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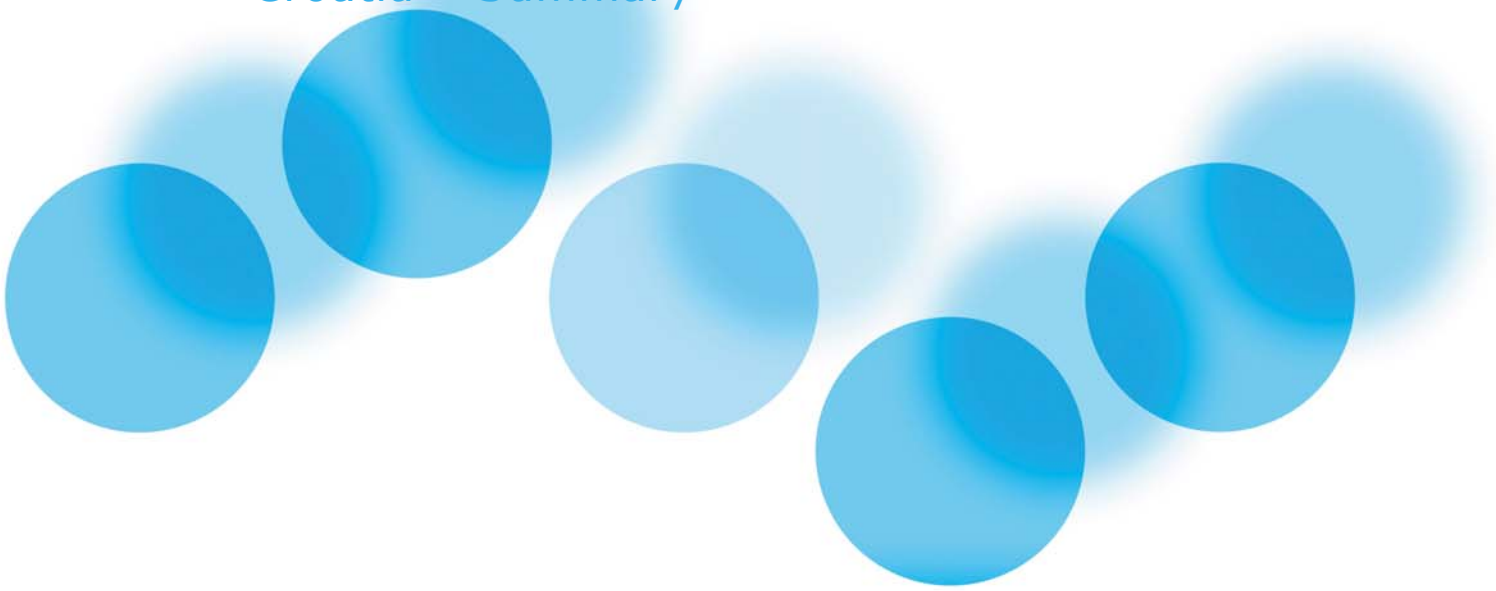
ASSESSMENT AND DEVELOPMENT OF MUNICIPAL WATER AND WASTEWATER TARIFFS AND EFFLUENT CHARGES IN THE DANUBE RIVER BASIN.

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



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AUTHORS

Dubravka Mokos, B.Sc. / Croatian Waters, Zagreb
Ivan Klakočer / Croatian Waters, Zagreb

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

Overview of Issues and Proposed Tariff and Charge Reforms in Croatia

Croatia has a fairly well developed water and wastewater (W&WW) infrastructure, providing good quality water to most of its citizens, and collecting wastewater from over 50% of the population. The quality of supplied water is generally good, the service is reliable, most municipal water and wastewater utilities (MWWUs) operate without major difficulties – at least in the short run. The water sector, however, is not without challenges, and the number and magnitude of problems is likely to rise with time, if reforms are not implemented in due course.

The purpose of the present document is to describe those issues identified by Project Components 1.6 and 1.7 of the UNDP/GEF Danube Regional Project, which, in our view, require immediate attention from policy makers and utility managers. Together with these issues, related reform proposals will also be described. Interested readers should turn to the Croatian National Profile and Croatian Case Study documents for more detail on the portrayed issues and reforms, or Volume 1 of the project report for more information on methodology of the project and background for reform proposals.

We list the issues and recommendations by themes under several headings. Not all of them relate directly to tariff and charge designs and levels, but they reinforce and increase the effectiveness of tariff and charge reforms. If, for example, a tariff reform is accompanied by cost saving measures, then reserves for future investments are easier to build up and subsequent tariff increases do not need to be so severe.

1 Accounting

Reliable, coherent and appropriately detailed accounting and financial information is difficult to obtain at many MWWUs, and this makes it difficult to carry out good quality financial analysis in support of reforms, including tariff reforms. The costs related to service provision to any given service user are difficult or not possible to calculate. This is partly caused by outdated accounting practices, partly by the fact that several activities are pursued by municipal utilities without their treatment as separate cost centers. Our suggestion is to reform accounting practices through:

- ***Creation of cost centers*** (including cost centers based on service, consumer groups and/or geographical location)
- ***New data requirements and reporting templates*** to assist financial analysis

2 Operating Efficiency

Most MWWUs have ample room for improving operating efficiency. The management should systematically ***investigate opportunities for cost control***, and introduce reasonable ***measures and investments with attractive repayment periods***. If the skills for streamlining operations are not present within the company, then well trained experts need to be hired or consultants need to be contracted for this purpose. Appearance of private (minority) stakeholders would speed up this process.

Some of the opportunities for cost reduction that we are aware of are listed below. Screening of the MWWUs would most likely identify a fair number of other options to reduce costs.

- Leakage reduction investment with short repayment periods
- Energy saving measures with short repayment periods
- Optimization of the billing process
- Laying off redundant workforce

3 Tariff Designs, Levels and Collection

While there are water companies with negative current financial accounts, most Croatian MWWUs have zero or slightly positive balance. Although the current account balance is a key indicator of MWWU performance, this figure alone does not tell the whole story. There are companies with zero balance which, by properly and regularly maintaining the infrastructure, are on a sustainable path of operation. Some other companies also break even financially, while they cannot maintain their infrastructure and therefore constantly experience a deterioration of system conditions and quality of service. Many MWWUs in Croatia belong to the latter category. Present tariffs at these utilities will not ensure safe long term operation, and the MWWUs need to increase revenues (often together with a decrease of costs). Higher revenues will be especially important when pieces of the existing infrastructure are worn out and need replacement, or the service is upgraded, for instance by building a wastewater treatment plant.

Even though collection of bills is not a problem for many MWWUs, some utilities are not able to collect a portion of their bills (up to 20%) or receive payments only with a delay. For these MWWUs setting proper tariffs must go together with efforts or strategies at improved and more timely collection.

On top of the problems with current and future financial balance, tariff designs are often distorted and household users are cross-subsidized by industrial and other users. Cross-subsidies not only result in a loss of economic efficiency, but they also pose a risk of disconnection on the part of industrial clients of the MWWUs, losing a major source of revenue. Since fixed costs make up the majority of all costs for most MWWUs, stable revenues are high priority, and the self-supply of industrial consumers is a threat to the stability of revenues.

Another threat to the revenue stream is that present tariff designs include only a variable component, and not a fixed one. As tariffs increase, demand for the services will go down, and this will have an impact on total revenues. By introducing a fixed tariff component, the stability of revenues can be improved.

Lastly, a large portion of the collected revenues is paid as a tax or charge to the government, reducing the possibility of building up reserves locally for future investments.

In this context, our reform proposals are listed below. Needless to say, not all proposals apply to all MWWUs in Croatia, but for many MWWUs they are worth considering.

- In the short run most municipal water and wastewater companies are in a financially stable situation. The infrastructure, however, is being depreciated not only in terms of accounting, but also physically, and major investments will be needed to maintain and/or replace assets. ***Tariffs will need to be increased*** in order to generate appropriate revenues for this purpose.
- At present household consumers are cross-financed by industrial consumers. ***Tariff increase, therefore, should primarily take place at households***. This is also a step towards sustainable and economically efficient tariffs.
- In MWWUs with problems with non-payment, ***strategies to improve collection and timely payment of bills*** need to be implemented.
- Economic efficiency can also be improved through the ***introduction of fixed tariffs***. Fixed tariffs generate revenues regardless of actual consumption, therefore they make the revenue stream more dependable, and they are also more equitable, as all consumers will have to contribute towards the fixed costs of the company, which need to be covered even if consumption is very low for certain users.
- There are, however, some vulnerable consumer groups, especially low income households, where a dramatic increase in tariffs, especially fixed tariffs, can create problems. Fixed tariffs, should therefore, be introduced slowly and cautiously, or ***special arrangements*** need to be made ***for low income households***.

- Some of the large investments, especially into ***sewage collection and wastewater treatment***, will dramatically increase costs, and subsequently, tariffs. If outside help, such as grants or preferential loans from the European Union is not available, then ***these investments need to be delayed*** until the economic status of consumers considerably improves.

4 Ownership and Autonomy

The majority stakes in MWWUs are owned by the Municipalities. While minority private ownership is made possible by law, this is still very rare in Croatia, in fact, most MWWUs have full municipal ownership. Municipalities nominate the management, and therefore key decisions reflect the goals and interests of municipal decision makers. These goals and interests, however, often do not coincide with the interests of the MWWU itself. Increase of households tariffs, as proposed in section 3 above, for instance, is rarely supported by municipal decision makers, as households are their constituency through local elections.

Real reforms can only be expected to take place if the autonomy of the MWWU from the municipality increases. This can be attained in several ways, from legal stipulation, through contractual guarantees to privatization. Involvement of a ***carefully selected private partner***, either for operation, or as an investor, accompanied with proper incentives for improved operations, and guarantees for autonomous decision making seems like a wise alternative. Such a reform, if well implemented, is advantageous to the local community, and can also serve the interests of the municipal decision makers, as the MWWU becomes better managed, more efficient, providing service of improved value to the constituency of local politicians. Private investors can also contribute capital needed for investments, if they raise equity in the MWWU – as opposed to buying a portion of the existing stake, in which case the revenues would arrive at the owners, the Municipality or Croatia Waters, and not the MWWU itself.

Regarding the above we cannot suggest any specific reform, other than ***educating local decision makers on how private-public partnerships operate*** (including both drawbacks and advantages) and training municipal decision makers so that they can manage contracts with private partners in the best interest of the municipalities.

Another issue of ownership is the role of Croatia Waters in the W&WW sector of Croatia. Croatia Waters, as a government agency, provides loans, and preferential loans to MWWUs through the Water Management Fund. If an MWWU is unable to repay its loan, then the loan will be converted into a stake in the MWWU. Through this arrangement, Croatia Water has acquired considerable stakes in a number of poorly performing MWWUs. While "convertible bond" is an important tool in private capital markets, the use of the same concept for financing badly managed or ill-situated utilities is questionable for at least two reasons. First, the MWWUs do not face serious consequences upon non-payment, in essence, we are talking about a soft-loan with a convertible feature. Second, we do not see why Croatia Waters, a government agency, should be the minority owner of financially unstable MWWUs.

As a reform proposal, we suggest that the present practice is abandoned, and instead

- ***MWWUs with a chance for stabilized finances do not receive any sort of assistance***, even loan from the government, instead they should get loans from commercial banks or capital from equity markets. By introducing such a rule, MWWUs will have an incentive to improve operations instead of waiting for outside help.
- ***Only MWWUs which inherited a destroyed or badly functioning infrastructure, or operate under overly unfavorable conditions, should receive assistance***, without the prospect being owned by the government again. Together with the provision of financial assistance, the MWWUs should be required to ***agree to improvements in their operations***, such as tariff designs and operating efficiency, in order to enhance the stability of operations.

5 The Design of Charges, and Use of the Revenues

The purpose of the charges and the value added tax is primarily revenue generation – the incentive for change in polluting behavior is quite limited. Our reform proposal is the following:

- ***Redesign the water protection charge*** so that MWWUs would have a real incentive to invest into reduction of water pollution. The initial level of the charge should be low and should gradually increase so that MWWUs have sufficient time to carry out infrastructural investments in reaction to the charges.

The revenues from charges and taxes serve a variety purposes. Revenue from VAT is of course a general budget revenue, while charges arrive at the Water Management Fund operated by Croatia Waters and are earmarked for water purposes, such as planning and water administration. The Water Management Fund has other sources of revenue as well. A share of the budget of the Fund is used for supporting investments at MWWUs, as described in section 5. In line with the recommendations in section 4, we propose that

- The central investment support schemes should be redesigned so that ***only a restricted circle of MWWUs*** (those which are most disadvantaged and have limited potential to access other sources, such as EU investment funds) ***would be eligible for financial assistance***, in harmony with lower revenues collected for this purpose.