

**For Official Use**

**ENV/EPOC/EAP/WSS(2005)10**



Organisation de Coopération et de Développement Economiques  
Organisation for Economic Co-operation and Development

**English - Or. English**

**ENVIRONMENT DIRECTORATE  
ENVIRONMENT POLICY COMMITTEE  
TASK FORCE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL ACTION  
PROGRAMME FOR CENTRAL AND EASTERN EUROPE, CAUCASUS AND CENTRAL ASIA**

## **Water Supply and Sanitation Sector Reform**

**Draft Issues Paper for the the Almaty+5 Ministerial Conference**

**5-6 June 2005**

**ENV/EPOC/EAP/WSS(2005)10  
For Official Use**

**English - Or. English**

## Assessing Progress in Achieving the Almaty Guiding Principles

Analysis conducted for this meeting suggests that the overall situation in the water supply and sanitation sector of EECCA has not improved appreciably since the Almaty Conference in 2000. At that time, the state of the infrastructure was assessed as being critical, and it has deteriorated further since then.

The coverage of urban populations with centralised water services remains at high levels, but disruptions of water supply, pipe breaks, and unaccounted-for-water have steadily increased in recent years. In many places in the EECCA region people receive water for only a few hours per day. The situation with sanitation services is worse since coverage is much lower than for water supply, and deterioration equally significant. Similarly, key financial indicators have not shown improvement. Tariffs often do not cover operational costs, much less maintenance and capital costs. On these trends it is unlikely that the water-related Millennium Development Goals (MDGs) will be achieved by 2015<sup>1</sup>. However, official estimates are not reliable and paint an overly-optimistic picture of progress. Improvements in the methodologies and data needed to make these assessments are urgently needed, not least to provide a more reliable basis for priority-setting and the elaboration of MDG-focused development strategies.

Some indicators have shown positive signs, such as significantly increased levels of metering in virtually all countries, decreasing levels of water consumption, and improved rates of bill collection. However, these positive developments do not suffice to reverse the overall negative trend. There are no signs that the continued deterioration of the EECCA water sector is slowing or that this trend will be reversed in the near future. The consequences for public health, the environment, and economic development in the region are serious. The World Health Organisation (WHO) estimates that in the ECE region<sup>2</sup> more than 13,000 children under the age of 14 die every year from poor water conditions, probably most of them in the EECCA region.

While the overall trend is broadly the same across the EECCA region, the state of water services and their adverse impacts is quite diverse. Some positive achievements have been registered in some capital and large cities. However, the situation is much worse in small and medium sized cities. Water services in many rural areas have collapsed following the dismantling of the collective farm system in the 1990's. Thirty-six per cent of population in EECCA live in rural areas, underlining the importance of more effective programmes in these areas in order to achieve the internationally-agreed water targets. More generally, the situation in the poorest EECCA countries is much worse than in the more affluent states, especially in terms of water quality and resulting health impacts.

A review of the major institutional and legal reforms in EECCA indicates that many countries have undertaken measures to improve the situation in the water supply and sanitation sector, most of them in line with the recommendations in the Almaty Guiding Principles. In particular, central governments have improved the institutional set-up for the water sector, and developed framework legislation to better guide local level actors, mainly in setting tariffs. Compared with the Almaty meeting, there are now a number of positive examples and tools<sup>3</sup> to support reform of the water sector in the EECCA region. A key challenge is to find ways to scale-up these positive examples and to provide training and other support to apply these tools. This will require both political commitment and capacity building.

---

<sup>1</sup> The water-related MDGs aim to reduce by half those people without access to safe drinking water and basic sanitation by 2015.

<sup>2</sup> The United Nations Economic Commission for Europe has 55 member countries.

<sup>3</sup> Some of the tools developed by the EAP Task Force in this respect are listed in the Annex to this document.

### **Issues for discussion**

*What measures have been most effective in driving the reform of the water sector and improving the delivery of water services? How should these best practice examples be replicated and scaled-up?*

*What should be the main priorities in the coming 5-10 years, taking account of the different situations in larger and smaller urban centres and in rural areas?*

### **Financing Water Services and the Social Implications of Tariff Reform**

One of the main reasons for the deterioration of water infrastructure in EECCA countries over the last 20 years has been the chronic under-funding of the sector. Increased financial flows are a necessary but not sufficient condition for improving the provision of water and sanitation services in EECCA countries: appropriate policy and institutional frameworks are also needed to improve the mobilisation and utilisation of financial resources and to ensure the financial sustainability of the sector.

Between 50 and 90% of water utility revenue currently is generated by user charges; the rest mostly comes from public budgets. In some countries user charges have been increased quite significantly and billing procedures improved, thereby generating more revenues for utilities. However, in many countries utility revenue still covers only about 60% of operation costs, which is obviously unsustainable. Water consumption has fallen as tariffs have increased, but the level of service provision, with some notable local exceptions, generally has not improved.

In these circumstances, most utilities in the region have been decreasing the levels of service that they provide in order to save on costly inputs such as energy and chemical reagents for water treatment. As a result, they have been unable to carry-out basic maintenance, further accelerating the deterioration of infrastructure. The water sector in many EECCA countries is caught in a vicious circle of financial unsustainability and declining service provision. This continues to impact negatively on public health and the environment, as well as economic development.

It has been estimated that between USD 15 to 34 per capita per year of additional finance would be needed if present infrastructure were to be properly maintained and renewed, and a total of about EUR 7 billion, roughly double the current level of available finance, to achieve the Millennium Development Goals on water supply and sanitation.

There are no simple solutions for meeting the financial challenge. EECCA countries will have to combine all sources of finance to enhance synergies, avoid crowding out other sources, and maximize leverage on total flows. Finance Strategies elaborated by a number of EECCA countries in cooperation with the EAP Task Force have provided some insights into some of the main elements of EECCA country approaches:

- User charges will continue to be the major source of finance, particularly for operational and maintenance costs
- Public budgets will be essential in most countries, particularly for capital costs
- Official Development Assistance (ODA) and finance from International Financial Institutions will play a small role in terms of total flows, but they may nevertheless have an important demonstration and catalytic role. There is potential for greater flows from these sources, particularly if reforms can help convince that the resources would be well-used. Increased ODA would be essential if the water-related MDGs are to be achieved.

- The private sector is unlikely to be a significant source of investment capital for the foreseeable future in most EECCA countries; it is more likely to be a source of managerial and technical know-how (see below).
- Local capital and financial markets are unlikely to be a major source of finance in the foreseeable future; though opportunities may be emerging in the larger, richer countries like Russia and Ukraine (see below).

Users or tax-payers (domestic or foreign) are the ultimate financiers. The other mechanisms provide means for covering high, up-front investment costs and scheduling the repayments over the long life-time of the infrastructure.

One obstacle to increasing tariffs is the social and political opposition that this may generate. Assessments in some countries suggest that as much as 50% of the population would pay more than 4% of household income – a frequently-used benchmark of affordability – if tariffs were raised to cover the full costs of operation and maintenance. These impacts would be felt more keenly in poorer households. In these circumstances, politicians are often reluctant to raise tariffs. At the same time, studies show that many, but not all, households are willing and able to pay more for water services. The way out of this dilemma is to raise tariffs in line with a more financially sustainable water sector, while targeting support on those most in need. Various approaches are possible, but they generally fall into one of two categories: a block tariff system where a basic amount of water is provided at low or no cost; or income support provided through social protection mechanisms to poor families.

To overcome political obstacles to increased tariffs, some countries will require local authorities to set tariffs at cost-recovery levels. If they do not, the local authorities must use their own budget to cover the difference between the actual and the cost-recovery tariff.

#### **Issues for discussion**

*Why have tariff reform measures generally not yet resulted in improved cost recovery and service delivery? What could be done to address these problems?*

*What can be done to put the water sector on a more financially sustainable basis by moving toward tariffs that at least cover operational and maintenance costs while addressing legitimate social and political concerns about the affordability of tariffs?*

#### **The Role of National Authorities in Supporting the Provision of Water Services at the Municipal Level**

As the Almaty Guiding Principles stress, decentralisation is an essential means for fostering improved delivery of water services in EECCA countries. However, central authorities still have an important role to play in establishing the legal, regulatory, institutional and financial frameworks, and in providing targeted financial support, needed for improved delivery of water services at the local level. Most EECCA countries could do more to ensure that a suitable priority is assigned to water and sanitation in national development strategies, including Poverty Reduction Strategy Papers. This is essential to secure support from national budgets and, as appropriate, from donors.

A basic task of central authorities is to establish the appropriate level of devolution. Responsibilities should be devolved to the lowest practical level while avoiding excessive fragmentation. This may also involve providing incentives for local governments to cooperate and coordinate their efforts in order to achieve economies of scale in infrastructure provision. In relation to the water sector, central authorities should

establish the framework for integrated water resource management at the level of river basins. From a finance perspective, a river basin management approach is essential to ensure that scarce resources are targeted on the most efficient and effective investments, and this requires cooperation among municipalities.

Other tasks for central authorities include:

- Establishing appropriate construction, health and other standards; this is a challenge in many EECCA countries where these standards are stringent in comparison with international benchmarks, thereby driving up investment costs
- Establishing mechanisms for tariff setting and revision
- Helping to build capacity in local authorities
- Providing the possibility for private sector participation in the water sector.

In most EECCA countries, fiscal transfers from central to regional or local authorities will continue to be an essential component in financing the water sector, particularly for capital investments. The way in which such transfers are made can influence the provision of water services. Generally such transfers should not form part of a mechanism for regional redistribution of resources. Global, rather than earmarked, grants are generally the preferred approach, provided they are accompanied by clear conditions and performance criteria.

National authorities must also determine whether they are willing to provide sovereign guarantees for loans from International Financial Institutions (IFIs). One reason for the relatively low number of IFI loans in the EECCA region is that many EECCA countries are unwilling to take on debt for the water sector, and some are prevented from doing so because of conditions associated with programmes of the International Monetary Fund (IMF).

More generally, central authorities provide the framework for municipal finance. This involves the ability of local authorities:

- to raise revenues to meet their delegated responsibilities
- to make expenditures, and
- to incur debt.

In most EECCA countries, the process of fiscal decentralisation has not proceeded very far, usually because central authorities have legitimate concerns about the capacity, integrity and fiscal discipline of local governments. Nevertheless, the process is advancing in some countries (notably Russia and Ukraine), creating opportunities for accessing local capital and financial markets to finance water infrastructure. Many municipalities in OECD countries financed their infrastructure in this way by taking out loans with commercial or municipal banks, or by issuing bonds. While there are still many obstacles, there may also be opportunities emerging for these types of approaches in a few EECCA countries. In the medium to longer term, this type of approach will need to become more important in EECCA countries.

### **Issues for discussion**

*What should be the relative roles of central and local authorities in financing the water sector? How can water priorities best be integrated into national budgets and fiscal transfers for the water sector be made most effective?*

*What are the opportunities and obstacles for increasing the access of local authorities to local capital and financial markets?*

### **Relations between Municipalities and Water Utilities**

Slow progress in reform at the municipal level is arguably the single biggest obstacle to improved provision of urban water supply and sanitation. There are a number of positive examples (e.g., Surgut, Saint Petersburg and Yerevan) where municipalities have adopted plans with clear objectives and identified the means for achieving them. Some of these have begun to manage their finances and have become sufficiently creditworthy in order to take on debt to finance the construction or rehabilitation of water infrastructure. However, these cases are very much the exception. A huge effort is needed to roll-out and replicate the positive experiences in municipalities throughout the EECCA region.

Local authorities in EECCA need to commit, and require support in order, to:

- set consistent, stable objectives for the water supply and sanitation sector as part of city or regional master plans
- elaborate realistic finance strategies to achieve these objectives
- translate these strategies into rolling, medium-term investment programmes, rather than the annual programmes that many municipalities currently follow, and
- promote public participation in the development and implementation of these activities.

Tools exist to support these actions.

A critical element of reform at the local level concerns the relations between local governments and utilities. Previously, utilities were departments within local government. Today, while many utilities have been established as separate legal entities (often as commercial entities under municipal ownership), the authorities remain *de facto* service providers and are heavily involved in the management of utilities. However, international experience demonstrates that the governmental functions of policy and regulation should be clearly distinguished from the responsibility of utilities to provide water services. Performance contracts between municipalities and utilities can be helpful in clarifying the relative roles and responsibilities of the two sides, and in creating a structure of incentives that rewards good performance by utilities. However, effective performance contracts are still rare in EECCA countries.

The management, organisation and capacities of utilities need to be enhanced as part of the reform at the local level. At the Almaty conference, there had been hopes that private sector participation in the operation of utilities would help to drive this process. Generally these hopes have not been realised. International operators have become more risk averse, in part because of uncertainties about the legal and political framework. Most are not prepared to invest any of their capital and prefer relatively low-risk forms of engagement such as management contracts as a first step into EECCA markets.

The Russian Federation is an exception in this regard. Following positive political signals, domestic private companies had established contracts in 20 cities by September 2004, supplying water to about 8%

of the urban population. This is high by international standards. However, most of these contracts are short-term leases and the sustainability of their involvement in the water sector is not clear at this time.

**Issues for discussion**

*What steps should be taken to enable local authorities to provide more effective direction, support and regulation of water utilities?*

*What are the main opportunities and obstacles to further private sector participation in the water sector?*

## ANNEX

### **Some of the main tools developed by the EAP Task Force to support reform of the water sector in EECCA countries**

- *Financing Strategies*: A computer tool (FEASIBLE) that allows the identification of realistic infrastructure development objectives, taking account of available financial resources. The tool helps clients to develop their understanding of the real financial needs and to adjust their objectives accordingly. It helps to create an objective basis for discussions among ministries and with donors and IFIs about the scale and ambition of possible investment projects.
- *Multi-Year Investment Planning Tool for municipalities (MYIP)*: This tool allows municipalities to plan their water sector and other investments on a three-year horizon. It helps establish some basic financial planning capacity in local governments and supports the preparation of coherent municipal investment programmes.
- *Financial planning tool for utilities*: This tool enables utility staff to develop basic skills in sound financial planning and to prepare corporate development plans. It complements the MYIP tool.
- *Toolkit for benchmarking water utility performance*: This tool is based on a methodology developed by the World Bank. It supports the development of more performance-oriented thinking in utilities and governments and can be integrated both into day-to-day utility management routines in utilities and into contracts between municipalities and utilities.
- *Guidelines for the development of performance based contracts between municipalities and utilities*: They provide a general introduction to the issue of performance based contracting, including their key contractual elements and practical experience in developing such contracts. They should help to prepare municipal and utility staff for a more formal structuring of their relationship as is usually required in the framework of IFI/donor projects.
- *Good Practices for public environmental expenditure management*: A pragmatic checklist to assess the performance of programs and institutions that manage public environmental expenditure, and guidelines to improve their performance.
- *Handbook for appraisal of environmental projects financed from public finance*: This tool aims to help governments develop methodologies for effective appraisal of water and sanitation projects in order to support the effective allocation of scarce public funds. It should support the development of a list of priority investments in national and regional governments, and improve the realism of project proposals, as well as the political commitment that comes along with them. It supports implementation of Good Practices of public environmental expenditure management.