

## Water and Sanitation Utilities Partnership

### Report # 3

# Utility Reform and Environmental Clean-up in Formerly Socialist Countries

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## REPORT OF A WORKSHOP ON THE BALTIC SEA

### Introduction

The overall objective of the newly created Utilities Partnership is to improve human well-being and the environment by improving the performance of urban water and sanitation utilities. The Partnership was initiated because there is an unprecedented window of opportunity for reforming water and sanitation utilities in developing countries and in the formerly socialist economies. The main function of the Partnership is to provide decision makers involved in reform efforts with concise, up-to-date, practical information on reform options and experiences. Utilities Partnership Report #1 covers an international meeting held in Brussels at which the strategy for the Partnership was defined. Report #2 provides details of an international workshop convened at the request of the Government of Peru, with a specific focus on experiences with private sector participation in the provision of urban water and sanitation services, and the implications for utility reform in Lima, Peru.

This issue reports on an international workshop on utility

reform in the formerly socialist countries bordering the Baltic Sea. The focus of the workshop was on the twin challenges facing water utilities in Russia, Estonia, Latvia, Lithuania and Poland: becoming modern, efficient, self-financed enterprises providing good services at reasonable costs to consumers; and becoming major contributors to the clean-up of the Baltic Sea.

### Utilities: Vital Environmental Actors in the Baltic Sea

The Baltic Sea is a unique and vulnerable environmental resource. It is the largest body of brackish water in the world, shared by nine countries, with 16 million people living on the coast and 80 million in the catchment area. Because the saltwater inflows from the North Sea are infrequent, the Sea has many of the characteristics of an inland water body and has suffered a fate similar to that of many lakes — increases in nitrogen and phosphorus inputs and concentrations, decreases in dissolved oxygen and widespread eu-

trophication, and localized increases in heavy metals and persistent organic compounds. In recent decades the municipal and industrial pollution loads into the Baltic from the market economies have declined substantially, while the inputs from the socialist countries increased substantially.

In real and symbolic terms, the challenge of the Baltic Sea is a microcosm of the challenge facing the interdependent world of the 1990s: in real terms, it is only through joint action by the nine countries bordering the Baltic that the quality of this regional environmental commons can be restored; and in symbolic terms, the sea is ringed by interdependent countries ranging from some of the richest in the world to others faced with catastrophic economic declines and the daunting task of economic transformation and development.

This unique set of environmental, economic, and political circumstances gave rise to the Baltic Sea Declaration of 1990 and a high level Task Force of the Helsinki Commission to prepare a Baltic Sea Joint Comprehensive

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Environmental Action Program. The preliminary report of the Task Force showed both the immensity of the task, with estimated investments amounting to over \$20 billion, and the primacy of municipal and industrial wastewater (which accounted for about half of the total cost) in the required environmental action.

At the time of the Baltic Sea Declaration it was implicitly assumed that the developed riparian countries would foot most of the bill for the clean-up. As the preparatory work advanced, however, it became clear that the initial conception — of huge investments financed by the rich countries — was neither realistic nor appropriate. It was not realistic both because the bill was so large in absolute terms, and because the developed economies of the region faced a host of serious domestic economic problems. And it was not appropriate because the problem was not simply construction of facilities, but building a sustainable institutional basis for environmental improvement in the formerly socialist countries. The task gradually changed, therefore, to one of identifying how to develop sustainable environmental institutions and of identifying high-priority, least-cost investments.

The water and sewerage utilities of the poor Baltic countries pose a tremendous challenge, and one that is central to the clean-up of the Baltic Sea. For this reason the Nordic Investment Bank (a lead

actor in the Helsinki Commission) requested the Utilities Partnership to convene a meeting on utility reform in the context of the Baltic Sea Environmental Program with the specific objective of producing consensus on a strategy for this vital sector for the interministerial meeting on financing of the Baltic Sea Initiative, to be held in Gdansk, Poland, in March of 1993.

### **The Riga Workshop: Participants and Program**

A two-day meeting, organized by the Utilities Partnership, and hosted by the Latvian Environmental Protection Committee, was held in Riga in February 1993. The meeting was attended by about 70 people, including representatives from utilities and local and national governments from Estonia, Latvia, Lithuania, Poland, and Russia, and representatives from water utilities in western European countries, international professional associations, and bilateral and multilateral financing agencies.

### **The state of water utilities in the formerly socialist countries around the Baltic Sea**

The water and sewerage utilities of the five formerly socialist countries bordering the Baltic Sea have some formidable assets. The first is a confidence borne from a history of surmounting challenges and supplying services for a very

long time. To cite just one example, Riga has one of the oldest continuous urban water supplies in Europe, with service dating back to 1620! The second is a high level of coverage, with water supply virtually universal and typically more than 70% of urban dwellers having sewerage services. The third and most important is a well-educated, skilled population, with a large number of competent and dedicated engineers and technicians.

The utilities also start on a reform process with some difficult conditions. From a technical point of view, much of the Soviet-era technology is outdated and highly inefficient. Representatives from Vilnius pointed out that energy costs now account for about 60% of the costs of operating their services, and that the new Vilnius wastewater treatment plant was such a high consumer of energy that it would actually pay the city to demolish it and construct a new, efficient plant! The infrastructure for operation of a commercial system is also very poor — few users are metered (and per capita water consumption is accordingly much higher than in Western Europe, despite the absence of water-using household appliances).

From a financial point of view the current situation is unsustainable. Water tariffs are very low (about \$0.10 per cubic meter, compared with \$2.50 in Stockholm, for example). Billing procedures are archaic (a single, undifferentiated bill for all municipi-

pal services). And as the economic downturn goes deeper, only about half of households actually pay their utility bills. In the past, utilities were able to function financially by paying subsidized rates for inputs (with energy especially important) and by obliging industries to pay high water rates. This distorted tariff structure will not (and should not) survive the overall economic restructuring. In addition, the collapse of industry has meant major declines in this source of revenue, too. Finally, transfers from central governments to the water utilities, too, have either been eliminated altogether or drastically reduced.

The utilities also face major human resource problems. As described above, there are excellent technical staff, but there are large numbers of employees who are now, or soon will be redundant (those who provide social services for employees, and those who had to deal with the byzantine Soviet logistic system). And there are severe shortages of the financial, accounting, financial, customer relations and management skills which are central to the functioning of a modern utility.

A final difficulty facing most of the utilities is that, daunting as they are, their problems do not command a high level of concern in societies grappling with a host of more immediate, more obvious and even more overwhelming restructuring problems. This is likely to be

the case until the water stops coming out of the tap (a situation which may well be imminent in a number of cities).

## **Challenges facing the water utilities**

Much of the discussion in Riga focused on three related challenges faced by the utilities of the region. The most immediate and short-term is to ensure, one way or another, that services continue to function. The second is, over the next decade and beyond, to transform the utilities into efficient, accountable, sustainable enterprises. The third is to help them become major contributors not to the pollution of the Baltic Sea, but to improvement in the quality of the sea and the rivers that flow into it.

### **Challenge 1: Maintaining services**

The first challenge—keeping services going—is implicit in the description in the previous section. At the Riga meeting it was evident that some utility managers see this primarily as a simple financial matter—of government providing the resources that they always have for operation of the water and sewerage systems. In the discussions it became clear that there is a deeper challenge. Water utility managers in the region and elsewhere have a long tradition of silent service. To surmount the immediate challenge and (as discussed later) confront the longer-

term ones will require new communication skills: they will have to communicate more effectively with politicians and with the public. This will require that managers, especially, gain the skills and attitudes helpful to public dialogues. Holding public confidence in the water utilities now and in the future depends largely on building up widespread understanding of the importance of the services, and of the reform efforts being undertaken.

Participants from developed countries and international professional associations stressed that an essential part of this communication will be the articulation of a vision of the utility in the medium term. Specifically, it will be necessary to convince politicians and planners that this is not a bottomless pit into which scarce public funds will have to be poured endlessly. The plea for the resources required to keep the utility functioning in the short term must be accompanied by a credible plan for phasing out such transfers in the medium term. A similar strategic approach will be necessary in arranging bridge financing from external agencies.

### **Challenge 2: The transition to modern utilities**

The Riga participants were unanimous that the major medium-term transition challenge is transformation of the utilities into enterprises capable of achieving and

sustaining coherent and largely self-sufficient management of the water supply and sewerage service as an efficient business which its customers come to see as offering fair tariffs and good value. In short, to transform themselves along the lines of "modern" utilities in developed (and some developing) countries.

Because they are not the first to undertake such reforms, the utilities of the region have much to learn from the experience of others who have undertaken such reforms before them. Presentations were made on reform efforts in other countries, and from these several conclusions of particular importance to the formerly socialist countries emerged.

The first message from the discussions was the importance of new legislation in some of the states to enable the water utilities to make more confidently and coherently the changes they have to make in the long transition ahead of them. Particularly critical issues relate to the laws needed for investor confidence, those relating to the setting of tariffs, and those ensuring that managers are given scope for making critical personnel and other management decisions.

The second message is that reform is never a simple or a quick process. In most countries, preparation for major private sector involvement has taken about five years of intensive work. Riga participants with experience in major reform efforts also stressed that there is no "magic bullet": there is no

solution that involves simply handing over the problem to someone else to solve. More specifically, effective use of external consultants will require large corresponding inputs from local government and utilities, especially in the vital areas of organization, finance, commercial practices, etc., where the objective is not just new methods but a commitment to change by the existing staff who come to contribute to it.

A third message from the discussions at Riga concerned the sources of information available to governments and utility managers on the lessons of experience. There were surprises: obvious sources turned out to be of only marginal value, while other apparently unlikely sources turned out to be rich with implications for the countries involved in these reforms. To be more specific, one presentation was made by one of the world's best-run utilities from one of the rich Baltic Sea countries. Impressive and innovative as the experience of this utility has been, its current challenges were so far removed from those facing the former socialist states that the participants did not find much to learn of immediate applicability. At the other extreme, one presentation discussed an ongoing reform effort where previously tariffs were less than 10% of the cost of water, the metering and billing system was in total disarray with less than 10% of bills even collected, and the utility functioned only with large subsidies from the

central government. Reform involved the development of a legal and regulatory framework for encouraging the participation of the private sector, competitive bidding among private operators for a 10-year lease (affermage) for operation of the system, and a gradual program supported by a development bank for phasing in a realistic tariff system (and a phasing out of subsidies) over an 8-year period.

In contrast to the presentation from the West European utility, this example was deemed highly pertinent by the participants. What was striking was that this lesson was from West Africa, illustrating the point that there are lessons to be learned from places which would not immediately seem relevant.

This raised a broader point of considerable interest. The countries of the region (naturally) see their development objective as one of emulating the success of their Western European nations, and they therefore look to the developed market economies for advice. The above example illustrates that, in many instances, the formerly socialist economies have much more to learn from reform efforts in developing countries. More specifically, the water utility reform efforts of Eastern Europe have much in common with similar efforts being undertaken in Latin America, Africa, and Asia.

In the same vein, the meeting revealed the wide variety of reform paths being undertaken by

the five formerly communist countries represented at Riga. For example, discussions are under way for concession contracts with French private sector firms in St. Petersburg, Gdansk and Vilnius. Riga is relying heavily on a twinning arrangement with the Stockholm Water Company, while in Estonia discussions are underway with an Estonian-American businessman for operation of the Eesti Wesi water supply authority. The participants noted the importance of: (i) having access to disinterested, third party advice, (ii) the facility which the bilateral and multilateral lending agencies offered in this respect, and (iii) putting in place mechanisms such as the Utilities Partnership for monitoring the experience of different countries, for digesting the lessons of experience, and for creating forums such as the Riga Workshop for feeding back those lessons in a practical, timely fashion.

Finally, participants from other countries noted the importance of self-help. This ranges from regional associations serving smaller utilities (Eesti Wesi, a water utility serving more than 40 smaller municipalities in Estonia, is a particularly interesting example), to regional associations such as the League of Baltic Cities. On the other hand, reference was made to the decades of "involuntary volunteering," and the strong legacy of suspicion in the region regarding voluntary associations. What was needed was not grand plans but

concrete examples — such as the Riga Workshop itself — where cooperation was clearly to the benefit of all.

### **Challenge 3: Effecting the environmental transition**

As noted earlier, about 50% of the estimated cost of the Baltic Sea clean-up is directly associated with utilities. The single loudest and clearest message from Riga — see "The Riga Statement" in Box 1 — was that utilities could play this vital environmental role if and only if the utility modernization process develops well. Once this modernization takes hold, the utilities can substantially reduce pollution in the Baltic Sea and the rivers flowing into it; water consumption could be reduced; there would be incentives for conservation, better operation and maintenance; and there would be an accountability to the population which had not previously existed.

The Riga participants also stressed that reducing municipal and industrial discharges into the Baltic Sea is not a one-time investment problem, but a very repetitive business that can be carried out only by well-managed, sustainable institutions.

Beyond institutional viability, however, the discussions at Riga made clear that utility managers will have to learn to live with the new environmental concerns, and learn to become a productive part of their solution. It was noted that

this is a relatively new challenge in many countries, and one which is a big and ongoing struggle in most developed countries. For instance, the Adriatic Sea is still severely polluted near resorts and the prosperous regions of Italy, and Brussels is still building its first sewage treatment works. More generally, even rich countries are finding the adaptation to new environmental protection standards a major financial and institutional challenge. This is a challenge in which the utility managers in the formerly socialist states need not be alone, but can work together with their counterparts in more developed countries.

The representatives of the richer countries at Riga did, however, have several messages on environmental improvement. The first lesson is that in developed countries the problem had often been inappropriately framed — setting standards, determining how this was to be done, and then expecting the resources to be forthcoming. This formulation is now giving way to a different approach that focuses on three issues: (i) determining the most efficient means for achieving environmental goals, (ii) determining the costs involved in meeting different environmental goals, and (iii) submitting to the public and the political process this information so that decisions on environmental quality and the cost of achieving it can be made together.

In this context the presentation on the Polish experience was

of great interest to participants. Poland has established an overall water resource management system modeled on the French river-basin system. A central feature of a French river-basin agency is the "water parliament" where environmental targets and levels of investment are set and highest-priority, least-cost investments identified. Participants agreed that monitoring of Poland's experience and its lessons is a high priority for the region as a whole.

### **The Riga Statement and the Gdansk Conference**

The impetus behind the Riga Workshop was a need to develop a consensus among the countries in the region and their external partners on: (i) the importance of utilities as environmental actors in the Baltic Sea and (ii) the key transition tasks facing water and sewerage utilities in the formerly socialist countries. Accordingly, a focus of the workshop was developing consensus around "The Riga Statement," which was designed to transmit the messages from Riga to the interministerial meeting on the Baltic Sea Environmental Action Program scheduled for Gdansk in late March 1993. The Riga Statement is presented in the Box on the opposite page.

(This report on the Riga Workshop has, however, been purposely delayed so that it could contain a postscript on the fate of the

Riga Statement in the Gdansk Conference.)

The role of the Riga Statement in the Gdansk Conference is summarized in the words of a major participant: "The Riga Statement was of transcendent importance because it showed that what was needed was not just throwing money at problems, but an alternative which would develop sustainable institutions and make efficient use of limited resources. The Riga Statement gave a practical, realistic, feasible focus for external support agencies (in support of feasibility studies and capacity building). And it gave a common framework for local and national governments and external agencies to work together with common purpose." At the insistence of the ministers attending the Gdansk Conference, the Riga Statement will be featured prominently and in full in the Gdansk Report (currently under preparation by the Helsinki Committee Task Force).

### ***Prologue: Realism and challenges***

The Riga Workshop began with bold, well-defined objectives: better service to water users and utilities, contributing to improvements in the Baltic Sea clean-up program. But it moved quickly to the hard realities of the transition: the central and urgent challenge of keeping services operating under immediate economic stress;

making the transition to modern, efficient, autonomous, largely self-financed enterprises that respond to and interact with consumers more effectively; and becoming positive agents for environmental improvement.

Perhaps the most important broad message to come out of the Riga Workshop is that this is a "win-win" situation in which policies designed to improve economic performance and standards of living are not only consistent with, but necessary for, environmental improvement. In the words of one participant at Riga "as we strengthen our utilities to serve consumers better, we will enable them to clean up the Baltic Sea."

## **THE RIGA STATEMENT ON WATER AND WASTEWATER AND THE BALTIC SEA ENVIRONMENTAL PROGRAM**

**PREAMBLE** Under the auspices of the UNDP Water Utilities Partnership, a group of seventy professionals met in Riga, Latvia, 15-17 February 1993. The professionals included government, municipal and utility officials from Estonia, Latvia, Lithuania, Poland, and Russia; officials from governments and water utilities in the Nordic countries; officials from regional and multilateral development banks and the UNDP; and representatives of the major international water and sewerage professional associations.

The meeting analyzed the economic and environmental conditions in the water and sewerage sector in the Central and Eastern European countries bordering on the Baltic Sea and was briefed on the status of the Baltic Sea Environmental Program and the involvement of the bilateral and multilateral financing agencies in the program.

The attendees at the meeting reached broad consensus on the critical issues facing the countries' water and sewerage sector. Accordingly, the participants decided to transmit, in their individual capacities, "The Riga Statement" to be considered at the Diplomatic Conference on Resource Mobilization of the Baltic Sea Environmental Program in Gdansk on 24-25 March 1993.

### **CONSIDERATIONS**

#### ***On water and wastewater utilities***

(1) The municipalities and water and wastewater utilities of the Eastern European countries bordering the Baltic Sea face a historic task. They are simultaneously attempting two difficult transitions. The first is to develop from poor-quality, high-cost service providers, to the high-quality, least-cost performance which characterizes modern water and sewerage utilities. The second transition is to make water and sewerage services a positive force for reducing the discharge of municipal and industrial pollution.

(2) Municipalities and water utilities have made remarkable efforts to simultaneously keep these vital services functioning and to effect these two transitions. Nevertheless, many of the systems are in a precarious state, and the health of the population seriously threatened. These efforts will have to be sustained in the face of difficulties and can only be done with the active support of citizens and governments.

(3) There was unanimous agreement in Riga that the first transition — to customer-oriented, efficient services — is a necessary condition if the second transition — to greater respect for the environment — is to be made. Strengthening of the institutional and financial performance of utilities is, accordingly, vital if sustained improvements are to be made in the condition of the Baltic Sea.

#### ***On investments in wastewater management***

(4) The need and urgency to make improvements creates a tendency to regard any wastewater treatment project as a good thing. But the ad hoc financing of individual wastewater treatment plants taken up in isolation can be inappropriate and a poor use of resources. The participants noted the potentially high payoffs from investments in water conservation (including metering), the rapidly changing composition of industry and the high opportunity cost of limited resources. The participants

therefore agree that attention should be given to the likely evolution of domestic and industrial water demand, and to identifying a phased, least-cost, high-priority investment program.

### **RESOLUTIONS**

The Riga participants therefore urge that the following three recommendations be considered at the Gdansk Conference.

#### ***Resolution 1, regarding the development of water and wastewater utilities***

High priority should be given by national governments and external support agencies to supporting the remarkable efforts of municipalities in Estonia, Latvia, Lithuania, Poland, and Russia to foster the development of autonomous, self-financed water and sewerage utilities which provide good service efficiently to their populations. Critical elements in this reform program include: new legislation enabling this process to go forward strongly and widely; intensive human resource development and capacity building programs, especially in the areas of financing and management; the phasing in of more appropriate tariff systems, with particular attention being given to closing, over a period of several years, the wide gap between current domestic tariffs and the cost of services; and least-cost investment programs focusing on rehabilitation, demand management, and commercialization.

#### ***Resolution 2, regarding investments in environmental improvement***

Priority should be given to the use of grant financing to conduct comprehensive feasibility studies to identify a medium-term package of high-priority investments. Isolated investments in wastewater treatment facilities should be avoided. This would both ensure that the best use is made of limited resources, and increase the possibility of obtaining financing by international financial institutions. This could initiate a sustained improvement in the quality of the Baltic Sea.

#### ***Resolution 3, regarding mechanisms***

Addressing these challenges will require a disciplined, sustained partnership involving municipalities and utilities, national governments, bilateral and multilateral financing agencies, professional associations, and the private sector. The Gdansk meeting should consider mechanisms for strengthening existing partnership arrangements (such as the Union of Baltic Cities) and fostering and facilitating the other forms of partnership that are needed.

**This is the third of a series of reports issued by the Utilities Partnership. They are intended to be a flexible and varied means for disseminating practical and timely information. Some reports will be more journalistic in style and tone. Others will be more detailed, technical reports on specific issues. Under preparation, for example, are papers on the recently awarded concession for W&S in Buenos Aires, the public-private partnership for W&S in Paris, and a regulatory and institutional framework for improving water and sewerage services.**

#### **For further information:**

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