

# TECHNICAL CONSULTANT FOR THE WATER SUPPLY OF THESSALONIKI FROM THE ALIAKMON RIVER

## Country

GREECE

## Location

Thessaloniki

## Client

Ministry of Environment,  
Planning and Public  
Works

## Financing

Cohesion Fund /  
Public Investment  
Programme of Greece

## Project Cost

110 M EUR

## Overall consulting services

1,588,000 EUR

## Services of ENB

1,150,000 EUR

## Project Duration

04/2000 – 03/2003

## Associated Firms

ELTEME Ltd (GR),  
GKW CONSULT  
GmbH (D).

## Project Description

The strengthening of the Water Supply System for the city of Thessaloniki (Salonica) (1,200,000 inhabitants to 2030) foresees a water intake of 8.0 m<sup>3</sup>/sec of the final section (near the Axios river) of the existing main canal, supplied with waters of Aliakmon river and destined to the irrigation of the plain of Salonica (L=50 km and Q=92 m<sup>3</sup>/sec). It also foresees a system for the transfer of these waters (8.0 m<sup>3</sup>/sec), and their treatment, then the transfer of the treated waters with transfer conduits to the distribution reservoirs. For this system ENB Ltd elaborated the Preliminary Design and the Final Design and during the period 2000-2003, as Technical Consultant, elaborated the execution plans and assured the supervision of the works.

The system comprises :

- Water transfer from Aliakmon river to Axios river : Rehabilitation of the existing main canal (L=50 km, Q=92 m<sup>3</sup>/sec) for the irrigation the plain of Salonica and the water supply for the city.
- Water transfer from Axios river to the pumping stations at Sindos : Aqueduct of Aliakmon: rectangular transfer canal (Q<sub>max</sub>=8 m<sup>3</sup>/s, L=10 km).
- Pumping Station (Q=2.50 m<sup>3</sup>/sec). Number of pumps: (3+1) x 0.83 m<sup>3</sup>/sec, HMT=100 m.
- Pumping Station (Q=8.0 m<sup>3</sup>/sec, first phase 4.00 m<sup>3</sup>/sec). Number of pumps : (3+1+3) x 1.33 m<sup>3</sup>/sec, HMT=60 m.
- Water Treatment Plant of total capacity of: 600,000 m<sup>3</sup>/day; in first phase : 150,000 m<sup>3</sup>/day.
- Reservoir of 75,000 m<sup>3</sup> and main potable water transfer conduits (L=13 km, Q=3.0÷2.5 m<sup>3</sup>/sec, L=23 km, Q=2.0÷0.7 m<sup>3</sup>/sec).

## Services

- Review of leakage control studies and progress of leakage control implementation
- Review of final designs
- Reporting on physical and economical progress
- Technical and financial management
- Preparation of designs and tender documents
- Preparation of funding application submitted to the EU Cohesion Fund
- Technical Assistance during commissioning and trial operation
- Monitoring of the construction quality programme and hygiene and safety in construction
- Supervision of construction (similar to FIDIC).