

Kroiss H., Lindtner S. (2005): Costs and Cost-Effectiveness Analysis for Waste Water Services, Vortrag: IWA-conference - Nutrient Management in Wastewater Treatment, Krakow, Poland, 18- 21 September 2005

Abstract: Whenever the implementation of legal requirements for waste water treatment is discussed on a political level, economic consequences have to be evaluated. These consequences comprise investment costs as well as operational costs. There are two main factors which get most attention in this respect. The first is the influence of the treatment efficiency requirements on investment and operational costs, the second is related to the organisational aspects of treatment plant management. The latter often is discussed within the context of public and/or private responsibility. For these services, full cost recovery from the consumers is aimed at (WFD 2000). As a consequence the full costs for waste water services are of political relevance, as the majority of the population is directly affected irrespective of the question whether the costs are recovered via fees from the municipalities or collected by private companies.

The international development in regard to cost optimisation for waste water services using process performance indicators was reflected in Austria by the development of a country wide benchmarking system for waste water services. Within a 6 years project a process benchmarking system, which allows the calculation of comparable process performance- and specific cost indicators for sewerage and waste water treatment, was developed. This tool was applied at a great number of sewer systems and 76 treatment plants with design capacities ranging from ~2.000 to 1mio p.e. . The main aim of this benchmarking project was to detect cost reduction- and process optimisation potentials and to make use of this information for improvements. The enormous amount of data collected during this project also allows interesting conclusions on absolute costs of waste water collection and treatment and the factors influencing them.

Keywords: Operating and investment costs for waste water services, performance indicators, benchmarking, cost reduction, data quality assessment