AQUIS

Great Man-Made River (phase II)

1,000 km transmission pipeline supplying water to Tripoli

In Libya, where water is scarce and hence almost as valuable as oil, water is produced out of wells in the Sahara desert and transported in gigantic pipelines 1,000 kilometers to the north to the city of Tripoli.

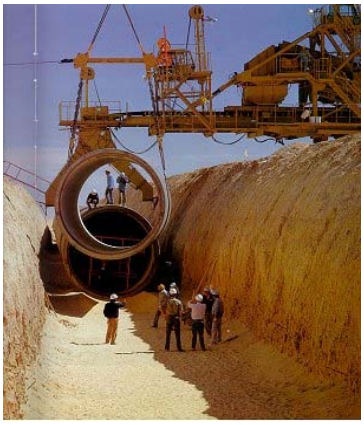
Pipeline Description

A well system of approximately 700 pumps supplies water to large reservoirs. From there the water is pumped into the enormous pipeline. A number of reservoirs serve as buffers along the pipeline. These are relatively small and hence require proper planning of the pipeline input and offtake to avoid running dry or overflow.

Pipeline length:	1,000 km
Water transported:	2 million m³/day
Pipeline diameter:	4.0 m

Project Objective

- To perform extensive model-based supervision.
- Pipeline planning – to ensure that enough water is available at the offtakes of the pipeline. Because of the length of the pipeline, an extensive 3-day planning is required.
- Leak detection.



Leakage Management System Features

Leakage Management System facilitates planning and management of pipeline operation within numerous areas, including:

- Leak detection
- Optimization of pump operation
- Optimization of pipeline planning and operation
- State estimation
- Surge analysis

CUSTOMER CASE

System Integrator

On the GMMR project, 7T has been the system integrator and a subcontractor to Siemens in Karlsruhe, providing the overall SCADA system. The main contractor is Dong-Ah of Korea.