# Cultural Village of Europe Opening Conference in Paxos 16-19 april 2004



## Contribution from Schachdorf Ströbeck



# WATER: past, present, future

#### **Abstract from the Lecture**

## **Water Management in Germany**

- Water supply is sufficient (182 billions m<sup>3</sup>)
- Water supply and sewage disposal are a municipal business
- Carried out mostly by separate companies
- Strongly subdivided structure
  - About 6700 water supply companies
  - About 8000 sewage disposal companies
- High connection rate
  - Water supply: about 98.6%
  - Sewage: about 96.4%
- High technical standards
  - 9% water loss on avarage
  - Considerable improvement of water quality (lakes,rivers) in the past decades
- Decreasing water consumption (about 125 l/p/d)

# Organizational forms of water supply and sewage disposal

Municipal department

Municipally operated within the framework of local government processes

Municipal utility

Municipally operated as special assets on a separate account

Municipal company

Municipally owned company, but with a private legal form

Joint company

Municipal company in a partnership with a private firm

- Private-operated (BOO, BOOT, BOT, ...)
   Assginment of plant operations to a private company,
   but the municipality remains responsible for task fulfilment
- Management and service contract
   Allocation of operations to a private company

## **Eastern German specifities**

#### **GDR**

- 16 state-owned water supply and sewage disposal works
- Low connection rate at central utilitites (instead: decentral house wells and sewage treatment tanks)
- High water consumption in industry and households
- High water losses due to outdated mains technology
- Water pollution due to insufficient sewage treatment
- Prices were not cost-covering

### Today

- 550 water supply companies,
   1050 sewage disposal companies
- Connection rates >90% (compulsory connection and usage)
- Large drop in water consumption (about 90 liPid)
- Repair and extension of existing mains and plants
- P Noticeable improvement in water quality (lakes, rivers)
- P Steep price increase

# Water supply in Schachdorf Ströbeck

"Wasser- und Abwasserzweckverband Huy-Fallstein"

(Association for the purpose of water and sewage management)

- About 30 member municipalities
- Share in decisions: Franchise in the assembly meeting
- High investments in the past 10 years
- Strong decline in the use of house wells for independent supply
  - -Increase in connection rate from 40% to 100%
- Water is bought from Halberstadt city utilities (50% dam water, 50% ground water)
- Good water quality
- Water price: 1,56 €/m³ (incl. V A T)
- Municipality stabilizes water price by paying 20,45€/inhabitant/year
- Collection of contributions:

One-off connection fee of about 2000€ per house

## Sewage disposal in Schachdorf Ströbeck

- "Wasser- und Abwasserzweckverband Huy-Fallstein" (Association for the purpose of water and sewage management)
- High investments in the past 10 years
- · Strong decline in the use of private sewage treatment tanks
- · Waste water goes on to Halberstadt treatment plant
  - High technical standards after having been modernized
  - Mechanical and biological clarification
  - Third purification stage (phosphate elimination)
- Sewage treatment price: 3,50 €/m³
- Collection of contributions: about 4€ per m<sup>2</sup> of property area

#### **Bodies of water in Schachdorf Ströbeck**

- Brook "Ströbecker Fließ"
  - Small brook (110 m<sup>3</sup>/h)
  - Was strongly contaminated by sewage dumping
  - Water quality improved after most residents had been connected to central sewage
  - No flood protection
  - Inside the village, the brook runs through a concrete canal
  - Low recreational value; biotope partially outside the village
  - Maintenance is done by a maintenance association (the municipalities are members, each member pays 7,50 € per hectore per year)

#### Village pond

- Was a combined pond and swimming pool
- Pool facilities knocked down in 1998 (not up"to quality requirements)
- Nature-oriented redesign
- Increase in recreational value
- Fishing, ice-skating, walks...