Water liberalisation — a gain for Europe’s citizens?
The single market strategy in the light of European experience


Documents concerning the water sector published by the European Commission this year (Internal Market Strategy 2003–2006; Strategy Paper on Competition, Internal Market and the Water Sector; and Green Paper on Services of General Interest) argue that:

- There is scope for improvement in the performance of the European water sector, particularly in pricing, environmental and health terms; and that

- Structural changes and increased competition in the water industry would result in greater efficiency and transparency, lower water prices for consumers, and improved quality in environmental and health terms.

The Austrian Federal Chamber of Labour, representing the interests of some three million workers and consumers, and the Association of Austrian Cities and Towns those of 55% of the population through its member authorities, recently commissioned a study entitled “An International Comparison of Water Sectors” (Schönbäck et al., 2003; further details below) as a contribution to the current debate on the Austrian water sector initiated by the business community and the Government. This study was prepared by the Vienna University of Technology Institute of Public Finance and Infrastructure Policy and the Ecologic Institute for International and European Environmental Policy, Berlin and Brussels. It compares the economic, social and environmental aspects of the water sectors of Austria, England and Wales, and France, taking into account the respective geographical conditions and settlement structures, and the legal and regulatory frameworks. Limited comparisons are also made with the situations in Germany and the Netherlands.

Our organisations intend to use the study as a basis for comments on the above positions taken by the European Commission, DG Internal Market and DG Competition. The statistics and graphs reproduced below are drawn from the study. The sources of the tables and statistics from which the graphs are derived are given in the annex to this release.
Comparison of countries with different degrees of market opening

The countries studied were selected for their differing degrees of liberalisation.

In England and Wales water supply and wastewater treatment have to all intents and purposes been entirely run by private companies on a licensing basis since 1989. The regulator, Ofwat, attempts to promote "yardstick competition".

In France 79% of all water and 52% of all wastewater disposal services are provided by private companies with limited term contracts, some of which are awarded by competitive tender.

In Austria local authorities are free to decide whether to provide water supply and wastewater disposal services themselves or to contract them out. Despite a longstanding debate on the matter, most services are still provided by the public sector. Private sector companies only figure as minority shareholders in two water companies which together serve 6% of the population. There are private holdings in a few pilot wastewater projects to which about 1% of the population are connected. There is competition for the construction of infrastructure (competitive tendering), and benchmarking of water companies’ performance has recently been introduced.

Cost comparisons

As the study shows, the level of average annual per capita expenditure on water supply and wastewater disposal in the countries studied is broadly similar (Fig. 1, data for 2000):

- In Austria spending is €61 on water supply and €84 on wastewater disposal, i.e. a total of €145;
- In England and Wales consumers spend €71 and €79, respectively, i.e. a total of €150 per capita and year;
- In France expenditure is €63 and €69, respectively, for a total of €132.

Fig. 1: Average annual expenditure on drinking water and wastewater per connected inhabitant (EUR)

Source: Schönbäck et al., 2003
In all the countries studied there are de facto subsidies, but comparable information on the precise amounts is not available:

In Austria, public subsidies averaged over 40% of investment cost during the 1990s. These payments, which were not income related, mainly helped to pay for installations in rural areas (dispersed settlements). However, of late the subsidies have been sharply reduced.

In England and Wales the main subsidy was paid at the time of privatisation, in the form a “green dowry” received by the owners — the infrastructure was effectively handed to them free of charge.

In France, apart from redistribution through a levy which forms part of the water price, modest subsidies are available.

As the above prices paid by consumers are not identical to the production costs, it also makes sense to compare the latter (because the data are taken from different sources, the cost figures are not directly comparable with the above annual expenditure statistics).

In England and Wales the production cost per connected inhabitant are at the lower end of the scale. Austria, which is more similar to France in terms of topography and the number of service providers, has relatively low water costs, but the higher wastewater disposal costs per inhabitant — 30–50% above those in the other countries studied — mean that the total cost of the services is at the top of the range. However, it should be noted that investment in infrastructure is considerably higher, and is reflected in markedly superior system quality. When the production cost per unit of treated drinking and wastewater volume is taken as the basis of comparison the picture changes, in that the treated volumes per inhabitant are significantly greater in Austria. Cost per cubic metre in Austria is on a par with England and Wales, and considerably lower than in France. Moreover, the quality of the drinking water and wastewater should be taken into account.

**Water supply system quality**

A comparison of system characteristics reveals the superior standards of Austrian networks. System losses through pipeline leakages are an indicator of the quality of a water supply network, as they can also be entry points for water contamination. In this respect Austrian standards are well above those of the other countries studied. After falling, system losses have been increasing again in England and Wales in recent years. According to British Water, which represents the British water companies’ interests, this is probably because the marginal benefits of increased efficiency have been exhausted.

![Fig. 5: Drinking water leakage rate (%)](source: Schönbäck et al. 2003)

The greater tendency to apply the precautionary principle in Austria is also reflected in the approach to source water protection. With 9% of the country’s territory under protection, most freshwater is suitable for use as drinking water without treatment. In France, and still more so in Britain, less source water is protected, and surface water is more heavily used, meaning that more water requires treatment.

Information on bacteriological quality regularly reveals problems in France, and England and Wales. Consumer satisfaction surveys show that in France about 40% of the population regard tap water as unhealthy or non-potable (which is certainly at variance with the water quality data), while in Britain drinking water quality (health aspects and taste) and security of supply are the main determinants of satisfaction.
Wastewater treatment quality

At 82% the rate of connection to public sewer networks is lower in Austria than in England and Wales (96%) and France (86%). However, it should be noted that in England and Wales, and France about 10% of all collected wastewater is directly discharged into water bodies, untreated.

As regards the efficiency of treatment of organic substances there is only comparative data for Austria and France. The average BOD5 degradation rate was 95% in Austria (2000) and 88% in France (1999). The average COD degradation rate was 87% in Austria (1998) and 72% in France (1995).

The main measure of the performance of modern wastewater treatment plants is their efficiency in removing nutrients — nitrates and phosphates — to which the so-called “tertiary treatment stage” is the key. Due to gaps in the data it is only possible to compare Austria with England and Wales in terms of the proportion of the population connected to treatment plants with tertiary stages (1997 data). On the other hand, Austria and France can only be compared on the basis of the amount of nutrients eliminated (2001 data). In both cases, Austria is seen to be ahead.

France, and England and Wales also have lower sewage sludge disposal standards than Austria. The amount of sludge spread on agricultural land is far greater, and the requirements (e.g. with regard to heavy metal content) are less strict. Other forms of disposal cost a lot more, and hence put up operating costs.
Increased efficiency through more competition?

A recurrent theme in the European Commission’s pronouncements on water has been the contention that liberalisation would lead to increased competition in the sector, and thus in turn greater efficiency and lower prices for consumers — the ultimate policy goal. The British and French systems provide little support for this view, since there is scant competition in either. Neither system gives domestic customers a choice, since they only have one provider. Private suppliers’ prices have long been higher than those of public water utilities in France. Moreover, comparative data in no way indicate that the French or British water sectors are more efficient than the Austrian.

In terms of labour productivity (cubic metres of drinking water or wastewater per employee) Austria, with its fragmented settlement patterns, actually outperforms England and Wales, and records significantly better figures than France. With regard to labour intensity England and Wales do marginally better than Austria, while France lags far behind. This finding is supported by new study by the Austrian Institute of Economic Research, according to which neither legal form nor size influence suppliers’ efficiency (Sustainable use of water resources, Puwein et al, Austrian Institute of Economic Research, Vienna, 2002). In other words, neither privately owned service providers nor large-scale operations are necessarily more efficient than others.

In this connection mention should also be made of the differences in the treatment accorded to employees. In Austria and France there has been a tendency for output to increase while employment has been static or has only slightly declined, whereas in England and Wales there has been a trend towards outsourcing. The water companies responded to the price reductions imposed in England and Wales in 1999 by cutting staff. While the Austrian and French data shows a mixed picture, there has been a marked decline in the incomes of workers in the British water sector.
Increased transparency through market forces?

In the German, Dutch and Austrian water sectors, which are largely or entirely publicly owned, **benchmarking** is now being applied. The regulator has an analogous function in England and Wales. In France, where little has yet been done to benchmark companies’ performance, there are growing calls for the disclosure of delegation and concession agreements, and for the provision of annual operational reports and detailed statements of accounts.

Conclusions

In Austria a large majority of the population and of the political decision-makers concerned (Association of Austrian Cities and Towns, and Association of Austrian Municipalities) favour retention of the existing constitutional right of local authorities to decide for themselves how water and wastewater services should be provided.

“While not questioning the basics of the institutional framework of the Austrian water sector, we believe that there is room for improvement in a number of areas ...” the authors of the study conclude (section 8.2). The authors arrive at this rejection of a radical transformation of the system on the basis of the aforementioned comparative data, as well as other considerations contained in the study. Despite the excellent relative performance of the Austrian water sector, the Austrian Federal Chamber of Labour and the Association of Austrian Cities and Towns have always taken the view that there is scope for improvement, and have themselves made proposals to this end.

We shall not comment here on legal issues, such as the extent to which water liberalisation falls within the competence of the Commission at all. However, in the light of the findings of the study, the Austrian Federal Chamber of Labour and the Association of Austrian Cities and Towns believe that their opposition to efforts in the direction of liberalisation — particularly in the form of mandatory competitive tendering — is justified by the quality and efficiency of the Austrian system.

An International Comparison of Water Sectors

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Sources of tables and other statistical information in the study

Varying degrees of market opening
Ownership structure: Tables 7-22 and 7-23 in section 7.4.3

Cost comparisons
Fig. 1 - Annual expenditure: Data from Table 8-2 in section 8.1.3 of the study
Subsidies: Table 7-36 in section 7.5.5
Fig. 2 – Production costs per connected inhabitant and Fig. 4 – Production costs per cubic metre: Data from Table 8-1 in section 8.1.3, Table 7-26 (section 7.5.2.1) and Table 7-27 (section 7.5.2.2)
Where the tables contain estimates stated as ranges between minimum and maximum levels, the above graphs contain average values.

Fig. 3 – Investments: Data from Tables 7-34 and 7-35 in section 7.5.5

Water supply system quality
Fig. 5 – Leakage rates: Table 7-6 in section 7.3.1.2
Source water protection areas: section 7.9.3
Water quality: section 7.7.2
Consumer satisfaction: section 7.8.4

Wastewater treatment quality
Connections to sewer networks: Table 7-8 in section 7.3.2.1
Fig. 6 – Tertiary treatment stage: Table 7-11 in section 7.3.2.3
Fig. 7 – Nutrient elimination: Table 7-12 in section 7.3.2.3
Sewage sludge disposal: Table 7-13 in section 7.3.2.4

Efficiency
Fig. 8 – Labour productivity: Table 7-28 in section 7.5.2.2
Fig. 9 – Labour intensity: Tables 7-16 and 7-17 in section 7.4.1.2
Employees: section 7.8.7; Tables 24 and 2-23 in sections 2.4 and 2.5