UNDP I GEF
DANUBE
REGIONAL
PROJECT

September 2004

ASSESSMENT AND DEVELOPMENT OF MUNICIPAL WATER AND WASTEWATER TARIFFS AND EFFLUENT CHARGES IN THE DANUBE RIVER BASIN.

Volume 2: Country-Specific Issues and Proposed Tariff and Charge Reforms: Slovak Republic – Summary

UNDP GEF

WORKING FOR THE DANUBE AND ITS PEOPLE

UNDP I GEF
DANUBE
REGIONAL
PROJECT

AUTHORS

Danka Thalmeinerová

PREFACE

The Danube Regional Project (DRP) consists of several components and numerous activities, one of which was "Assessment and Development of Municipal Water and Wastewater Tariffs and Effluent Charges in the Danube River Basin" (A grouping of activities 1.6 and 1.7 of Project Component 1). This work often took the shorthand name "Tariffs and Effluent Charges Project" and Phase I of this work was undertaken by a team of country, regional, and international consultants. Phase I of the UNDP/GEF DRP ended in mid-2004 and many of the results of Phase I the Tariffs and Effluent Charges Project are reported in two volumes.

Volume 1 is entitled *An Overview of Tariff and Effluent Charge Reform Issues and Proposals*. Volume 1 builds on all other project outputs. It reviews the methodology and tools developed and applied by the Project team; introduces some of the economic theory and international experience germane to design and performance of tariffs and charges; describes general conditions, tariff regimes, and effluent charges currently applicable to municipal water and wastewater systems in the region; and describes and develops in a structured way a initial series of tariff, effluent charge and related institutional reform proposals.

Volume 2 is entitled *Country-Specific Issues and Proposed Tariff and Charge Reforms*. It consists of country reports for each of the seven countries examined most extensively by our project. Each country report, in turn, consists of three documents: a case study, a national profile, and a brief introduction and summary document. The principle author(s) of the seven country reports were the country consultants of the Project Team.

The authors of the Volume 2 components prepared these documents in 2003 and early 2004. The documents are as up to date as the authors could make them, usually including some discussion of anticipated changes or legislation under development. Still, the reader should be advised that an extended review process may have meant that new data are now available and some of the institutional detail pertaining to a specific country or case study community may now be out of date.

All documents in electronic version – Volume 1 and Volume 2 - may be read or printed from the DRP web site (www.undp-drp.org), from the page Activities / Policies / Tariffs and Charges / Final Reports Phase 1.

We want to thank the authors of these country-specific documents for their professional care and personal devotion to the Tariffs and Effluent Charges Project. It has been a pleasure to work with, and learn from, them throughout the course of the Project.

One purpose of the Tariffs and Effluent Charges Project was to promote a structured discussion that would encourage further consideration, testing, and adoption of various tariff and effluent charge reform proposals. As leaders and coordinators of the Project, the interested reader is welcome to contact either of us with questions or suggestions regarding the discussion and proposals included in either volume of the Project reports. We will forward questions or issues better addressed by the authors of these country-specific documents directly to them.

Glenn Morris: glennmorris@bellsouth.net
András Kis: kis.andras@makk.zpok.hu

Executive Summary

The Country Report developed within the UNDP/GEF project include a "National Profile" that provides descriptions and analyses of water tariffs and effluent charges associated with municipal water systems in Slovakia. An integral part of the Country Report is a "Case Study" that simulates different development scenarios at the water utility level.

The analysis is based on the data provided by the official institutions at national level, such as the Ministry of Environment, Ministry of Agriculture, and the National Office for Regulation of Network Sectors. Also, data of a selected water company were used to investigate the cost and revenue consequences for selected development scenarios. The objective was to select the water utility that represents a common situation in Slovakia and, at the mean time, the water company is planning to invest into its operation in order to meet the EU requirements. An additional aspect was that the newly established water company was willing to cooperate and provide data for the study.

The National Profile includes a discussion of the legal and institutional setting affecting municipal water and wastewater operators. This includes identification and discussion of regulatory units (such as ministries, water authorities, environmental authorities.), management units (ownership and operation regimes), and service users (the different classes of customers). There is also discussion on various dimensions of municipal water operations: service provided, water production, and water quality; regulatory conditions including permitting, approvals, and performance limits; financial and economic data including tariff setting; and physical infrastructure technology, age, and operating condition.

The Case Study provides background information on the management unit and from this background develops "baseline" information such as current production and service levels, customer usage by different groups of customers, water discharge quantities and quality, water and wastewater tariffs, production and treatment costs, and revenues from the sale of the different water and wastewater services.

The Case study is combined with the Accounts Simulation for Tariffs and Effluent Charges (ASTEC) model. ASTEC is a spreadsheet model developed by the core team of the Project and provides for an assessment tool to design and evaluate strategies for tariffs and charges reform.

In Slovakia, W&WW services were in the past typically provided by the state-own W&WW utilities. A decentralization process was officially launched in 1996. However, by 2003, only a few W&WW utilities were transformed into municipal water companies. This long-lasting process brought several tensions in the decentralization process. Besides legal and institutional uncertainty, the water sector is characterized by heavy investment demands, obsolete water treatment facilities, and a lag in infrastructure development. In addition, in the past the water sector in Slovakia was based on heavy state subsidies due to the centralized administration of water prices for households. The underlying problem causing unsustainable water use practices in the water sector. Water tariffs were not determined on the basis of cost-recovery, but rather tariffs were dictated solely by the Government decision and were the same for each household consumer regardless of the production costs of operators, geographical conditions of water provision, and management practices of water operators.

2003 is crucial in the evolution of the Slovak water supply and wastewater sector due to the following factors:

- new water-related legislation was passed (Water Act, Act on Water Supply and Sewerage Utilities, Regulation on Permissible Level of Pollution),
- municipal water companies are being established taking the responsibility of the infrastructure development, cost, and revenues and these municipal water companies are allowed to establish public-private partnerships
- regulation of water tariffs from national level was cancelled and replaced by the regulation of the National Office for Regulation of Network Sectors, and

- state budget contributions to cover the production costs of water and wastewater (W&WW) service operators practically stopped.

The main background considerations reflected in our examination of possible tariff and effluent charge reforms may be summarized as follows:

- The Slovak Government committed to meet the EU UWWT Directive by 2015. The requirement to connect all agglomeration larger than 2 000 population equivalent (pe) into the sewage network and removal of nutrients of agglomeration larger than 10 000 pe will lead to huge investments needs.
- Current effluent charges do not pose any incentive for the operators to install the abatement technologies. There is a plan to revise effluent charges (rates and structure) by 2004 and this will bring an economic burden on water operators.
- The Slovak Government directly (via the National Regulatory Office) regulates the tariffs for both households and industries. The current water tariffs are regulated based upon the justifiable economic costs of service provisions.
- Municipal water companies are being established, although they might delegate maintenance and operation to a municipal or private company. Fundamental problems with this strategy are that municipalities do not have a tradition to create partnerships with the private sector, lack experience to manage the water industry and, rely on the local operators decisions with respect to prioritization of future investments.
- In 2003, the population connected to drinking water supply system reached 83,6%. Drinking water is consumed by households and other users (industry) in a ratio of 66:34.
- Development of public sewer systems is not as advanced as the water supply network. In 2003, 54.3% of the population was connected to sewerage and this has not increased significantly over the last several years.
- Approximately 80-90% of the households' consumed water is metered. The specific household consumption varies within different regions in Slovakia. For example, in Bratislava it is 182 l/p/day, while in other regions it is less than 80 l/p/day. The average specific households water consumption was 123 l/p/day in 2001. There is not a significant increase of water-saving devises.
- The expenditures of households spent on water services is perceived as modest in comparison with other households` expenditures (such as electricity, basic food, health care). This results in low public awareness with respect to public control over water and wastewater tariffs.

Main results of the analysis and simulation costs and tariffs in the case study could be summarized as follows:

- Decentralization (and privatization) allows for provision and responsibility of water services at local (municipal) level. This is a good signal that the Government will have a "regulatory" rather than "provider" function. It is necessary to establish clear responsibilities and institutional arrangements supporting Municipal Boards to oversee the water system and a water operator to manage it.
- The current basic rule of the tariff structure is that the tariffs are designed to cover the operating costs and investment costs (through a depreciation allowance) of the W&WW operator but work needs to be done to assure that these costs are entered properly and apply continuously
- Currently, there are lower tariffs for households` clients and higher tariffs for industrial clients. It is necessary to establish a clear mechanism to examine individual constituents of production costs including depreciation and future savings. This should be enforced through independent auditing of water operators.
- Pollution load of users (those using public water services) is not specifically addressed in the final calculation of the tariffs however could be considered. There are only few examples, that W&WW operator designed tariffs for others (industry) based upon the pollution entering the public WWTP.

Therefore, there should be consideration to allow for increasing/decreasing tariff depending on input pollution load (mainly valid for industry).

- Service users are not aware of current costs and future investments that must be repaid. Therefore it is necessary to inform the consumers about future rising costs including better public access to information on pollution of recipients.
- The operator does not have substantial incentive to reduce internal operation costs due to several reasons:
  - Households tariffs are indexed and calculated based upon the previous year basis regardless of production costs and the rest of production cost must be recovered from others,
  - Tariffs (both for drinking water and sewage water) are calculated in a way that a final tariff includes 10 – 15% net revenue for the water company,
  - Improved effectiveness (and thus reduction of operation costs) would lead to a decrease of the accounting profit.

  Therefore it is necessary to remove indexing of household tariffs and examine ways to provide better incentives for good management.
- The prospect of major investment requirements and the need to raise tariffs to support them suggests the further consideration of tariff design including examination of the two-part tariffs and increasing/decreasing block tariffs.

The National Profile and Case Studies further outline the proposals for tariff and charges reform using measures that are discussed from with respect to their effectiveness, proportionality and practicality. The description of proposals for reform served as an input for the Volume I of the Tariff and Charges report: *Volume 1: Executive Summary and Overview of Tariff and Charge Reform Issues and Proposals*.