnaire) and also to identify particular “keys to success” and “lessons learned” for market entry and activity by domestic companies.

The case studies are a mechanism to address the basic questions of the ECA market study at the company, project and community level:

To gain Market Insights at the Company, Project & Community Level

- Are domestic market participants able to enter the water utility management market?
- Can domestic entities perform as water utility managers?

1.2. Criteria

To focus on and test the basic premises of the market study, the study team sought out case studies, which characterize the experiences of “domestic” water utility managers in the ECA region, according to the basic criteria:

Case Study Criteria	
Project Location	ECA region (Eastern/ Central Europe and Central Asia)
Project Type	Water Utility Management (community water and/or wastewater services) in a Public-Private Partnership model
Project Status	Complete or underway for more than two years, to enable comprehensive project assessment from procurement to implementation
Company	With domestic owners and headquarters (within the ECA region)
Company Role & Capacities	Water utility manager and operator

1.3. Selection

The study team selected the two case studies upon evaluation and clarification (by telephone interview, correspondence, etc.) of 17 suggestions provided by the respondents to the questionnaire.

Selection of the Two Case Studies		
Project Location	Piaseczno, Poland	Svitavy & Policka, East Bohemia, Czech Republic
Project Type	Service Contract and Lease	Lease
Project Status	Service contracts completed (1989, 1993 plus extensions); Lease commenced in 2003	1993 – ongoing (open ended)
Company	Aquarius & Co	VHOS a.s.
Company Role & Capacities	Wastewater operator since 1989 Water supply operator since 1993	Water supply & wastewater operator since 1993

Each case study offers a unique perspective into the specific market conditions of a particular ECA country or region, according to the approach taken by each particular company and client.

2. CASE STUDY: PRIVATE OPERATOR IN POLAND

2.1. Overview

This example of a private operator, Aquarius & Co, in the Town of Piaseczno demonstrates the ability of a domestic company to enter and perform in the water utility management market, as summarized below. This chapter outlines the key factors and conditions that enabled the establishment and long-term survival of a domestic, private operator in Poland.

- 1. Can a domestic enterprise perform as a “private” water utility manager in a public-private-partnership contract... and assume traditional “utility” responsibilities for operations, management and/or investments?**

Yes, Aquarius has been operator of the “urban” water & wastewater systems in Piaseczno since 1989, first in a limited service contract (for storm water system), then in a full service contract from 1993 – 2002 (all systems) and has been awarded a 10 year lease in 2003, now including responsibility for revenue collection.

The municipality retains ownership of assets and responsibility for investments.

- 2. Is the water utility management market accessible to domestic companies?**

- a. which are established in the water sector?**

Yes, Aquarius utilized its familiarity with the local water service systems to enter the market (the company was founded by personnel of the Warsaw Utility previously serving Piaseczno, a suburb). The company established its market position by taking advantage of a window of opportunity offered by the broader political transition:

- decentralization (return of assets to the municipality),
- a fledgling domestic market (low competition) and
- emerging procurement procedures (not yet fully open and transparent).

- b. which are newcomers to the water sector?**

Not applicable - while Aquarius is a “new” company, founded during the period of political transition, it cannot be considered a newcomer, as the staff founding the company worked in Piaseczno in their former employment.

- 3. Are National Government and Water Sector laws compatible with attracting maximum participation by domestic companies?**

Yes, during the political transformations of the 1980s and 90s, the national government resurrected private company structures spurring entrepreneurship across Poland, even in the water sector. The nationwide process of decentralization returned assets to municipalities, without dictating the type of operator, public or private. Some municipalities, such as Piaseczno or Gdansk, have used this opportunity to introduce public-private partnerships for asset operations.

- 4. Are International Financing Institutions and Donor procedures compatible with attracting maximum participation by domestic companies?**

Not applicable – the engagement of Aquarius in Piaseczno involves no IFI funds. However, the owner of the assets, the municipality, has received European Union, as well as Polish funds for the rehabilitation and expansion of system infrastructure.

2.2. Case Study Data

All information presented in this case study was gained in voluntary interviews with key representatives of Aquarius and the Municipality of Piaseczno onsite during 26 – 27 August 2004. The study team did not conduct a formal audit of technical or financial information of either the operator or the municipality. Therefore, the case study is a cursory review of the developments in Piaseczno over 15 years, with many details remaining unknown.

The study team wishes to thank the Municipality of Piaseczno and Aquarius for their willingness to volunteer their time and participate in the case study:

- Municipality of Piaseczno, mgr Jozef Zalewski, Mayor
- Municipality of Piaseczno, mgr inz. Wlodzimierz Rasinski, Manager
- Aquarius & Co, mgr inz. Robert Latawiec, Director

2.3. Country Setting

This example demonstrates the importance of a sound business environment, characterized by a non-violent setting, newly democratic form of government, economic liberalization to a market economy, and progressive legislation enabling private enterprises.

Poland has been one of the Eastern “stars” in transforming itself from a state dominated to democratic and market oriented systems, so much that it entered the European Union in 2004. In retrospect, this is perhaps not surprising in the country, which played such a key role in the dramatic political transitions through Solidarity, the influential trade union and political movement, and the “eastern” pope, who reached out to and emboldened the entire East Block.

FACTOR	COUNTRY DATA ¹
Population, total inhabitants	38.6 million
% urban/ % rural	62% / 38% ²
Poverty (% population below 1\$ per day)	2%
Life expectancy at birth (years)	1990: 70.9 2002: 73.8
Form of Government	Republic, adoption of democratic mechanisms
Rule of Law	Yes: continuing transition from former communist to continental civil law
Laws enabling private companies	Yes: Law on Economic Activity (1989)
Form of Economy	Progressive and continuing liberalization policies from a former state planned to market economy
World Bank Country Income Category	Upper Middle
GNI Gross National Income per Capita, US\$ per year	1990: \$1,910.- 2002: \$4,570.-
GNP – PPP Gross National Product per Capita at Purchasing Power Parity, US\$ per year	\$9,051

¹ World Bank Website, 2004

² UNICEF Website, 2004

The Polish government quickly seized opportunities presented by the political transformations to create a private sector. Steps were taken to “remove discriminatory laws and regulations that historically favoured state-owned enterprises and to place private firms on an equal footing with other enterprise forms”³. As a result, the nation as a whole embraced entrepreneurship at the institutional and grass-roots levels (witness 800,000 sole proprietorships and 16,000 new companies by 1989, alone)⁴.

Yet, the process of change has been neither linear nor clear. Macro-economic fluctuations, recessions and continuous development of government institutions, regulations and legislation, created an often vague and unpredictable climate.

2.4. Water Sector

A progressive and proactive transformation of water sector institutions and legislation in Poland over the last 15 years, similar to the political and market changes, has provided an ever sounder and more effective setting for community water service activities.

Political and water sector changes have often been intertwined in Poland, such as decentralization of public service jurisdictions and transfer of assets to municipalities. A key factor is that while water sector legislation has evolved significantly, often with associated vagueness in regulations and “new” compliance requirements, alternative structures for water utility management have been neither dictated nor prohibited – leaving an open door for non-traditional mechanisms, such as public-private-partnership.

FACTOR	DESCRIPTION
National Institutions responsible for community water services	Polish Ministry of Environmental Protection Polish Ministry of Water Resources
Water Resources Regulations	Ongoing Harmonization with EU Directives (Water Framework Directive)
National Water Utility Association	NA
“Enabling Legislation” stipulating responsibility for community water services	Responsibility rests at the Municipality level, without specification of public or private mechanism
Non-public entities permitted by law to provide community service	Yes
Foreign entities permitted by law to provide community service	Yes
Requirements for Ownership of:	
• Public service company (utility)	Open
• Utility Property – Land	By Municipalities only
• Utility Assets (infrastructure, etc.)	By Municipalities only
Authority for Setting Water Tariffs	Municipality
Requirement for “social/ affordable” pricing of water	No

³ *The Emerging of Private Sector Manufacturing in Poland - A Survey of Firms*; The World Bank (L. M. Webster); 1993

⁴ *Ibid*

Some of the legislative developments (as surmised from onsite interviews) affecting the transformation of the Polish water sector include:

Law on Self Government (1989)

- Consolidation of 49 to 17 Voivodships (provinces)
- Decentralisation with greater authorities apportioned to municipalities

Law on Economic Activity (1989)

- Resurrection of private company forms (from prior 1934 law)

Law on Collective Water Supply & Wastewater (1990 – 91?)

- Responsibility for community water services is a municipal level jurisdiction (without dictating the mechanism for implementation: public or private are “enabled” to provide community services)
- Authority to set water tariffs rests with municipalities (via municipal council and mayoral approval); tariffs can include costs for infrastructure
- Process initiated to transfer water & wastewater assets to municipalities (by 1992 – 1993)

Law on Public Procurement (1994)

- Reforms in government procurement procedures towards EU standards
- Greater standards for transparency, but no specification of tendering procedures for PPP type contracts

Law on Collective Water Supply & Wastewater (2002)

- stipulates process for implementation of concessions, including
 - describes procedure for adoption of concessions at the municipal level, including a nation-wide deadline by 2003 for application by interested companies
 - sets limits for water tariff “margins above cost” for concessions

Pending Law on Public-Private-Partnership (by 2008?)

- Defining norms and standards for application of PPP with municipal assets?

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- Reforms in government procurement procedures towards EU standards
- Greater standards for transparency, but no specification of tendering procedures for PPP type contracts

Law on Collective Water Supply & Wastewater (2002 update?)

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Pending Law on Public-Private-Partnership (by 2008?)

- Defining norms and standards for application of PPP with municipal assets?

2.5. Local Setting

The Municipality of Piaseczno is an affluent suburb located about 20 km south of downtown Warsaw. The "bedroom" community benefits from its proximity to Warsaw and its attractive setting (parks, river, small town centre, single family neighbourhoods, etc.), such that it has attracted many new residents over the past decade (about 22% over the last 10 years), especially professionals with jobs in Warsaw. The average income of residents is reported higher than in most Polish municipalities.



Table 1: Basic Data of the Municipality of Piaseczno	
FACTORS	DESCRIPTION
Municipality	Piaseczno www.gmina-piaseczno.pl www.piaseczno.eobip.pl
Area	128.2 km ²
Character	Residential, with town centre and retail - industry area along the main road to Warsaw
Population, total inhabitants	52,000
% urban	32,000
% rural	20,000
% poor	Minimal - mostly pensioners
Economic Base/ Major Employers	Retail Warehousing Light manufacturing - technology Small business (trend)
Unemployment Level	6 %

2.6. Public Partner

This case study demonstrates the importance of local government “willingness” to adapt to a changing legislative regime and to consider alternative structures for community services. Conversely, the example in Piaseczno demonstrates the dominant position of municipalities in water utility management.

Polish municipalities typically have responsibility for numerous public services; the Municipality of Piaseczno, for example, is responsible for services in the town of Piaseczno and several surrounding villages and rural areas, including:

- drinking water & wastewater
- solid waste
- district heating
- housing

The municipal government is led by a mayor, who has been in power for about 10 years, with a staff of about 100. The administrative organization has evolved with a municipal service unit (during the 1980s and 90s), which was eventually liquidated to another legal form, and a municipal Department of Environmental Protection. The municipality has an international “sister-city” in Upplands Vista, Sweden.

The municipality assumed ownership of the public water & wastewater infrastructure in 1991, according to the Law on Self Government - Decentralization. The municipality “acquired” two separate batches of assets from two previous owners, including

- the “urban” systems covering most of the town of Piaseczno (previously under the jurisdiction of the **City of Warsaw**) and
- the “rural” systems covering the surrounding villages and rural areas (previously under the jurisdiction of the **Voidvodship**).

Becoming an Owner of Assets, but without a Utility to run them

The municipality never had a water “utility” of its own and, therefore, faced a significant challenge from the decentralization process and return of assets to municipalities.

2.7. Private Partner

Aquarius & Co presents an example of a company capitalizing on water market transitions and of the entrepreneurial climate prevalent in Poland during the time of political transitions. Conversely, this case study demonstrates the ability of previous public sector participants to build upon market familiarity as a strategy for market entry and dominance.

Table 2: Basic Data of the Private Operator	
COMPANY FACTORS	DESCRIPTION
Name	Aquarius & Co
Type	Registered, as “natural person”
Owner	Private person
Year Founded	1989
Types of Expertise – Services	<ul style="list-style-type: none"> • Operation of water and wastewater systems; • Design & construction of small works; • Laboratory services
Geographic Area of Activity	<ol style="list-style-type: none"> 1. Piaseczno “urban” water & wastewater system 2. Contract basis wastewater services (sewer cleaning & repairs, etc.) for nearby Polish municipalities
Number of Employees	60
Annual Revenues	10 mio. PLN, estimated (Euro 2 million)

Utilizing public sector experience for private market entry

A key point in the founding and success (continuously in business for over 14 years, including the entire transition period) of Aquarius was the ability to utilize its previous market knowledge and presence to capitalize on the window of opportunity presented by the changing political and water sector landscape of the late 1980s and 1990s. The founder and many key staff of the company were previously employees of the Warsaw utility and active in the Piaseczno Service Unit.

The key staff of Aquarius were intimately familiar with the system layout and operations, in contrast to the municipality, and were professionally involved in preparations for transfer of assets. Aquarius utilized this knowledge of the market and municipality to establish itself as a private water operator.

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2.8. Project Need – Market Opportunity

Based on the decentralization process in Poland starting in 1991 and the return of assets to municipal control in 1993, the Municipality of Piaseczno was “forced” to develop a strategy regarding its water & wastewater systems. It faced three options; each presented unique opportunities and constraints, but all were unknown:

1. return operations under contract with the Warsaw utility / water company
2. create a municipal utility / water company
3. outsource operations to a private company

The involvement of the Warsaw utility was not favored, as there was an interest to support newly gained independence and capacities in the community.

Creating a new utility presented difficulties and costs in starting up a new department or entity (additional staff, administration, capacities, etc.)

Outsourcing to a private entity entailed unknowns in terms of procurement, contracts, finances, etc. (prior to Public Procurement Law)

While the strategy development is not well documented (no “alternatives evaluation report” to the best knowledge of the study team), the municipality, despite initial reservations by the municipal council, decided on outsourcing. The decision rationale is explained, 10 years later, as follows:

- Lower up-front costs to the municipality (legal, staff salaries & training, administration, machinery, vehicles, equipment & outfitting, etc. which would have been necessary to build up a utility)
- free up financial resources for investments (instead of operations)
- rely on experts to do the job
- keep municipal administration small – focus on core administrative functions
- greater efficiency: better cost recovery, unaccounted for water
- support local entrepreneurship

Likewise, two local companies took advantage of the changing conditions:

- Aquarius, formed by former employees of the Warsaw Utility responsible for the Piaseczno service unit utilized their familiarity with the municipality and infrastructure system, and built upon a smaller sotrm-water contract
- Elmar, formed from a company which had built several facilities in Piasecznoand which was involved in sales of water equipment

2.9. Project – Contract Preparation

This case study demonstrates the importance of a “solution” and “results” oriented approach of the public partner (municipality) to project and contract development, especially during a vague and evolving period in the water market. Likewise, this example illustrates the potential risks and drawbacks to overly expedient and superficial project development.

In accordance with “inheriting” two separate water supply systems (“urban” and “rural”), the municipality decided in 1992 on a strategy of maintaining the twin systems – and letting two separate bids:

- operations of the “urban” water, wastewater and storm water systems
- operations of the “rural” water, wastewater and storm water systems

This was partly a strategy to foster competition between two parts of the municipality and also against corruption. A key element is that the asset ownership was clearly retained by the municipality.

The project preparation was very improvised and informal. No financial or technical audits were performed (for instance, of the previous Piasieczno service unit), though asset transfer may have been available for review. The tender documents were very casual and superficial, calling simply for “operations of the urban/ or rural water & wastewater system” and not including a sample contract. This seems to indicate neither the owner nor the bidders had a firm grasp of the situation, whether the risks or the opportunities.

While the project preparation procedures clearly do not meet IFI or donor standards, does this signify a significant weakness in the project? Or was the ability to move forward, despite significant vagueness in the market and no prospects for assistance – whether international or national – in these new matters, the more important factor?

At the time of asset transfer the infrastructure systems were intact and public services were reliable, for example, 24 hour per day water service, and compliant with national regulations. The municipality appears well organized and proactive to seek external financing sources to improve its assets.

“Urban” Water Supply System (service covering most of the town of Piasieczno, with about 21,000 population):

- No main water source (water purchased from the Warsaw Utility, the former operator prior to asset transfer)
- Intermediate pump station (built after asset transfer)
- About 150 km of distribution network

“Rural” Water Supply System (covering a third of the town of Piasieczno and villages/rural areas, with about 30,000 population):

- About 12 groundwater sources, per numerous village systems
- About 150 km of pipe distribution network

“Urban” Sewerage System

- Separate sewerage collection system of about 150 km (combination gravity, sub-pressure, pressure systems)
- Wastewater Treatment Plant (originally at 5,000 m³/d and upgraded to 10,000 m³/d after asset transfer)

“Urban Storm Water System”

- Separate storm water collection system of about 150 km
- Storm Water Treatment Plant (built after asset transfer)

2.10. Procurement

This aspect of the case study may present the key weakness of the entire project. The lack of transparency mechanisms, while not an indictment of wrong doing, clearly breaks the professional creed of “giving the impression of the potential for improper awarding of contract.” According to the information gathered by the study team, this is an area of criticism, simply because of the lack of documentation and procedural back-up.

Project procurement appears to have proceeded just as casually and informally as project and contract preparation, with no national agency nor public oversight. Overall, however, procurement procedures have improved with each successive contract.

Contract No. 1: Service Contract for “urban” storm water	1989
Bidding Type	None
Number of Bidders	None
Selection Procedure	Per approval of Mayor & Municipal Council
Contract Award	Per Direct Negotiation
Winner	Aquarius
Contract No. 2: Service Contract for Operations of “urban” water supply, wastewater & storm water systems	1993
Bidding Type	Request for Proposals – Competitive Bidding
Number of Bidders	3 (Warsaw Utility, Neighbouring Municipality, Aquarius/ Craftsman Cooperative)
Key Criteria	Low Cost
Selection Procedure	Per approval of Mayor & Municipal Council
Contract Award	Per Direct Negotiation
Winner	Aquarius/ Craftsman Cooperative
Contract No. 3: Lease for “urban” water supply, wastewater & storm water systems	2003
Bidding Type	Request for Proposals – Competitive Bidding
Number of Bidders	4 (Elmar, Aquarius, Craftsman Cooperative, local construction company)
Selection Procedure	Per Internal Auditor recommendation to the Mayor & Municipal Council
Contract Award	Per Direct Negotiation
Winner	Aquarius

Contract No. 1

The awarding of the storm water service contract in 1989 to Aquarius, appears to have proceeded through direct negotiation with Aquarius (at the time apparently still the employees of the Warsaw utility) without a bidding process.

Contract No. 2

The awarding of the two service contracts for the “urban” and “rural” contracts in 1993 appear to have improved somewhat in the bidding procedures, including request for proposals and competition between three entities for the urban contract. However, the contract appears to have been developed through direct negotiations, after Aquarius and the Craftsman Cooperative were selected as the preferred operator.

Aquarius teamed together with the local Craftsmen Cooperative to win the urban contract. This combination is reported to have been essential to demonstrate sufficient experience in all areas of water and wastewater operations to the municipality; Aquarius was considered too small and inexperienced, by itself. The team did not bid for the rural network, as this would have been “too much”.

Aquarius notes that a key aspect to entering the market was the prior philosophy that “assets belonged to everybody – but nobody”. Aquarius felt capable to step in and operate the networks. Aquarius acknowledges market entry was difficult for outsiders, as success was based on system knowledge and connections.

Elmar, a construction company which had constructed some of the facilities in Piasieczno with a founder experienced in sales of water purification equipment, won the rural project.

The selection of the two companies met the satisfaction of the mayor and the municipal council for a few reasons (in addition to the strategic aspects outlined above):

- higher efficiency and lower costs (members of the municipality had travelled to Britain (date unclear) and were impressed with the efficiency gains attained in the water sector by Mrs. Thatcher’s divestiture of assets)
- experience of employees with the infrastructure system and municipality: guarantee of further satisfactory service
- support local – municipal entrepreneurship

Contract No. 3

The awarding of the lease for the “urban” and “rural” systems in 2003 appear to have improved somewhat in the bidding procedures, including competition between four entities for the urban contract and review by an internal auditor, an EU requirement. However, the awarding of multiple concessions (to all companies as “capable” of being operator), but only 1 contract is reportedly being reviewed for legal consistency.

Aquarius seems to have benefited from its position as incumbent operator. Indeed, it split from and competed against its former partner, the Craftsman cooperative. A local construction company, with experience in the municipality in the construction of water system facilities, The project attracted no interest from afar, with only companies from the region submitting conditions, apparently in response to regulatory deadline. The contract arrangement apparently bypasses the public-procurement law with the free of charge lease of assets (regarding thresholds for public spending).

A key improvement in 2003 was the incorporation of an Internal Auditor – required for EU membership – for review of tariff application and procurement review.

2.11. Contract Structure

The case study demonstrates the evolution of contracts, and the allocation of risk and responsibilities, in a changing water sector. No standard contracts were used; the local parties created their own. This example illustrates the need for attention (proper project preparation) for suitable risk allocation and payment mechanisms.

FACTOR	DESCRIPTION: Contracts 1 and 2	DESCRIPTION: Contact 3
Type	Limited Service Contract (1989) & Full Service Contract (1993);	Lease (2003 – 13)
Value	Unit prices of m3 water & sewage	Per customer revenues
Public Partner:	Municipality of Piasieczno	Municipality of Piasieczno
Private Partner:	Aquarius & Craftsman Cooperative	Aquarius
National:	None	None
International:	None	None
Duration	3 Years (1993) + 2 Years (1996) + unspecified (1998)	10 Years
Overall Objective	Operations of storm water (1989) and water supply & wastewater systems (1993)	Operations of water, wastewater & storm water systems
Key Responsibilities:		
• Asset Ownership	Public: Infrastructure & Land Private: moveable equipment & building	Public: Infrastructure & Land Private: moveable equipment & building
• Investment – Assets	Public via local taxation and national & international funds	Public via local taxation and national & international funds
• Revenues – billings & collections	Public	Private
• Operations & Maintenance	Operator per compliance with national standards & satisfaction of Municipality (measured informally per customer satisfaction & complaints)	Operator per compliance with national standards & satisfaction of Municipality (measured informally per customer satisfaction & complaints)
• Management & Administration	Private	Private
• Utility Staff (hiring – firing)	None	None
Default Mechanism	None	Multiple concessionaires

Contract No. 1

The service contract for the storm water system was managed by the municipal environmental protection department and became part of the 1993 contract.

Contract No. 2

The service contract for the operations of all “urban” systems was originally a three year contract, but was extended for 2 years in 1996 and again in 1998 for an unspecified extension period. Some key aspects of the service contract maintained some key responsibilities for the municipality including:

- Customer contracts between the customers and municipality (not operator)
- Operator not responsible for revenue billings or collection: Municipality paid Aquarius per cubic meter of water delivered (10% withholding from each payment as performance bond)
- Operator’s performance standards: compliance with national standards (monthly water supply & wastewater inspections, fire safety, police-security, all with owner notification); However, no audit whether technical or financial
- Operator responsible for customer complaints and interaction
- Additional service contracts (about 5-7, all terminated in 2003) as new facilities came online- could have been tendered to others, but Aquarius won public tenders

Contract No. 3

The 10 Year lease contract shifts more responsibilities to the operator, but still has some generous terms:

- lease of assets for operations at no cost (no transfer of assets – remain municipal property)
- As of 1.1.2004 operator responsible for entire Operations and maintenance and associated costs
- No Operator investment responsibilities: upgrade nor expansion (rests with municipality)
- Customer contracts with Aquarius
- Operator responsibility for revenue collection; Aquarius no longer paid by Municipality (though cofinance of customer bills by Municipality per water bought from Warsaw, at 1 PLN for each 2 PLN)

Aquarius resisted assuming responsibility for revenue collection, due to greater associated risk. But this was risk and responsibility the municipality clearly wanted to transfer to the private partner. The Municipality was keen to achieve full cost recovery, which was seen as the fault of municipal water fee collections (each year typically resulted in 5 mio. PLN deficit).

2.12. Contract Implementation and Results

Contract implementation appears to have proceeded without major difficulties, with the operator providing regular and consistent services, without major regulations compliance issues.

In 1993, Aquarius essentially took over the Warsaw Utility staff of the Piasieczno operations unit and gradually replaced or terminated any incompetent staff.

Water Tariff Setting Authority was a key concern in the early days of the lease, as this now had a direct impact on the private operator’s revenue stream.

- Mayor’s influence (directly approves recommendations or waits 70 days in case of municipal council rejection).
- Mayor pressure – if new tariff is not approved, old goes out of date.
- Municipal council per operators costs (2003 first submission – difficulty no raise).

Despite the operators presentation and justification of a tariff increase, the municipal council rejected the proposal.

Aquarius achieved the following results over the course of the “urban” area contracts.

FACTOR	BEFORE (1995)	AFTER (2004)
DRINKING WATER SERVICE		
% population in service area connected to system	%	%
Water quality: compliance with National standards	100 %	100 %
Water Supply, hours per day	Summer:24 hours/ day Winter: 24 hours/ day	Summer:24 hours/ day Winter: 24 hours/ day
Total Kilometres of pipe network		
No. pipe breaks repaired per year	60-80 per year	60-80 per year
Time to repairs	2-6 hours	2-6 hours
WASTEWATER SERVICE		
% population in service area connected to system	%	%
% outfall compliance with National environmental standards	Some non-compliance % (stricter than EU, as considered large town per Polish standards)	Some non-compliance % (stricter than EU, as considered large town per Polish standards)
Total Kilometres of pipe network		
ENTERPRISE EFFICIENCY		
No. Registered Customers	1,300	3,608
Metered connections	Yes	
No. Illegal Customers		19,000 PLN of 7 million PLN
Annual Water Production, m3	1,825,600	3,436,200
Annual Customer Billings, m3	929,322	2,938,200
Annual Customer Revenues, m3		
Unaccounted for Water Levels	627,000 50%	498,000 26% (through improvements in billings)
Annual Water Production, Euro		
Annual Customer Billings	1,621,806 PLN	6,940,602 PLN
Annual Customer Revenues	1,599,973 PLN	6,550,714 PLN
Collections Ratio		Late payments a problem
Total Number Staff	Branch Office of Warsaw	
- No. Technical Staff	Only O&M	
- No. Administrative Staff	4 lab	2 lab
- No. Management Staff		
Number of Staff / 1000 connections		
Operating Costs/ Operating Revenues	Deficit (owner 5 mil PLN/ year)	1:1 , 0profit; tariff catching up with costs – expect 0 losses by end of 2004
Water Tariff (PLN/ m3)	1.45	3.05
Sewerage Tariff (PLN/ m3)	0.96	2.93

2.13. Assets and Investments

This case study demonstrates the continuous public ownership and public responsibility for investment in water and wastewater assets.

The public entity is owner of all stationary assets and land, while the private operator owns all moveable equipment and vehicles necessary to conduct business and his building (located on municipality land). The private operator is responsible for repairs and maintenance of the stationary assets, while the owner is responsible to replace or expand the system infrastructure. According to the lease terms, the operator is to return the assets to municipality “in no worse condition per normal wear & tear”.

The municipality has invested significant sums over the past 10 years to keep pace with a fast growing population. Many of the investments were planned in a 1996 Modernization Plan (201 mio. PLN over 2004/09), which included inputs from the private operator.

- **Wastewater Infrastructure: 97.5 mio. PLN**
 - Upgrade of WWTP from 5,000 to 10,000 m³/day
 - New Storm Water Treatment Plant
- **Drinking Water Infrastructure: 23.5 mio. PLN**
 - 8 rural water treatment plants (groundwater)
 - Extension of the rural water network to 96% of the rural areas.

The projects were let under public procurement and constructed by others (one of which bid on the operations lease contract).

As the water tariffs are allocated strictly to operations costs (could by law be extended to cover investments, but has not been done to date in Piasieczno), the capital source for the investments was from local, national and international sources:

- Municipal budget (local taxes)
- Community matching funds (for new villages or areas being connected to the system)
- Loans from national and Viovodship funds (e.g. environmental protection fund)
- EU Structural funds: SAPPARD, ISPA & Phare
- Environment Protection Bank, a local commercial bank (most local banks were sold off during the last decade).

The municipality reports it has no excessive debt service burden.

2.14. The Future Path

The Municipality of Piasieczno continues to increase in population, benefiting from its proximity to Warsaw, which will require continued proactivity to accommodate.

The two separate parts of the town network are starting to grow together and overlap; some neighbourhoods receive water supply from one operator and wastewater services from another. Additional investments shall become necessary to accommodate municipal population growth. For example, the wastewater treatment plant is already deemed to be operated at capacity and a second expansion (to 20,000 m³/d) is under consideration.

The security of the operator contracts is seen as uncertain, since the municipality wishes to benefit from EU cohesion funds for infrastructure investments. Uncertainties in qualification procedures is leading to rumours that both operator contracts may be cancelled in/ by 2008 and a public utility created to obtain investment monies (applications for 180 mln PLN for wastewater treatment plant modernization; networks expansion, though with 36% local matching funds required). The reality is that public and private funds can be blended upon proof and transparency that no “windfall gains” are passed on to a private company from EU money.

As such Aquarius is considering ways to diversify, such as entering the portable toilets business.

2.15. Best Practise Milestones

To the best knowledge of the study team, the 1993 service contract in Piasieczno, with associated national elements, meets few of the Best Practice Milestones advocated by the Asian Development Bank. By the 2003 lease contract compliance had only marginally improved.

1993	2003	Best Practice Milestones – Asian Development Bank
No	No	1. State-owned reform unit, specialized in privatisation
No	No	2. Scoping Study of the water utility
No	No	3. Costs & Benefits of separating natural monopoly businesses
No	No	4. Risk assessment and ranking with mitigation strategies
No	No	5. Determine most suitable PPP option – groundwork for privatisation tenders
No	No	6. Review legal framework affecting reorganization of water utilities (prepare draft versions of necessary amendments)
No	No	7. Support for local Capital Market reforms
No	No	8. Assess and prepare water resource management strategy; assess feasibility of tradable water rights
No	Yes	9. Assess data on non-revenue water and scope for revenue increases
No	Yes	10. Review Tariff Structures and financial statements
No	No	11. Assemble financial model of Utility, focusing on bulk and retail systems
NA	NA	12. Review bulk supply mechanism and develop time scale for meeting international standards
No	Yes	13. Implement sound commercial tariff structures, billings and collections
Yes	Yes	14. Define scope of market, investment obligations and quality/ performance targets
No	No	15. Implement and independent regulatory authority for overall review
No	No	16. Commission advisors to prepare project preparation and tender documents

Does this poor level of compliance with best practice milestones indicate a sub-par project? Perhaps, but not necessarily - while attaining the milestones is desirable and apparent, the funding mechanisms and expertise to attain such milestones are not, especially during a period of financial and regulatory confusion. The parties in Piasieczno proceeded to find an operations solution to their newly acquired assets in 1993 according to the means and capacities available to them.

2.16. Areas for Improvement

While it is true that the project commenced in the midst of a significant transition, several areas require great levels of improvement, especially at the later contract date when the water sector was more settled:

1. **Transparency:** the apparent lack of proper tender documents and selection procedures leaves the project open to criticism of cronyism and corruption, whether or not any wrong doing occurred
2. **Project preparation:** a greater level of baseline study for better risk assessment is necessary; mechanisms are needed for access to expertise and standards
3. **Contract structure:** the responsibilities and risks can be more reasonable distributed between public and private partners, according to the financials of the project (lease price must be realistic, municipal subsidy is unclear)
4. **Tariff Policy:** approval mechanisms must be objectified and carry ever greater percentage of the investment costs.
5. **Need for External Support:** to fill the market-wide knowledge & standards gap

2.17. Keys to Success

The project moved forward despite the obstacles offered by country-wide changes in political and water sector mechanisms. Although such a project would not meet standards of IFIs and donors, the project attained modest efficiency gains (data awaited by fax) by domestic operator. The keys to domestic market entry and participation were:

1. National legislation permissive of alternative structures in water utility management – progressive attitude of national government
2. Municipality willing and open (unbiased) to seek alternative solutions during a volatile period
3. Community open to a private sector arrangement
4. Private entity flexibility to capitalize on prior municipal involvement and market familiarity, and to continue to adapt to the changing market
5. Prosperous customer base of an affluent suburb

This project model is likely not especially replicable, as the “window of opportunity” seized in Piasieczno has likely passed, and the affluent setting is atypical to much of the ECA region

2.18. Lessons Learned

The key lessons to the input of a domestic company in water utility management from the project in Piasieczno are:

1. **Flexibility and Innovativeness** – the ability to comprehend and embrace change, almost immediately, is key to seize market opportunities while they exist, as exhibited by the municipality and the operator.
2. **Learning by Doing** – neither the municipality nor the private operator waited until all studies were completed and the last detail was understood (on the contrary, they may have moved forward to naively). Nor did they wait for external national or international entities to provide the proper frameworks and support– they may have waited a long time. Both public and private entities moved forward bent on finding a solution to water systems operations. Now national (and international) mechanisms must catch up to provide oversight and expertise in areas of project procurement, contracts, etc.
3. **Cover your tracks** – while both parties have moved forward in a proactive, solution oriented manner, the downside is the lack of transparency both in procurement and contract matters. Merely the impression of cronyism is unacceptable and should be corrected through proper procurement and contract preparation at the earliest opportunity. The lack of central regulations and oversight to support and control PPP – PSP contracts is a key deficit.

3. CASE STUDY: EAST BOHEMIA, CZECH REPUBLIC

3.1. Overview

This example of a private operator, VHOS a.s., in East Bohemia demonstrates the successful transformation of a former regional utility division into a private operator. This chapter outlines the key factors and conditions that enabled the establishment and long-term survival of a domestic operator in Czech Republic, with key points summarized below.

1. Can a domestic company perform as a “private” water utility manager and assume “traditional” utility responsibilities for operations, management and/or investments?

Yes, VHOS a.s. has been operator of water & wastewater systems in several towns of East Bohemia since 1993.

The towns retains ownership of assets and responsibility for investments. Yet, the lease fee collected from the operator covers between 40 – 90% of annual investment amounts, an indication of the progress towards water sector sustainability, even during a period of large investments (inherited system upgrade, EU accession, etc.).

2. Is the water utility management market accessible to domestic companies...

a. which are established in the water sector?

Yes, VHOS utilized its familiarity with the water sector to “enter” the market as a private operator; the company was transformed from a division of the prior regional utility, according to the window of opportunity offered by a realignment of the water sector following regained country autonomy in the early 1990s.

b. which are newcomers to the water sector?

Not applicable - VHOS is a “new” company, founded during the period of political transition, but cannot be considered a newcomer, as its predecessor was established in the water sector as a regional water utility.

3. Are National Government and Water Sector laws compatible with attracting maximum participation by domestic companies?

Yes, after the dissolution of the Soviet Block and separation from Slovakia, the Czech government rigorously pursued a course of privatisation, starting with water services in the utilities sector. The country-wide decentralization of state assets to the cities and towns provided the opportunity for private sector participation in the water sector. Overall, many international companies are active in the large cities, but many domestic operators are working in towns and villages, such as Svitavy and Policka.

4. Are International Financing Institutions and Donor procedures compatible with attracting maximum participation by domestic companies?

Not applicable – the engagement of VHOS by towns and villages in East Bohemia involves no IFI funds. However, the owners of the assets, the towns and villages, have received some European Union (per the accession process) and national funds for the rehabilitation and expansion of system infrastructure.

3.2. Case Study Data

All information presented in this case study was gained in voluntary interviews onsite during 1 – 2 November 2004 with key representatives of the Towns of Svitavy and Policka, asset owners; VHOS, private operator; and SOVAK, a national-level professional association of water & wastewater operators,. The study team did not conduct a formal audit of technical or financial information of either the operator or the municipality. Therefore, the case study is a cursory review of the developments in East Bohemia over roughly 15 years, with many details remaining unknown. The study team wishes to thank the towns of Svitavy and Policka and VHOS for their voluntary participation in the case study:

Municipality of Svitavy:

- Mr. Miroslav Vetr, Ing., Deputy Mayor
- Mr. Marek Antos, Ing., Water Union Secretary (representative of 11 municipalities)
- Mr. Jii Zamecnik, Chairman VODA & SPORT Ltd.

Municipality of Policka:

- Mr. Jaroslav Martinu, Deputy Mayor
- Mr. Kiselka, Secretary of Municipal Union (representative of 16 municipalities)
- Mr. Kowladen, Mayor of Sebranice Village

VHOS a.s.:

- Mr. Pavel Binka, Ing., Chairman of the Board of Directors, Managing Director

SOVAK (Sdruzeni Oboru Vodovodu a Kanalizaci CR):

- Mrs. Miloslava Melounova, Dipl. Ing., Director
- Mrs. Katerina Sucha, Administrator

Mr. Ladislav Tuhovcak of the Brno University of Technology provided technical expertise to the study team during all meetings, except with SOVAK.

3.3. Country Setting

This case study demonstrates the importance of a tranquil and secure setting on the water sector, at the national level, during a potentially turbulent and destabilizing political transition.

The Czech Republic has peacefully and prosperously developed through a challenging transformation over the last 15 years: first by shedding Soviet authority in the “velvet revolution” of 1989 and then by separating from its national “twin” of 70 years, Slovakia, in the “velvet divorce” of 1993. Milestones of this progression include a significant engagement with the international community, most notably entry in NATO (the North Atlantic Treaty Organization) in 1999 and in the European Union in 2004.



Map Source: World Atlas.com

As a result of this “smooth” transition from centralized authority to democratic forms of government and market economy, the Czech Republic is characterized as one of the “most stable and prosperous of the post-Communist states”.⁵

Table 3: Basic Data of the Czech Republic	
Factor	Country Data ⁶
Population, total inhabitants	10.246 million
% urban/ % rural	74% / 26% ⁷
Poverty (% population below 1\$ per day)	2%
Life expectancy at birth (years)	1970: 70 2002: 75
Form of Government	Parliamentary Democracy
Rule of Law	Yes; Civil law based on Austro-Hungarian codes with ongoing transition towards OSCE (Organisation on Security and Cooperation in Europe) obligations and away from Marxist-Leninist legal theory ⁸
Laws enabling private companies	Yes
Form of Economy	Progressive and continuing liberalization policies away from a former state planned to market economy
World Bank Country Income Category	Upper Middle
GNI Gross National Income per Capita, US\$ per year	1990: NA 2002: \$5,560
GNP – PPP Gross National Product per Capita at Purchasing Power Parity, US\$ per year	\$13,991

Certainly, the process of change was neither linear (macro-economic fluctuations, recessions, currency valuation, etc.) nor self-evident from the onset (development/adaptation of government institutions and legislation; administrative reorganization into 13 regions, etc.).

But the business setting remained relatively sound and stable in the Czech Republic, despite an often vague and unpredictable climate. A significant reason was the Czech government’s firm and steady commitment to privatisation in vital sectors of the national economy, as a means to encourage foreign investment and engagement, from banking, telecommunications, energy to water.

This steady business environment provided a solid foundation of confidence and incentive for private sector participation, both international and domestic, in the water sector.

⁵ The World Fact Book, US-CIA Website, October 2004.

⁶ *World Bank Website*, 2004

⁷ *UNICEF Website*, 2004

⁸ The World Fact Book, US-CIA Website, October 2004

3.4. Water Sector

The overall political transformations in the Czech Republic led to significant changes in the water sector, most notably according to two major transformations:

- Decentralisation: transfer of responsibility (and assets) for water services from the central to the local government level (cities, towns, villages, etc.)
- Private Sector Participation: introduction of the private sector in water services operations, as an optional alternative to the traditional municipal utility model.

The newly autonomous government, especially under the leadership of Prime Minister Klaus, quickly embarked on a national campaign of water sector reform in the early 1990s, inspired in part by the fresh example in England. The primary goals of the state government were to:

1. reduce, and eventually terminate, the federal burden for investment in public services infrastructure
2. increase the efficiency of the water sector, for self-sufficient and sustainable services mechanism.

Yet, in stark contrast to the British model, the Czech approach to “privatisation” did not include full divestiture, with asset ownership retained at the local government level. Privatisation was further accelerated in the Czech Republic upon full separation from Slovakia in 1993, which had generally resisted the privatisation option⁹.

Building a Foundation to enable (but not require) Public-Private-Partnerships

Once the former chains of authority were dissolved, the state government speedily utilized its powers to activate the process of decentralisation and, in turn, create the option for private water services operations.

- Government Notice No. 222/ 1991

This provided a general notice on water sector reform, especially laying the groundwork for transfer of asset ownership to local governments and opening up the possibility for private sector inputs (separation, for the first time, of the responsibilities for asset ownership and operations)

- Act of Municipalities 302/ 1992

This dictated the transfer of public water supply responsibility from the central to local government, according to the free-of-charge transfer of assets.

As such, each of the then existing regional utilities were required to prepare plans for the transfer of the drinking water and wastewater system assets to the respective cities, towns and villages. (Seven regional utilities, plus two separate utilities for Prague, provided water sector services in the Czech portion of the former Czechoslovakia). In order to be accepted for activation, each plan required the official approval of the respective local government plus, at the national level, the Ministry of Agriculture and the Fund of National Assets. The asset transfer plans typically included two basic models:

- The “**mixed utility**” option proposed local government assume both functions of asset ownership and operations.
- The “**operating utility**” option proposed local government retain ownership and investment responsibilities, but “contract-out” the operations & maintenance functions

Therefore, local governments were confronted with a choice between a traditional “public utility” or “public-private-partnership”, though without having direct experience in either.

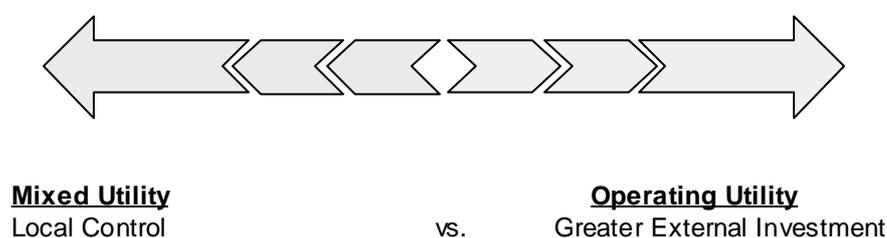
⁹ Czech Republic Report – OECD/ Dancee Programme, January 2002

“Two Waves of Privatisation”

Nationwide, the smaller towns and villages mostly opted for the traditional (“mixed utility”) option to maintain greater control over their assets, while larger cities and towns tended to select the private sector (“operating utility”) option, in order to attract (hopefully) greater levels of foreign investment. In cases of shared assets (for example, regional water supply systems with one source), the respective towns often created a water union.

The economic realities (unemployment levels, presence of employers, etc.), availability of investment capital as well as the extent of local control figured highly in the decisions of local governments.

Decentralisation & Asset Transfer:
Perception of the Decision faced by Towns & Villages



The introduction of the private sector in the Czech Republic occurred in two “waves”. First, in 1992, two local governments, including Brno - the second largest city of the Czech Republic, opted to enter into contracts with water service operations companies. Then, in 1994, numerous cities and towns, such as Svitavy and Policka, followed this lead and engaged private sector operators.

Public Capital and Support for Private Operations Companies

In addition, to the “system infrastructure” assets, the “operational” assets (staff, equipment, vehicles, facilities – administration buildings, workshops & warehouses, etc.) of the former regional utilities were also “privatised” in parallel. Typically, the local operations division for each particular town were either transferred free-of-charge to the municipality (where the “mixed utility” type was selected) or sold to a newly-created private operator (where the “operating utility” type was selected). While numerous domestic operators were created in this fashion, many have since sold out to international companies. Similar trends are visible in the privatisation of other sectors, i.e. finance and banking.

A key aspect of the process to privatisation was the public issuance (to the respective system customers) of coupons for stock purchase in the new private operations companies, along with an associated stock exchange. This mechanism was successful in mobilizing public capital and support for the new operations companies.

A decade later, the collective decision of the many cities, towns and villages to engage private operations companies, has resulted in a diverse water market for private operators, which attracts big and small, international and domestic companies. The Czech Republic currently includes about 100 operations companies & utilities, with 51 international to 49 domestic entities¹⁰. This equals, on average, one operator per 100,000 inhabitants.

¹⁰ SOVAK Discussion and Brochures

Accession to the European Union

The water sector, in general, and privatisation, in particular, received an additional boost from the EU accession process. Harmonization with EU regulations and best practices required additional reforms at the national and local levels, according to:

- Requirements to achieve **full cost recovery** necessitated tariff increases to all user classes (domestic as well as commercial-industrial and public) and gradually resulted in lower water consumption rates
- Greater levels of **investment in infrastructure**, as stipulated by the Water Framework Directive spurred the construction of wastewater treatment plants (mechanical and biological treatment, with nitrogen and phosphorus removal) – still ongoing
- Phasing out of **central government subsidies** for asset investment
- Increased **system efficiency**, especially in drinking water delivery, was institutionalised through the passage of a national “water extraction law”, which levies a tax of 2 CZK for each cubic meter of produced water (forcing both public and private operators to address the issue of leakages).

Initial Results of Water Sector Reform

The Czech water sector shows definite improvements over 10 years since the start of reforms and the introduction of private operators¹¹:

- Water consumption (paid water) has stabilized at 163 litres per person per day, down about 43 percent from 298 lpd in 1989,
- Population served by municipal water supply systems at 89.8 percent, up 7.6 percent since 1989 (from 82.4 percent)
- Population served with public sewerage systems at 77.7 percent, up 5.3 percent since 1989 (from 72.4 percent)

Continuing Transitions in the Water Sector

While improvement has been achieved, entities active in the water sector continue to face numerous challenges to achieve viable, efficient and sustainable mechanisms, whether public or private, for municipal drinking water supply and wastewater evacuation, including:

- **Sustainability vs. Politics:** water tariffs are typically reviewed and set on an annual cycle by the local government, the asset owner. Yet, local mayors and politicians are forced into compromises between, on the one hand, raising capital for infrastructure improvements (i.e. tariff increases) versus, on the other, improving the chances for re-election (keeping customer costs low by not increasing tariffs).

While private operators are typically contracted for long-term system responsibility, local politicians are often focused on a four-year election cycle – occasionally leading to a conflict of technical vs. political priorities

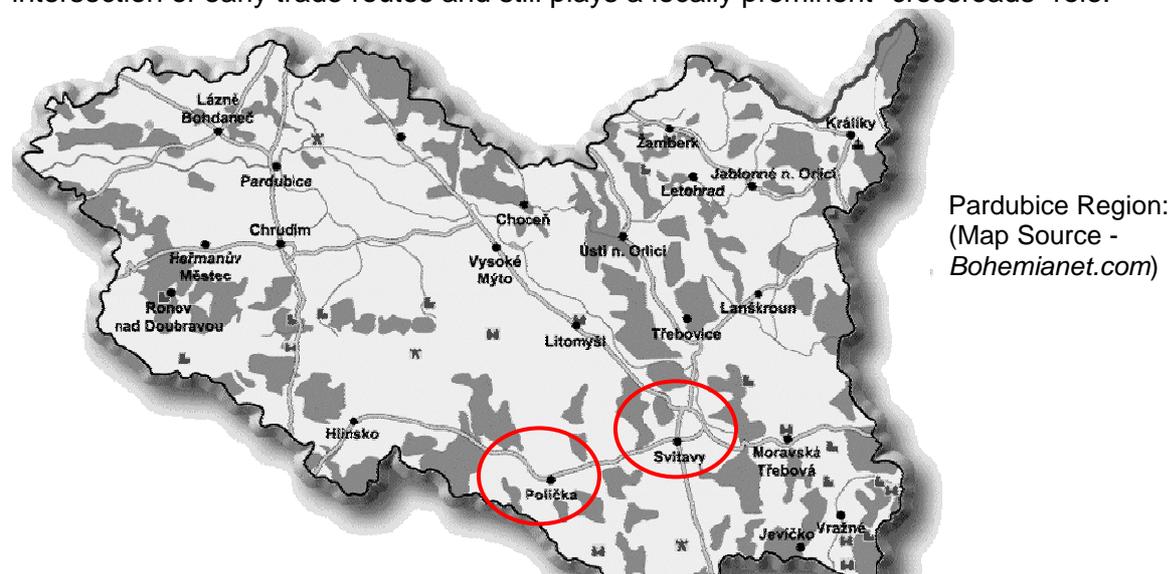
- **Regulatory Function:** The municipalities have generally not developed into sector regulators, as foreseen by the founders of water sector privatisation.

For example, the Ministry of Finance has the obligation and duty to check tariff levels, in part by controlling the operators (public or private) costs according to a generic list. Yet the asset owners, the local government, has minimal means or expertise to confirm the efficiency of its own (if mixed utility type) or private operators (if operating utility type) performance.

¹¹ Water Supply and Sewerage Systems in the Czech Republic, Annual Report 2003

3.5. Local Setting

The Towns of Svitavy and Policka are located in the “highlands” of the Pardubice Region, part of Bohemia, about 175 kilometres East of Prague. The historic towns have renovated town centres and a generally favourable standard-of-living, including “cultural” infrastructure (theatres, public recreation facilities, public squares, etc.). Svitavy is located at the intersection of early trade routes and still plays a locally prominent “crossroads” role.



Both towns face typical challenges of small communities in Central - Eastern Europe: creation of a sustainable economic base, adaptation of government administration to new forms, transition to EU membership, etc. For instance, each town is hoping to capitalize on increased tourism as part of its future economic strategy.

Table 4: Basic Data of the Towns of Svitavy and Policka

Factors	Svitavy 	Policka 
Country Administrative Region	Pardubice	Pardubice
Municipality	Svitavy	Policka
Town Area	31.3 Km ²	33.1 Km ²
Character	Urban with town centre, neighbourhoods and commercial areas	Urban with town centre, neighbourhoods and commercial areas
Population, total inhabitants	17,427	9,123
% urban / % rural	NA	NA
% poor	0	0
Economic Activities	Retail - small business; Manufacturing/ industry; Services; Agriculture	Retail - small business; Manufacturing/ industry; Services; Agriculture
Unemployment Level	12 %	8 %

3.6. Public Partners

Until the transfer of assets in 1994, the former East Bohemia Regional Water Utility was responsible for water services to both Svitavy and Policka, with an operational division based in each town. The type of assets had a significant influence on the options available to local governments, as they adapted to decentralisation.

Shared Assets

The example of Svitavy demonstrates the route taken by many towns in the Czech Republic, which shares part of its infrastructure with other settlements.

The water supply system in Svitavy is part of a “regional” system, with a single groundwater source as the supply for the town plus several other villages. Therefore, upon transfer of assets, the respective local governments were required to reach a collective decision on the future operational and administrative mechanisms of the water supply system. In contrast, each of these settlements, had separate sewerage systems, enabling individual solutions.

As a result, Svitavy and the villages created a commercial “water union” regarding joint use and operation of the water supply system, with decisions reached by consensus of the respective mayors. Regarding its wastewater assets, Svitavy combined this function with another public service responsibility, recreation facilities (sports stadium, fitness centre, indoor & outdoor swimming pools, skating rink, etc.), to create another commercial entity, with decision authority by the town council.

For Svitavy, these two commercial structures became the “contracting” entities.

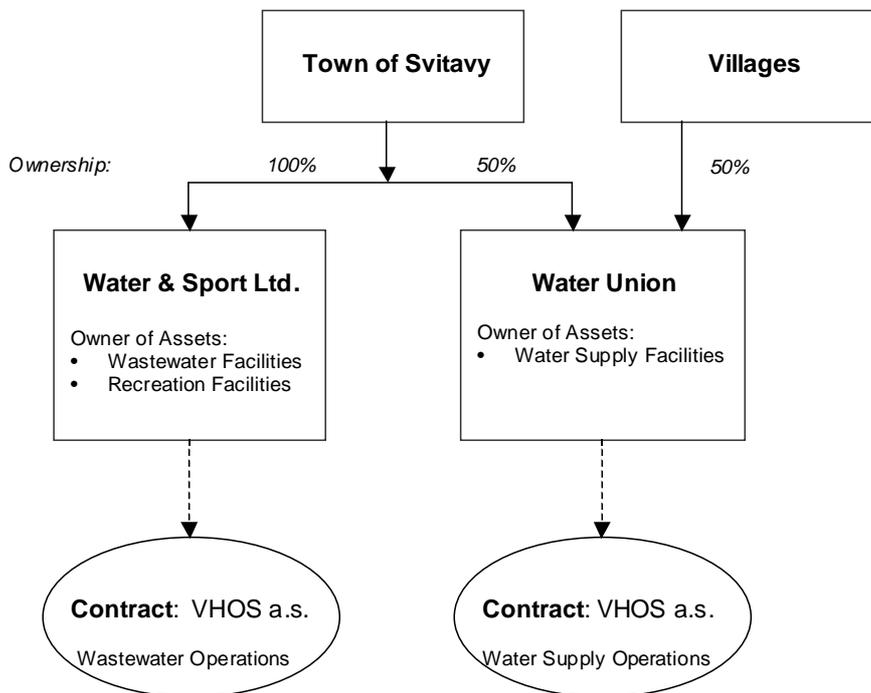


Figure: **Commercial Structures of the Town of Svitavy for the Water Sector**

Separate Assets

The town of Policka has its own, separate assets for both the water supply and sewerage systems. Therefore, the government was able to pursue an individual course of action during decentralisation.

3.7. Private Partner

VHOS a.s. presents an example of a company capitalizing on the water sector transitions and of the entrepreneurial opportunities in the Czech Republic during the time of political transitions. Conversely, this case study demonstrates the ability of previous public sector participants to build upon market familiarity as a strategy for market entry and position.

Table 5: Basic Data of the Private Operator	
Company Factors	Description
Name	VHOS a.s. Moravska Trebova, Czech Republic www.vhos.cz
Type	Joint stock corporation
Owner	<ul style="list-style-type: none"> • 80% of company stocks held by 5 individuals (3 VHOS managers and 2 members of VHOS board) • 20% held by institutions (1 UK and 3 Czech)
Year Founded	1993
Types of Expertise & Services	<ul style="list-style-type: none"> • Operation of water and wastewater systems • Civil works • Pumps rehabilitation & repair • Manufacturer of man hole covers • Manufacturer's representative for valves, pumps, etc.
Geographic Area of Activity	<p>Many towns in East Bohemia – Pardubice Region</p> <p><u>Water Supply Operations Contracts</u></p> <p>33 Total contracts:</p> <ul style="list-style-type: none"> • 5 for unions (5 x 250,000 m³/y for 1.25 mio. m³/y total) • 13 contracts for 2-3 village groups • 15 contracts for individual villages <p><u>Wastewater Operations Contracts</u></p> <p>12 Total contracts:</p> <ul style="list-style-type: none"> • 5 sewerage + treatment (5,000 - 35,000 population equivalent) • 7 sewerage systems (3 with treatment) at 2,000 p.e.
Number of Employees	187
Annual Revenues	200 mio. Czn. (estimated Euro million)

A Re-branded State Utility

VHOS takes pride in being an independent company with predominantly Czech stockholders. The company was created from several operations divisions of the former East Bohemia Regional Water Utility, as part of the decentralisation and asset transfer process, and essentially “renamed” as a joint stock company. The former regional utility staff were kept on to ensure continuity of system operations (but also to cement market knowledge).

Local Population inclusion in the Privatisation of Operations Mechanism

The transfer of ownership to private hands was conducted via a novel coupon system with the aim to promote local support and capital for private sector involvement. All customers in the selected service areas were apportioned coupons with which they were permitted to purchase stocks in the new corporation. According to the privatisation process the original distribution of coupons for stock purchase was in the following manner:

- 76% customers
- 15% managers
- 3% employees
- 6% National Fund for Assets

When this mechanism was approved by the Ministry, a key requirement was that stocks be traded and available on a public exchange. This mechanism was established with a national stock market for other similar endeavours (administration in Prague). Yet, VHOS shares were removed from the exchange in October 2004, as the trading activity level dropped below the prescribed minimum amount; shares are now consolidated in a few entities, as a few enterprising VHOS managers-employees gradually bought coupons from the general public and shares on the stock market.

Company Diversification in response to Market Demand...and Market Position

The evolution of VHOS demonstrates the ability of a company to respond to the market needs and fill various market niches in the water sector during this transitional period. VHOS developed over the last decade from a “re-branded” state utility division to a diversified operations, construction, manufacturer and sales company. The progression is reported by the company in three major phases:

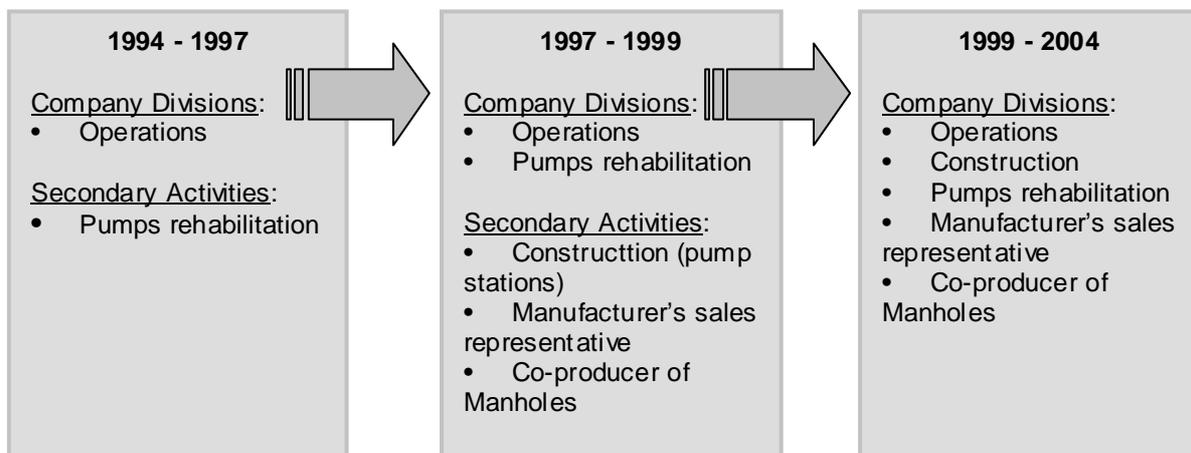


Figure: **The Corporate Development of VHOS a.s.**

The reasons for this gradual but deliberate diversification are twofold. First, once the company had quickly established itself as a private operator, it was well positioned to further respond to market needs as they developed. Indeed, the company was poised to take advantage of the water sector transitions and a fledgling private sector, when market entry and competition were somewhat less formalized, organized and contested, to further extend its market reach (thus further decreasing possible competitors?).

Second, over time, the success of the water sector reforms (higher tariffs and greater efficiency in drinking water supply) resulted in reduced water consumption – and declining revenues and profits for water supply operators (despite higher tariffs, the value of operations related annual turnover has decreased by about 30% since 1994); companies such as VHOS sought other activities to compensate.

The company's ability to recognize market opportunities, assume greater risk (financial and technical), and create synergies from its base as a water sector operator are presented in the following examples:

- **Market Entry by Geography:** VHOS was able to grow and develop a “pumps repair & rehabilitation” division, because of geographic developments and former contacts. When the Czech Republic and Slovakia split-up, most pump supply parts & repair companies were suddenly located in another country, Slovakia. VHOS maintained and fostered contacts of the regional utility to build a professional cooperation with a key company in Slovakia, including staff training and certification. Soon, the Slovakian company was recommending VHOS to Czech utilities for pump repair & rehabilitation, and also for product sales.
- **Market Entry by Synergy:** With contracts to repair and rehabilitate pumps, VHOS developed professional relationships and credibility with numerous towns/ utilities, which eventually needed to rehabilitate, expand or build new pump stations. With entrepreneurial spirit, plus the positive reference of the client, VHOS was able to secure contracts in competitive bids for turn-key services (civil works, pump sales, etc.) for pump stations, thus establishing a construction capacity in the company. This was also an opportunity to present its basic water operations services.

Not just an Operator anymore

As a result, only about 35 percent of VHOS company revenues are in water & wastewater operations. The remaining 65 percent are in other contracts and sales.



3.8. Project Need – Market Opportunity

This case study demonstrates the importance of local government “willingness” to consider and implement alternative options, when available, in water utility management. Decentralisation and the transfer of assets to the municipalities was the key trigger to the introduction of the private sector into the Czech water sector.

The decisions by Svitavy and Policka, along with other cities and towns in the Czech Republic, to “contract out” water & wastewater operations enabled the necessary window of opportunity to create a private sector. However, decentralisation also created more dominant positions for municipalities in the water sector, with the power to engage and contract private companies. Without proper precautions and checks, such power can potentially be abused, with the possibility of corruption.

New Owner of Assets - but without the Expertise or Institutions for Operations

During decentralisation of 1991 - 1993, the Towns of Svitavy and Policka, like hundreds of other cities and towns in the Czech Republic, were confronted with an important short-term decision with long-term implications.

How were the towns going to operate their drinking water and wastewater systems, once the assets were transferred to their town governments?

Neither Town had a water “utility” of its own and, therefore, faced a significant challenge from the decentralization process and return of assets to municipalities. Municipal governments had to choose between external or internal solutions, i.e. whether to accept the “privatisation option” offered by the regional utility – state entities or whether to establish their own utilities for the operation of their assets. In Svitavy and Policka, each considered the “mixed utility” or “operating utility” model for asset management. The response to the pressing need for drinking water supply and wastewater operations was similar in both towns:

- It's not our job: Neither administration had the expertise nor experience in water services operations; nor were these services were considered core competencies, worthy of building-up the necessary institutions within the town governments.
- We don't have the funds: Neither town had the liquid capital available to cover the establishment of an in-house utility, transfer of and taxes on operational assets, etc.

Both Svitavy and Policka selected the “operating utility” model to retain ownership and investment responsibilities, but to engage the private sector for operations.

We know the Market, the Setting ...and want to keep our jobs – This is our chance!

The managers and employees of the operating divisions in parts of East Bohemia were driven, in part, by the spirit of entrepreneurship and, in part, by self interest.

The fate of the staff in the regional water utilities hung in the balance of the decisions taken by towns like Svitavy and Policka. During the process of decentralisation, their future employment was unclear, as some cities opted for international operators or establishing new public utilities. Most of the managers and employees in the East Bohemia regional Water Utility banded together to create VHOS, as their proactive strategy to control their future employment in the form of a private water operator.

3.9. Project – Contract Preparation

This case study demonstrates the importance of a “solution” and “results” oriented approach of the public (towns of Svitavy and Policka) and private (VHOS) partners to project and contract development, especially during a vague and evolving period in the water sector. Likewise, this example illustrates the potential risks and drawbacks to cursory project and contract development; the cities and towns bore most of the burden and risk of the asset transfer process, since the national government provided little guidance or up-to-date information on the new possessions.

Sink or Swim – It’s not the Central Government’s Problem anymore

The asset transfer was based on the national Act of Municipalities, but was a relatively vague process without definition; the national government stipulated that water services were “not our problem anymore” and organized a basic “handover” of assets, without any formal assistance provided to the municipalities to assume their new responsibilities¹².

Furthermore, the national government has not and does not intend to establish an official “regulator” to oversee the water sector, as it has for other sectors such as energy¹³.

While each former regional utility was required to prepare and present an “asset transfer plan” for approval by each municipality, the plans mostly presented the asset operations options (“mixed” or “operating”), without providing detailed technical documentation (not even system maps or drawings), asset valuation, financial status of operating divisions, etc. For example, the regional utility of East Bohemia put forward asset transfer plans for Svitavy, Policka and other towns, designating the “operating utility” option with a “private operator” to:

- Operate municipal assets
- Municipal assets transferred from state without financial payment
- Purchase operational assets (payment + tax burden; municipalities wanted to avoid this financial transaction)

Accordingly, the towns became system owners without a comprehensive review or understanding of the status of their new possessions. The final asset transfer plans were also accepted by the Ministry of Agriculture and the Fund of National Assets.

Moreover, the town governments, which previously had only peripheral and informal involvement in water services, had no specific expertise in water services (technical, financial, legal, etc.) to conduct their own assessments, due diligence, etc. Nor did the towns have the financial resources to hire the experts needed to conduct such investigations.

In preparing the bidding documents and contracts, the towns had no suitable models or examples available to them. In Svitavy and Policka, the process consisted of the towns and water unions discussing together to develop the necessary documents. As such, the bidding documents contained minimal technical or financial information on the systems or a sample contract, presenting a limitation in the bidding process.

The Burden of Decentralisation borne by Cities, Towns & Villages

Indeed, throughout the country, many municipalities assuming their new responsibilities faced similar challenges and risks, especially smaller towns and villages without sufficient resources or specialized staff to address the significant implications of their new role as owner:

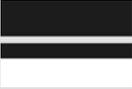
¹² Onsite Interviews in the Czech Republic, 1-2 November 2004

¹³ Czech Republic Report – OECD/ Dancee Programme, January 2002

- new scope of activity in water services requiring specialized technical, financial, etc. expertise)
- new tasks, such as procurement, contract management, etc.
- development of new document forms (bidding documents, contracts, etc.), without appropriate standards in local language

3.10. Procurement

The procurement process initially proceeded according to a basically open, competitive, verifiable and objective process in East Bohemia, in an on-the-job-training type of input. However, the first bidding appears to have played a pivotal role for the region, with several other towns essentially accepting the results of the first bid – and awarding contracts on that basis - in a domino effect. Some of the towns report they lacked the expertise, capacity and resources to conduct a meaningful bidding. No national agency nor other public oversight was integrated in the bidding process.

Table 6: Procurement in Svitavy & Policka		
	Svitavy  (+11 villages of Water Union)	Policka 
Bidding Type	Open Competition (announced in newspaper)	Negotiation
Bidding Dates	1993 – 94	1994
Number of Bidders	2	None
Basis of Bid Evaluation	24 criteria per the regional asset transfer plan	Assumed results of Svitavy Bid
Contract Terms	Direct Negotiation with winning Bidder	Direct Negotiation with winner of Svitavy Bid
Contract Award	Water Supply: per mayoral approval of towns in Water Union Wastewater: per approval of Mayor & Town Council of Svitavy	per approval of Mayor & Town Council
Selected Operator	VHOS a.s.	VHOS a.s.
Contract Type	Lease, open-ended	Lease, open-ended

On-the-job-training

The Town of Svitavy, apparently assumed its historic “crossroads” role in this part of East Bohemia, by being first to select the “operating utility” model and then again by being at the forefront of the process to select an operator. Since Svitavy, as the largest town of the area, has a larger town administration and greater capacity, the smaller towns and villages, including Policka and Sebreňa, looked to Svitavy to chart a course through the new waters presented by decentralisation.

The first bidding was developed locally and included basic formalities of open competition, such as a public announcement in the local paper and predetermined criteria as set forward in the regional “asset transfer plan”. Yet, overall, the bidding was limited by the quality of bidding documents and lack of a sample contract, as described in a previous section.

Two companies competed in the tendering; the small towns were apparently not a great attraction to international companies and few companies existed in the fledgling domestic market. Since private companies in the water sector were still a novelty at the time, each company used a strategy of incorporating some staff of the former East Bohemia Regional Utility to build references and credibility.

- Jema, (now Akvamont), a “newly established” local building company, headed by the former manager for operations & management of the East Bohemia Regional Utility
- VHOS, a “newly established” local water operations company, including practically all employees of the former East Bohemia Regional Utility

After a bid evaluation by the town administration, VHOS was declared the winner in 22 of 24 criteria. The mayors leading the towns of the water union (water supply) and the municipal town council of Svitavy (wastewater) officially declared the winning bidder. Price negotiation only took place after the bidding in direct negotiations, as no financial bid was required.

During the entire process, all parties learned on the job. There was no bank of experience to rely on and no resources for experts or consultants. Indeed, procurement for private companies in water was a new area of expertise; at that time minimal domestic assistance was available, anyway. Indeed, the towns report “best practices & standards” is continuing need for procurement, contracts, etc.

Bidding by Domino Effect – Lack of Transparency

The first bidding was, in retrospect, a key battleground for influence and market position in the region. For subsequent tenders, such as in Policka, only VHOS was invited/ responded (not clear) to calls for bids.

A key point in the bidding was the perception of “trust” and credibility, especially in a fledgling market with new owners undertaking procurement for the first time. The towns knew the people of VHOS (as former managers and staff of the East Bohemia Regional Utility). The municipalities believed it was important to know the problem, i.e. locals who already knew the infrastructure systems. The Municipality was not able to operate its assets and VHOS provided this guarantee.

A key weakness in the perceived transparency of the procurement was the lack of competitive bidding in the remaining towns, after the first bid in Svitavy, raising doubts of cronyism or corruption. Also the absence of a financial bid diminishes the impression of a truly competitive process.

System Knowledge - Advantage of the Operator

Ironically, the bidders likely had a greater understanding of the assets than the asset owners, based on their years of experience as managers & staff in the Regional Water Utility, including preparing the “asset transfer plans”. Therefore, unofficially based on their experience, the bidders were able to estimate the scope and risks of an operations contract.

Clearly, this would have provided a competitive advantage over a non-local bidder. But this was not the case. The key to the success of VHOS over Jema, appears to have been the credibility of the VHOS managers, who, on the one hand, convinced the majority of former utility staff to join them in the bid, and, on the other hand, held sufficient respect from the town officials to win their confidence.

3.11. Contract Structure

The case study demonstrates the local development of contracts in response to a significantly changing context. Overall, the parties appear to have struck an acceptable (to the parties involved) balance in the allocation of risk and responsibilities between owner and operation. However, the goal of full sustainability (operator lease fee covering 100% of investments, as collected through customer tariffs) has not yet been attained.

The case study also demonstrates that the towns of East Bohemia have come to terms with their role of asset owner, but are still struggling with the role of regulator – and have no firm mechanisms yet to attain this aspect.

Table 7: Selected Contract Terms	
Factor	Description: Selected Contracts
Type	Separate Lease Contracts for the operations of water supply and wastewater systems in various towns, villages and unions:
Value	Annual tariff review checks the private partner operations costs and sets the lease fee, as the basis for the customer fee (per m ³)
Public Partner:	<ul style="list-style-type: none"> • Water Union (Svitavy and 11 towns) for water supply • Water & Sport Ltd. (Town of Svitavy) for wastewater • Town of Policka for water supply and wastewater
Private Partner:	VHOS a.s.
Regulator	Public Partner
National Involvement:	None
International Involvement:	None
Duration	Open ended, starting in 1994 (with annual contract re-evaluation, as in 2004)
Default Mechanism	Termination clause (2 years notice period, except 6 months for negligence)
<u>Key Responsibilities:</u>	
• Asset Ownership	<u>Public Partner:</u> Infrastructure assets & land <u>Private Partner:</u> Operational assets (moveable equipment & building)
• Infrastructure Investment	<u>Public Partner:</u> investment decisions <u>Private Partner:</u> advice; lease fee provides majority of funds
• Billings & collections	Private Partner
• Operations & Maintenance	Private Partner: per compliance with national standards & overall satisfaction of Municipality
• Management & Administration	Private Partner: own company
• Utility Staff (hiring – firing)	Private Partner: own staff

The contract is reported to be based in business law, as no specific national law exists addressing contracts for public-private-partnerships. No standard contracts were used nor were examples in the Czech language available during the asset transfer process; the local towns created their own contracts, which have further been developed based on practical experience over the last decade. Indeed, the towns would welcome assistance with standard contracts and specialized expertise. For example, several key contract issues are still vague 10 years on.

Investment Funds vs. Maintenance & Operations Costs: unclear definition

The definition and responsibility for investment (asset repairs vs. rehabilitation vs. replacement) is still a vague and valid point, as reported by the Town of Svitavy. Yet, a key fact is that the lease payment is a primary finance source for all new infrastructure investment projects.

Tariff Policy: conflict-of-interest

The tariff policy is reviewed on an annual basis by the respective water unions (town mayors) or town councils with the following considerations:

- Operator's operational requirements (chemicals, materials, energy, etc.)
- Lease fee, payable by the operator to the owner for "use" of town assets
 - The fee is generally calculated "empirically" for the forthcoming year according to customer affordability, investments needed, other available finance sources (grants, loans), etc. for the entire region (annual coordination between the various water unions and towns)
 - No national laws prescribe rules on asset depreciation or its inclusion in tariffs or lease fees. Yet, the lease fee is routinely compared to depreciation levels, as an informal indicator.
- The Ministry of Finance controls the water & wastewater tariffs, according to the affordability of both the customer & municipality. This primarily includes checks on operator costs – which must meet standards- and on lease fees.

However, the towns readily admit that the annual tariff setting process, presents politicians with a difficult and often conflicted choice: whether to support the "technical" needs for better infrastructure systems (i.e. tariff increase) or rather to favour customer affordability and one's re-election prospects (i.e. tariff freeze). This conflict-of-interest has implications not only on the customers (levels of service, level of payment), but also on the operator (the "state" of the infrastructure system effects the inputs, costs, etc. needed for operations).

Regulatory Role of Municipality: still vague and conflicted mechanism

As described in the Water Sector section of this report, the "founders" of privatisation in the Czech Republic foresaw the asset owners, the cities and towns, assuming the role of regulator regarding water services operations. As such, no national level regulator exists in the water sector, except the Ministry of Finance to oversee costs and affordability aspects, in contrast to the energy, etc. sectors.

Yet, this model presents several difficulties. First, the burden (costs, responsibility, risks, etc.) are shifted from the national to the local level, which is perhaps least suited for the role (less resources, capacity, expertise, etc.). Second, assuming both roles of owner and regulator presents a conflict-of-interest, as the actions of the "owner" must also be regulated by an objective party – which is clearly not the case of "self-regulation."

In current practice, the towns are challenged by the oversight and verification of the operator:

- The operator (in this case VHOS) prepares an annual estimate, based on historic figures, for its operations and maintenance costs, according to a standard list specified by the Ministry of Finance (budget line items, such as materials, energy, chemicals, etc.) for consideration during the annual tariff review process. Yet, the municipalities typically have no mechanism or expertise to check & control the operator's estimates. At a minimum, the towns place a cap on operator "profits", but this is merely a bookkeeping exercise, not an actual control of costs.
- No specific performance standards are integral in the lease contracts, except the operator's responsibility for compliance with national and EU standards. The lack of more specific performance standards likely make the role of regulator more difficult.
- Quarterly meetings are specified in the contract between the owner (and regulator!) and the operator to present specific issues and work out problems

Contract Term: implies an entrenched private sector

All contracts are open-ended, including a two years notice period or immediate termination (6 month in case of negligence). Yet, the lack of finite lease contracts (typically between 10 - 30 years) and a scheduled competitive bidding, builds an impression of a static market and that an entrenched private sector has replaced an entrenched public sector.

3.12. Contract Implementation and Results

Contract implementation appears to have proceeded without major difficulties, despite the novel nature of private sector involvement in the water sector. Both Svitavy and Policka report satisfaction with system operations. The operator is reported to have provided regular and consistent services, without any major regulations non-compliance. As water services were satisfactory prior to privatisation, a major challenge for VHOS was to maintain the good service levels, which appears to have been achieved (a more comprehensive assessment of the contract results, per staff levels, company expenditures, population in service area, etc. was not possible, as only minimal data was provided by the operator):

Table 8: Selected Contract Results		
FACTOR	SVITAVY "BEFORE" (1993-94)	SVITAVY "AFTER" (2004)
DRINKING WATER SERVICE		
Water quality: compliance with National standards	100 %	100 %
Water Supply, hours per day	Summer: 24 hours/ day Winter: 24 hours/ day	Summer: 24 hours/ day Winter: 24 hours/ day
Water Tariff (CZK/ m3)	7.35 (domestic) 10.50 (commercial)	21.40 (unified)
Sewerage Tariff (CZK/ m3)	6.09 (domestic) 9.45 (commercial)	21.50 (unified)

Tariffs: Regional Harmonization and steady progression towards sustainability

A key result during the contract period was the harmonisation between commercial/ industrial and domestic tariffs, as of 2001, for the entire area of coverage by the operator. Before the commercial/ industrial customers were effectively subsidizing the domestic customers and urban areas the rural areas. Now, the same tariff structure exists for all towns and villages under contract with VHOS, to the satisfaction of towns, such as Policka.

Table 9: **Progression of Tariff Policy in East Bohemia**¹⁴

	Year	Water	Sewage	Combined
		CZK/ m3	CZK/ m3	CZK/ m3
Domestic				
	1994	7.35	6.09	13.44
	2004	21.40	21.50	42.90
		+291%	+ 353%	+319%
Commercial - Industrial				
	1994	10.50	9.45	19.95
	2004	21.40	21.50	42.90
		+ 204%	+ 227%	+215%

In comparison, the national “average” for combined water and sewage tariffs reached 31.55 CZK per cubic metre in 2000- a 266 percent increase over 1992 levels¹⁵. According to the average annual tariff increase over this period of about 30 percent or 2.5 CZN / cubic metre, the combined average tariff for 2004 is extrapolated by the study team to total about 41.55 CZK/ cubic metre. (This is a valid assumption, as the liberalization of the water markets in the Czech Republic resulted in a dynamic period of tariff adjustments throughout the country).

Therefore, the tariff levels in East Bohemia are assessed to be similar to other regions and utility service areas, since the national average for combined water and wastewater tariff equals about 97 percent of the combined tariff in East Bohemia. Significantly, the rates in East Bohemia appear equitable and not exploitive of the “monopoly on water infrastructure”.

Owner Perspective: greater strength (and investment funds) in numbers

In general, both Svitavy and Policka are satisfied with the operator’s (VHOS) performance and results. Customer satisfaction is also regarded as high, with minimal complaints reported to the town administrations. All service interruptions are quickly attended to and fixed by the operator. Therefore, neither town seeks to terminate their contracts at this time

Over the years about six villages, such as Lubna and others, have joined the water union with Svitavy and, accordingly, the operations contract with VHOS. These towns had other operators (small, private), but were not satisfied with the level of services. Plus, these towns seek greater investments levels by banding together.

This is a sign of a stark reversal in local reaction to the asset transfer process. Initially, each municipality was eager to take an “individual” approach to fully control all facets of their assets. However, this trend has reversed over the long-term resulted, with municipalities now more eager to join together for economies-of-scale. Now, with years of experience and individual responsibility for contracts and contract management, many towns have realized their general lack of expertise and capacity in such areas, plus the duplicity of costs and time among all the towns. A joint approach can result in administrative savings and a greater pool for system investments.

Customer Perspective – good service levels, but at a high cost

Service are generally considered satisfactory (as reported by the towns) and tariff levels are generally accepted by customers, although some feel the increases have been too rapid and

¹⁴ Rocenka Svitava – Zivotni Prostredi2003

¹⁵ Models of Water Utility Reform in the Central and Eastern European Countries – Lessons to be Learned for Reform in Eastern Europe, Caucasus and Central Asia; OECD/DANCEE; 2003

too extreme (tariff increases are said to have outpaced salary/ cost of living increases over the past 12 years).

Indeed, a gross assessment of customer payments confirms that the combined water & wastewater fees (for a household of 4 persons with only 1 wage earner) exceeds the World Bank affordability limits for the water sector. This high level likely reflects the substantial investments required over the last decade according to decentralisation (system rehabilitation per pre-existing deficiencies) and EU accession.

Table 10: Gross Assessment of Customer Affordability

Tariffs:	
Drinking Water Tariff CZK/ m3	21.40
Sewerage Tariff, CZK / m3	21.50
Total Tariff, CZK / m3	42.90 CZK per cubic meter
Consumption:	
Average consumption per person, paid ¹⁶	163 litres per day = 4.9 cubic meters per month
Average household	4 persons
Average household consumption, paid	19.6 cubic meters per month
Payment:	
Average water & sewerage fees, CZK / month	840 CZK per month
Average household wages (1 wage earner only)	17,000 CZK per month
Affordability:	
Water fees, as percentage of household wages	4.9 %
World Bank Affordability Levels for the Water Sector	4.0 %

Operator Perspective: local presence key to overcome economic hardships

The operator, VHOS, reports substantial difficulties and risks during the initial period of the project, regarding the establishment of the company and assumption of full operations responsibilities. The greatest burdens were of a financial, rather than the technical nature.

The preparation of bids, company registration & organization and purchase of operational assets (only negotiated after the tender) were significant challenges to the successful establishment of a new private company. In addition, the setting during the early years was volatile and insecure: the starting condition of the system assets was categorically poor, hampering efficient operations and raising costs, plus macro-economic conditions (inflation at 18%) impacted revenues and cost recovery via a reduced real value of the tariffs. The liquidity of the company was often threatened, requiring commercial loans to cover shortfalls. VHOS, as most operators, would have preferred a tariff pegged to inflation, though the operator understands this would likely not have been acceptable to customers nor the owners. The operator continues to take commercial loans to cover occasional short-term budget deficits.

¹⁶ Water Supply and Sewerage Systems in the Czech Republic, Annual Report 2003

Inflation is now low, but additional pressures continue to diminish the “sustainability” of the water tariffs, such as the new national “water extraction law” (on produced, not delivered, water of 2 CZK per cubic meter). In effect, this has produced a nation-wide campaign for water services efficiency, and provided an incentive on operators, public or private, to improve water production to delivery ratios. For example, since this law was ratified (2002), VHOS has focused on and prioritised leakage reduction activities. This includes the creation of a dispatch control centre for flow assessment and monitoring.

The operator has used a “local responsiveness” strategy to service its customers and clients. From its headquarters in Moravska Trebova (about 15 km East of Svitavy), VHOS is well situated to service many towns in its jurisdiction. Plus, has established several “project offices”, such as in Policka, with a local contact person to ensure familiarity with the local situation and enable immediate and onsite problem resolution.

Overall, the operator reports frustration regarding the political sensitivity of the tariff process and associated lack of implementation of the needed technical investments. As an example, the operator cites the instance of a town dictating an increase in the lease fee, which was achieved through operator staff reductions (rather than a tariff increase). Moreover, there is some uncertainty about the possible cross-subsidization of non-water activities (such as recreational facilities) through the lease fees.

3.13. Assets and Investments

This case study demonstrates that the owner (town) can retain ownership and responsibility for investments, and use the lease fee paid by the operator as a key mechanism to secure a significant proportion, even majority, of investment funds. This presents an important indication of the progress towards water sector sustainability in East Bohemia. In general, most towns can cover water supply investment cost, but not yet for wastewater investments.

Over the past 10 years, a major development during the lease contracts was to address the poor initial state of the infrastructure and, in addition, to realize new infrastructure for compliance with the water framework directive, per EU accession requirements. For example, in Svitavy the following major infrastructure was realised during the course of the lease contracts:

- 1994 – 95, reconstruction of the wastewater treatment plant: 35 mio. CZK (mechanical and biological treatment);
- 1995 – 97, sewerage network: 35 mio. CZK
- 1997 pressure transmission main to village: 5 mio. CZK
- 2002, nitrogen & phosphorus removal plant addition, 10 CZK mio. (80% loan from national environmental fund)

The average annual amount for new investments and debt service totalled about 17 million CZK. Sixty percent of investments funds were obtained from the National Environmental Fund and the remaining 40 percent from the lease fees. With a pressure distribution system, more revenues are allocated to energy & pumping costs, and less left over for investments.

In Policka, improvement of assets, especially the drinking water distribution network, was a key concern of the town during the lease contract. Annual investment totalled about 6 million CZK per year, with 90% gained from the lease fee and the remainder from supplemental funds, etc. The issue of capital for sewerage is more pressing, as there is only one wastewater treatment plant (plus one other village). All villages must solve their wastewater problems separately.

As EU accession funds and projects gradually terminate and national funds become more limited, municipalities shall be required to cover all investment needs through lease fees.

The selection of infrastructure investments is based on the annual capital investment plan prepared by the operator regarding rehabilitation and new realisation of assets. This typically includes a recommendation by the Operator on the most important projects. The final decision rests with the water unions or individual towns (for this reason the infrastructure investments are not presented in the contract results section of this case study).

3.14. Market Future

Across the Nation

Regarding the Czech Republic, SOVAK, the professional water & wastewater association, predicts greater consolidation in the water sector (such as the smaller villages abandoning smaller operators and joining water unions in Svitavy). In their view, the market appears to be progressing to an ever lower number of operators, but with greater know-how and qualification. Moreover, SOVAK contends the future will belong more to the international rather than domestic companies, according to political, investment and know-how factors.



Figure: Does the future of the Czech water market belong to foreign companies? (the areas marked in white and red are served by companies with domestic owners only)¹⁷.

In East Bohemia

The municipalities do not view their market as “static” or “entrenched”, although acknowledge the unlikely termination of the current contracts – but due to satisfaction, rather than lack of options. Other operators are active in other towns, though consolidation appears to continue, with smaller operators generally being squeezed out of the market.

¹⁷ SOVAK, Geographic Display of Companies Active in the Czech Water Market

Overall, the towns prefer local operators, in part to keep operator taxes, profits in the local economy, and are not keen to introduce international operators, which would not have local knowledge or experience, in their view. However, the lease contracts are periodically reviewed and terms improved and refined.

Therefore, at the current time, the local market is likely to remain under the service of the domestic private operator.

In the Private Sector

VHOS continues its various activities in East Bohemia and elsewhere; VHOS is also attempted to break into other, foreign markets as an operator – but with no success to date. It views its diversification beyond water sector operations as key to its corporate health and well being, and will continue along this course.

3.15. Best Practise Milestones

To the best knowledge of the study team, the national and local measures leading to the development of the lease contracts in Svitavy and Policka, meets few of the Best Practice Milestones¹⁸ advocated by the Asian Development Bank. The milestones prescribe a route for the introduction and development of a private sector in the water market, in progression from a traditional government-monopoly utility market.

Table 11: Best Practice Milestones – Asian Development Bank ¹⁹		
For the Introduction of the Private Sector into the Water Utilities Market		
Svitavy 	Policka 	Milestones
No	No	1. State-owned reform unit, specialized in privatisation
Yes	Yes	2. Scoping Study of the water utility
No	No	3. Costs & Benefits of separating natural monopoly businesses
No	No	4. Risk assessment and ranking with mitigation strategies
No	No	5. Determine most suitable public-private-partnership option – groundwork for privatisation tenders
No	No	6. Review legal framework affecting reorganization of water utilities (prepare draft versions of necessary amendments)
Yes	Yes	7. Support for local Capital Market reforms
No	No	8. Assess and prepare water resource management strategy; assess feasibility of tradable water rights
Yes	Yes	9. Assess data on non-revenue water and scope for revenue increases
Yes	Yes	10. Review Tariff Structures and financial statements
No	No	11. Assemble financial model of Utility, focusing on bulk & retail systems
Yes	Yes	12. Review bulk supply mechanism and develop time scale for meeting international standards
Yes	Yes	13. Implement sound commercial tariff structures, billings and collections
Yes	Yes	14. Define scope of market, investment obligations and quality/performance targets
No	No	15. Establish independent regulatory authority for overall review
No	No	16. Commission advisors to prepare project preparation and tender documents

¹⁸ Developing Best Practices for Promoting Private Sector Investment in Infrastructure – Water Supply, Asian Development Bank; 2000

¹⁹ Ibid.

Only about half of the milestones appear to have been met in Svitavy and Policka (and some were only met after, not before, the introduction of the private sector). Does this low level of compliance indicate deficiencies in the transition to the private sector?

The Nationwide transition – Decision made despite uncertain times

While the national vision for privatisation in the water sector appears to have been sound (decentralisation, asset transfer, openness to public or private models, etc.), the primary weaknesses were in the execution of and resources available for the transition. The significant political transformations creating other more pressing national government priorities, the newness of the issue of the private sector in the water market, volatile economic conditions, etc. clearly resulted in less than perfect conditions and, hence, implementation of the transition to the private sector.

In hindsight, the major weaknesses of the transition appear to have been:

- the burdens placed on local governments, without adequate preparation or training
- the lack of establishment of a regulator for the water sector

However, the key is that the decision was taken, despite the uncertainties and imperfections of a hectic transition, to challenge the status quo of traditional water utilities and grasp the opportunity of real change, by the introduction of the private sector into the water markets. Indeed, if the national and local governments had waited to meet all the best management milestones, they would still be waiting, as all conditions are not met now, 10 years on. Perhaps, this desire for change in the water sector was a reflection of the whole scale political challenge of the prior systems to introduce a new order.

The Local transition – Responsibilities assumed despite uncertain times

The cities, towns and villages proceeded to find an operations solution to their newly acquired assets in 1993 according to the means and capacities available to them during a volatile time. A new order was dictated for the local water services and was realised through the competition and jockeying of remnants of the former order. In essence, the old was re-branded as new, but with new rules of sustainability, accountability and survival as a private entity.

Overall, the local governments in East Bohemia have achieved a relatively balanced approach to public-private-partnerships in the water sector, with reliable services for their populations and steady progression towards sustainability (full coverage of operations and investment costs through the water tariff, with a lease fee paid by the operator). Improvements appear to be made periodically (tariff review, contract review, etc.) and greater emphasis is needed in the future on procurement, transparency and sustainability issues, to avoid even the appearance of an entrenched, corrupt or subsidized market.

3.16. Keys to Success

The national and local governments of the Czech Republic have succeeded in the establishment of a private sector, attracting both international and domestic companies, in the water utility management markets. The study team lists its assessment of the seven most significant steps in the progression to public-private-partnerships, as gleaned from the experiences of Svitavy and Policka.

Table 12: Keys to Success in Svitavy & Policka and the Czech Republic	
Factor	Pivotal Measure
Introduction of Private Sector in Water Market	1. A “willingness” to seize the “finite” Window-of-Opportunity , despite various obstacles, uncertainties, unclear final destination, etc., to create a “new playing field & new rules”, with the overall goal to progress towards, but not necessarily immediately meet all, “best practice milestones” This flexible and innovative “spirit” must be embraced by both the public and private partners, as well as the community at large, for public-private partnerships to have a chance of success.
	2. Retain asset ownership by local government , including final decisions on tariffs, investments, etc.
	3. Offer a voluntary, not mandatory, choice of public-private-partnership mechanism : to enable application only in settings with “willing” communities, customers, governments and existing utilities
	4. Welcome foreign and domestic market participation , to enable maximum market competition with best results for the customer base (efficient & reliable services at affordable prices)
	5. Integrate (not just involve) customer base & community in privatisation process & success ; give a stake in privatisation outcome via coupons for stock ownership in public utility transformed into private company (to raise public support and capital for process – and avoid a “corporate privatisation”, i.e., a direct transfer to the rich and powerful)
Contract Execution	6. “Considerate” harmonization of national with local government initiatives in the water sector per development of local economy, affordability, water services, capacities, etc. (For example, introduction of water extraction law to reinforce local efficiency efforts in water delivery, only once the local setting was relatively stable in 2002)
	7. Establish and use mechanisms for good working relationships/ conflict resolution : the public & private partners set and used quarterly meetings to voice & solve complaints; plus the operator emphasized his local presence and contact persons to remain “accessible” to the client

3.17. Lessons Learned

While much credit must be assigned to the national and local governments in the Czech Republic for their “can-do” attitude to attain their goal of a viable private sector in water utility management, neither the transition nor the implementation was perfect; many opportunities remain for continued development and improvement of public-private-partnerships, especially now that the setting is no longer so volatile. The study team presents, in the spirit of constructive criticism, some key areas for improvement, including suggestions for possible remedies. (Areas, which might be suitable to inputs by International Financing Institution or Donor, are indicated in blue text).

Table 13: Lessons Learned in Svitavy & Policka and the Czech Republic		
Symptom	Likely Cause	Possible Remedy
Transition to Private Sector		
<ul style="list-style-type: none"> Insufficient local government capacity as asset owner (burden of asset ownership placed on towns & villages) 	Insufficient national & local government resources, expertise & experience	<ul style="list-style-type: none"> ❖ Develop a national “PPP Committee” (within a ministry?) to provide training for town staff & administration (Area for IFI Support?)
<ul style="list-style-type: none"> Insufficient baseline information for proper PPP contract design (risk of asset transfer placed on local governments) 	Insufficient national & local government resources, expertise & experience	<ul style="list-style-type: none"> ❖ Develop a national “PPP Committee” to provide assistance & specialized expertise during project preparation (Area for IFI Support?)
Procurement		
<ul style="list-style-type: none"> Lack of proper tender documents & bidding procedures Lack of sample contracts Impressions/ criticisms of cronyism and corruption 	Insufficient local government resources, expertise & experience	<ul style="list-style-type: none"> ❖ Develop a national “Clearing House” to provide standard bidding documents and contracts, in Czech language, & specialized expertise (Area for IFI Support?) ❖ Pool local-regional resources & expertise to lower burdens on local governments
Contract Implementation		
<ul style="list-style-type: none"> Unsustainable Tariff: Political influence/ domination (over technical need) during tariff setting and for investment decisions 	Political structures create a “conflict-of-interest” for key politicians, between providing the most practicable services to customers and their own re-election	<ul style="list-style-type: none"> ❖ Introduce ballot initiatives/ referendums to circumvent political role and engage the general public in key decisions (Area for IFI Support?)
<ul style="list-style-type: none"> Deterioration of tariff “value” 	Macro-economic factors, such as inflation	<ul style="list-style-type: none"> ❖ Define relief to operator in cases of extreme economic conditions
<ul style="list-style-type: none"> Unclear water sector revenue streams 	Commercial structures with more than just water services	<ul style="list-style-type: none"> ❖ Maintain separate corporate structures, or at least bookkeeping
<ul style="list-style-type: none"> Impression/ criticisms of an entrenched private sector. 	Open-ended contracts without integral opportunity to challenge existing operators	<ul style="list-style-type: none"> ❖ Introduce contracts with finite duration (e.g. 10, 20 years) with set schedule for open competition
Regulation		
<ul style="list-style-type: none"> No viable regulator active in water sector (except Finance Ministry for control of tariff) 	<ul style="list-style-type: none"> Regulator role of municipality not sufficiently dictated by national government – responsibility and burden simply shifted to the local government Conflict-of-interest of local government (also asset owner – cannot objectively review itself) Inadequate control & monitoring mechanisms 	<ul style="list-style-type: none"> ❖ National review of PPP - PSP Contracts; need for strong regulator – at national level (Area for IFI Support?) ❖ Establish control & overview mechanisms: <ul style="list-style-type: none"> • integrate “efficiency” performance standards in contracts (bonus, penalty) • publish operator results & annual reports in newspapers; • establish & publish nation-wide benchmarking of operators

4. CONCLUSIONS

Both case studies in Poland and the Czech Republic demonstrate that “domestic” participants have opportunities, can penetrate and can perform in the Europe and Central Asia markets for water utility management. Indeed, both domestic companies demonstrate success in attaining and holding market share in markets, which also comprise “international” competitors, including from Western Europe. Indeed, the emergence of private water utility management markets, on the one hand, with market share gained by domestic companies, on the other, are generally assessed as positive developments in the progression from monopoly to more competitive, and hence efficient, markets for community water services.

However, the mere presence of private sector participation does not automatically guarantee attaining the potential benefits of improved and cost effective customer service. To be sure both case studies demonstrate the ability of domestic companies to provide satisfactory system operations; but this was already the case in both examples under “monopoly” structures prior to the introduction of PSP. Indeed, the lack of truly competitive and transparent procurement procedures, especially for contract renewals, as well as the vague contract performance requirements cloud the final conclusion as to whether customers receive the most efficient and economic water & wastewater services possible.

Assessment of Market Development Study Premise – Results of the Case Studies	
Are domestic market participants able to enter the water utility management market?	<p>YES</p> <p>Private, domestic companies were able to enter the Polish and Czech Republic water utility management markets.</p> <p>In both cases, the “new” companies were formed from a core of “former” utility employees/ managers who positioned themselves in an entrepreneurial manner to take advantage of the transitions in the water sector during the greater country-wide political changes. It is unclear whether this was a singular window of opportunity and if new domestic companies are now able to penetrate the market.</p>
Can domestic entities perform as water utility managers?	<p>YES</p> <p>Private, domestic companies are able to provide satisfactory services to their customer bases, but with mixed financial implications. The Polish example indicates a continued government subsidy approach, while the Czech Republic case has progressed further to cost recovery, including some percentage of investment costs.</p>

Regarding the overall acceptance and progression of privatisation in these communities, the key aspect was the “willingness” to attempt the privatisation option, despite a very imperfect starting point. Yet, further progression and vigilance is necessary in the water sector to dispel any possible perceptions of cronyism or cartels, for example, in contract terms (the responsibilities of the private companies must be commensurate with their financial intakes), transparency (procurement procedures must be open and competitive) and regulation. Both case studies point to the need for the establishment of a strong central regulator to oversee the public interest in contracts, tariffs, etc.).

Thus far, the communities and companies must be given full credit for the courage to venture into the “un-chartered waters” of PPP – PSP and, up till now, the benefit of the doubt regarding the imperfect state of private water markets development. (A comprehensive audit is necessary to determine if the transformation of former utility units into private companies have prolonged or transcended monopoly structures, for example, in terms of company entrenchment, procurement, customer tariffs, responsibility for investments, etc.).

Yet, the PSP “introduction period” must now be declared over and final steps taken to develop mature markets. Indeed, this is a key area in which international financing institutions and donors can provide much needed assistance, through institutional strengthening at the national and local level. Only so can the preliminary gains attained through the introduction of PSP in numerous communities and countries of the ECA region since the political transitions, become the building blocks for a competitive, honest, efficient and economic markets for private water utility management worthy of full customer confidence and public trust.