## 4.15 Water - Public good or trade commodity?

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SUMMARY: Public water utilities in Europe have for decades reliably supplied safe drinking water to consumers and provided for the disposal of wastewater. But things are changing. Municipal budget constraints, the pressure exerted by multinational corporations on governments to allow them to enter the water business, and neoliberal political initiatives at national and EU levels encouraging the privatisation of water services, are turning water management into a business. It is argued here that an overall shift to more commercial and cost-efficient policies will potentially undermine the current water service standards, especially in the long-term perspective. Respective developments are reported from countries with recently privatised water sectors.

ity dwellers are always fatefully dependent on a reliable supply of clean drinking water. During the Middle Ages, single households looked after their own needs for water by digging wells or by maintaining communal wells with other families. When the density of settlement increased and well water became scarce or was contaminated by excrement and commercial activity, city authorities took on the responsibility for supplying water. The first public well in Munich, for instance, is mentioned as early as 1318. It was a running well, its water flowing through wooden pipes from a source on an hill on the outskirts of the city. Well into the 19th century, most cities entertained private single and community wells in addition to a centralised supply of water managed by the city. At that time, cities focused primarily on finding sources of additional freshwater. Although the increasing volume of water supplied to cities made it more and more urgent to build drainage systems for rain and wastewater, this aspect was largely ignored during urban development of the time. The cholera epidemics of the 19th century that then struck many European cities made this deficiency in water management painfully clear.

# Waterworks as integral parts of city administrations

It wasn't until the second half of the 19<sup>th</sup> century that most European cities began to build sewer systems. Planning and operating sewer systems and centralised drinking water supply were so complex and costly that city administrations took on this task themselves. Only a few cities attempted temporarily to entrust private companies with the job of setting up their water infrastructure for drinking water and wastewater. In Germany and otherwise in Europe, with the exception of some French municipalities, water supply and drainage became integral parts of city administrations.

Until the present day, responsibility for the water sector remains almost entirely in public hands, although it now incorporates more flexible, up-to-date organisational structures. This serves to ensure that city governments influence strategic decisions for the future. Citizens and

most politicians still see water management as a central, essential task serving the common good and needing the special protection and care of democratically legitimised municipal agencies.

- But this basic principle of urban life has been called into question by an entirely new development in the past 15 years, based on: attempts of private businesses, some of them (French) water groups, some of them in the German energy sector, to gain control over local waterworks;
- political interest in cutting back on state activity to favour private participation (»less state«);
- serious budget constraints facing municipalities.

#### Water supply a lucrative business?

The pressure exerted on municipalities to transfer responsibility for water management to profit-oriented businesses has nothing to do with real needs. Quite on the contrary, the capability of public services in organising and operating water supply and wastewater disposal systems in Germany, for instance is impressive – especially when compared to other countries. This applies to the quality of drinking water, to the environmentally sound disposal of treated wastewater, and to the maintenance of an extensive underground infrastructure. Built up in the past decades, the system is viable for the future, and it offers a high degree of certainty regarding long-term water supply. The experience of not having water at home, even if only for a short time, is practically unknown in Germany.

Building, operating and maintaining a water infrastructure, mostly underground, is not cheap. German consumers pay more than 20 billion euro each year for drinking water and wastewater disposal. Some economists assert that more competition would lead to higher efficiency and therefore to a clear reduction in the cost of water services. They compare prices with those in countries where drinking water costs less. But these comparisons fall short, failing to take into account the poor quality of water, its often precarious supply, insufficient treatment of wastewater, and the decrepit pipes and canal networks found elsewhere. Likewise, comparisons fail to account for the fact that



German water prices include substantial levies for wastewater disposal and groundwater abstraction as well as taxes. Last but not least, the level of salaries also plays a role. Basing their reasoning purely on the comparative cost of water, banks and investment companies nevertheless argue in favour of privatising the water sector in the same way the energy sector has been privatised, and leaving water to rigorous cost-efficiency management.

In view of high turnovers in water and wastewater, energy corporations like RWE and E.ON are thus interested in the water sector. RWE purchased Thames Water, the world's third largest private water company, thereby joining the international water business. RWE also owns 25% of Berlinwasser, a holding that has control of the city of Berlin's water utilities since 1999. Two French companies, Veolia and Ondeo, are leaders in the private water industry, operating waterworks all over the world. After experience with less successful endeavours in emerging countries like Indonesia, the Philippines and Argentina, these companies are now increasingly interested in reliable returns from water management in the industrialised world. Germany is particularly attractive because its water infrastructure is in excellent condition and its spending power is high.

### Municipalities under pressure

Because cities are ensured a high degree of autonomy by the German constitution, no city can be forced to sell its drinking water supply or wastewater disposal systems. It is still at issue how far European Union directives could render this autonomy invalid. Municipalities' public budgets today are massively strained, notably hard hit by cities' obligations to provide social welfare services, which greatly limits their scope for action and tempts them to relinquish control over their water utilities in exchange for money. Surveys indicate that hardly any mayor would be concerned with selling water utilities if there weren't a financial crisis.

The reality looks very different. The combination of financial crisis and one-sided advice from banks and investment corporations, flanked by political initiatives to privatise existential responsibilities such as water supply, puts great pressure on cities and municipalities to relinquish control to commercial businesses. In recent years, several cities have taken practically irreversible decisions on water management without investigating in detail financial alternatives to selling, or looking long enough at the consequences of this change in direction.

Income from a single selling-off of a utility to prop up a city's budget hardly balances the serious long-term consequences of doing so. Higher prices for water, putting even more of a burden on citizens, are as foreseeable as a decline in the quality of water supply services – from

water quality and reliability, to protection of the environment and water resources. The city no longer has a say in the water sector since it is excluded from strategic decision-making for at least several decades. The consequences of this development are at first hardly noticeable because the water infrastructure reacts very slowly due to its long life span. But the running activities and investment plans of private operators indicate that facilities and pipes fall into decay much more quickly than they are repaired.

#### Cost-efficiency above all

Private operators approach water supply and wastewater disposal very differently from municipal enterprises. At the fore is the plan to increase profits by lowering operating costs. Economic efficiency therefore becomes the highest principle, while water quality, sustainability and environmental protection recede into the background. Commercial water management relies on four basic strategies:

#### Strategy 1: Running costs are lowered below the minimum needed for operations

The water sector is considerably different from other utility services using mains networks as 80 to 85% of total operating costs are fixed, regardless of how much water is supplied. A large share of fixed costs is for salaries; therefore, reducing personnel is the most rapid tactic for gaining nominally higher economic efficiency. But such a one-sided way of regarding efficiency overlooks the fact that job cuts have far-reaching consequences on the quality of water supply. Loss of personnel also means the irretrievable loss of human expertise and experience. The intensity of quality control and the maintenance of facilities goes down, and the safety and reliability of the drinking water supply diminishes. Because fewer employees can attend to maintenance, the time needed for repairing technical problems (such as burst pipes) is much longer, putting a strain on residents who must wait longer for their supply of drinking water to be restored.

#### Strategy 2: Economies of scale are applied

The careful use of nearby springs or local groundwater resources is usually more expensive than the large, centralised treatment of river water. To use groundwater, utilities must maintain and monitor a greater number of single facilities. The area around wells must be protected and local farmers must be compensated for refraining from agricultural activities that threaten the quality of water. These costs completely disappear if utilities use river water. Costs can be greatly reduced if the water supplier turns away from local groundwater resources and switches to river water, and indeed, private water companies count on rivers whenever possible. The drawback to this strategy is that high-quality local sources are no longer protected and rivers are overexploited — most notably when the level of the river is low. Water supply then becomes much more vulnerable to severe or sudden pollution, for instance after accidents, but also to climate change, which is expected to make the volume of water in our rivers very erratic (long periods of drought, floods).

In contrast to bacteria-free groundwater, river water must be treated. This process turns drinking water into a manufactured commodity (in contrast to goods that are taken directly from nature, needing only to be distributed). Treated water is in principle of lower quality than pure, unpolluted water because chemical pollution cannot be entirely removed from it. Water pumped over long distances is prone to bacterial growth due to longer residence times in the mains system and therefore has to be chlorinated. Chlorination is effective against pathogens only if active chemicals like chloroform remain in drinking water over the whole distance to consumers. The presence of surplus chlorine and chloroform in drinking water is detrimental to health, but it is a direct and unavoidable consequence of centralising a drinking water system with long distance transport.

The chemical treatment of dirty river water is of course also costly, as it requires the construction and operation of treatment facilities. The large French water groups Ondeo (formerly Suez-Lyonnaise des Eaux) and Veolia (formerly Vivendi) actually see these costs as an additional source of turnover. Their own subsidiaries develop, plan and build such purification plants. In fact, their overall costs hardly change – the money saved from not having to protect groundwater is used to treat river water. The advantage for the water corporation is that a larger share of turnover remains within the business.

## Strategy 3: The cost of preventing water pollution is passed on to the state

In Germany as in all of Europe, state authorities are responsible for protecting water resources. Nevertheless, it has generally become standard practice in German water management for waterworks themselves to monitor and protect sources voluntarily and independently. This model is extremely successful. If operations are forcefully directed towards lowering costs, high standards begin to disintegrate. The French water group Ondeo, in a legal battle gained assurance from the highest French court that it did not have to bear responsibility for protecting the water resources it used. The court confirmed that Ondeo was obliged only to carry out »reasonable treatment« of raw water and that it was the concern of state authorities to

protect water resources. In other words, the water resources sold by Ondeo had to be protected at state cost – with taxpayers' money.

The disturbing side-affect of this practice is that the water gained from treating polluted resources can be declared a »manufactured good«, a trade commodity like any other. This raises the threat that drinking water supply can be subject to rules governing the market and competitiveness, such as those currently being negotiated by the World Trade Organisation for the General Agreement on Trade in Services.

## Strategy 4: Costs for improving, replacing and maintaining the infrastructure are minimised.

The greatest expenditure in supplying drinking water is for constructing and maintaining a mains network and facilities. To look after mains properly, about one-and-ahalf to two percent of pipes and sewers must be replaced or renovated every year. Investment in maintenance is by far the most significant cost factor in the water sector. It is obvious that a strategy directed towards economic efficiency will start here. Neglecting the infrastructure is a smoother way to increase profit than to raise water rates, always an unpopular move, since the consequences of inadequate maintenance don't become evident for several years. Future consumers of water will have to foot the bill for repairs once they become inevitable. The management of mains networks and sewers calls for planning that looks ahead more than a hundred years - cost-efficiency management directed towards short-term business profits is hardly the answer.

The privatisation of waterworks in England and Wales in 1989 shows how the major part of profits being paid to shareholders came from water companies' failing to invest in maintenance. At the same time, the loss of water from leaking pipes increased to as much as 40% in some cities. In Berlin too, investments in maintaining the infrastructure were drastically reduced after Berlin's water operations were partly privatised in 1999.

# Long-term planning and the common good

Limiting the principles of efficiency simply to economic optimisation, as practised by private operators in water management, predictably leads to an erosion of the standards that are taken for granted in Germany today. The far-reaching consequences of this development don't become apparent until system breakdowns and deterioration in quality are noticeable to all. A course of action directed one-sidedly towards economic efficiency fails to recognise the basic prerequisites needed for any water management planning – long-term thinking and an interest



in the common good. These were the very ideas that 150 years ago moved city fathers to put the management of urban water supply into public hands and not entrust it to private businesses. Back then, and even more so today, public authorities by nature of their office were, and still are, far better equipped to plan for the long run, seeing themselves as agencies responsible for urban planning not fettered to profit-oriented, short-term business strategies.

Water management is fundamentally different from other services, even electricity or gas supply. Enormously high investments must be made in building and maintaining facilities. These investments can be financed and paid back in the long run because pipes and sewer systems have a life span of at least 50 years. Long-term planning must adapt to this durability. Such costly systems can be realised at acceptable prices only when all consumers pay water fees to contribute to the financing, which is why every user is obliged to be connected to public mains and sewers. The consumer is much more than a customer who simply buys water. Consumers are obliged by law to participate in a system on which they also depend. They must have complete trust in the reliability of the enterprise responsible for water supply and wastewater disposal – there is no alternative source of supply or second sewer system. Because of the special relationship between residents and the operators of waterworks, the latter is charged with a special social obligation to orient water management towards the common good.

More and more, it is no longer engineers and health authorities who are making decisions on water management, but financial experts and city treasurers - assisted by bank managers. The consequence is that in some places those responsible are attracted to economically efficient principles and design their strategies accordingly. They not only put at stake the standards for water management reached over decades, they also unnecessarily take leave of higher principles for the common good. They give cities a reputation for neglecting their duty of care towards residents.

### Not enough transparency

Many referenda in recent years have shown that citizens do not agree with the new directions in water management that city politicians want to set. Surveys clearly indicate that city residents are against privatisation. But decisionmaking as a rule is neither public nor transparent. The population often first finds out from the newspaper that a private business will be operating the local waterworks from now on. More citizen participation and general openness during planning and the strategic decision-making process could enable the population to accept relevant changes more readily. This could also create opportunities for considering alternatives to privatisation in years ahead. The financial interests of a municipality – the only important criterion in the overwhelming majority of decisions taken on privatisation – can often be met without losing strategic control over the water system.

But most privatisation processes still take place with the public excluded, not least because the observance of secrecy in the financial sector is an important criterion for reaching favourable conclusions. Currently, operator contracts between private businesses and municipalities are absolutely secret; at best, a selected circle of politicians have access to them. But most citizens don't agree with this policy of secretiveness. More and more citizens' initiatives are grouping together to monitor the politicians and public managers involved, and to remind them of their duties. The future of the water supply has in recent years become one of the most important issues preoccupying citizens and organisations defending the common good. Churches, non-governmental organisations, and municipal parliaments now seriously contest the decision-making processes affecting the water sector. Even an international project funded by the European Commission has researched how decision-making processes concerning municipal water supply and wastewater disposal can be optimised to improve the quality of life (www.watertime.net) ♦