September 2004

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

AUTHORS

Lenka Camrova / IREAS, o. p. s.
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now available and some of the institutional detail pertaining to a specific country or case study community may now be out of date.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](http://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
Overview of Issues and Proposed Tariff and Charge Reforms: The Czech Republic

In the accompanying National Profile and the Case Study the institutional framework, legal status and financial conditions of public water supply and sewerage systems are described. The current situation of municipal water management in the Czech Republic is examined. Based on this examination, we make suggestions for, and related to, tariff and effluent charge reforms. This portion of the Czech Country Report briefly introduces some reform suggestions and critical points regarding the current of municipal water system thanks. These basis for these reform proposals is more fully developed justified in the following chapters.

1 The Control of the Price Regulation

Currently, water and sewage tariffs of MUs are under the financial regulation controlled by the Ministry of Finance and its regional Financial Offices. This regulation includes a strict rule for tariff construction (e.g. given items) and regular reporting on tariffs to customers and government administration. The problem is that Financial Offices do not have water-management experts, so it is very difficult for them to identify any failure (e.g. inappropriate pricing) or to accurately estimate the “real” financial need for running the system sustainable. Thanks to the different types of MUs (in which municipalities as owners and businesses as service providers have different agendas – almost each MUs is an “original”- the tariff level can be both:

a) lower than optimal, which means that sufficient resources are not saved for future investments and repairs of the infrastructure (especially when Mayors are pushing not to increase prices of water),

b) higher than optimal in some items (e.g. management wages, administration overheads… etc.).

To find what is “optimal” from outside is very difficult, especially for the Financial Offices. Due to this limitation on financial control, there is a danger of unsustainable running of MUs that can cause the severe deterioration of the infrastructure in the next 10 – 15 years.

That is why in the near future the Ministry of Agriculture, as the responsible body for the development of public water supply and sewerages, is going to propose a significant change in the price regulation control: They ask the responsibility to be shifted from Ministry of Finance to Ministry of Agriculture, where the special department should be established as a controlling body. This change would need to be initiated by the amendment of related laws.

2 Effluent Charges Increase

In the Czech Republic, effluent charges for wastewater discharge are derived from both, the total quantity discharged and the level of pollution in discharged water (there is a list of pollutants for which different payment are settled in absolute numbers – e.g. 16 CZK/kg of phosphorus). Regarding other cost of wastewater treatment, the level of effluent charges can be considered as rather low (the average payment in 2002 was about 0.48 CZK/m³). Effluent charges therefore do not
seriously influence the behavior of MUs, e.g. discouraging a decision to building a wastewater treatment plant to avoid the payment of the effluent charge. Further, the fixed component of the charge can erode with inflation.

Ministry of the Environment is considering the proposal of new levels of effluent charges. At present, to enforce this increase, the amendment to the Water Act has to be adopted (which is much more difficult and time-consuming than to change a decree of the Ministry – the second and maybe the better option of how the effluent charges can be revised).

While considering the increase, the appropriate relation between the payment for the volume and the payment for the pollution has to be kept. In this system of payments, there is a danger of encouraging reductions in the effluent charge through dilution but producing more wastewater on volumetric terms.

3 Tariffs and Wastewater Treatment Plant Constructions

According to the EU Directive on Municipal Wastewater Treatment (No. 91/271/EHS), each agglomeration over 2000 of population-equivalent is obliged to be connected into sewerages and to ensure the sufficient treatment of its wastewater. To meet this requirement themselves is impossible for most of municipalities (also because new constructions have always been subsidized and centrally planned) and it is therefore expected to be heavily subsidized from national and international public resources.

The scenario of the construction of WWTP in such small municipalities has been investigated in the Case Study (S4, S5). Even with the assumption of a substantial external investment grant, the case study result is an enormous cost on the public (e.g. increase of the sewage tariff of about 300%). We will briefly summarize, what are main factors and critical points of doing such investments:

1) The un-subsidized costs may sometimes be distributed only to the particular customers connected to the new plant or distributed to all customers of a particular MU. Even the latter, to realize such an investment in small towns (up to 2000 PE) may be an enormous financial burden to carry into the future.

2) Although the construction of WWTP is subsidized, the minimal participation of municipal resources (at least 20% of the investment) is required and, as illustrated in the case study, these costs may increased current sewage charges significantly.

3) The operational cost of running the new infrastructure or WWTP are not subsidized. These costs are key to necessitating increases in the sewage tariff.

Constructions of a new WWTP in the Czech Republic and also getting national and EU subsidies should be coordinated by the Ministry of the Environment. It should ensure that resources will be allocated efficiently and that such an investment will not threaten financial collapse of MUs in the future.