



## Radio transmission of data within Krakow waterworks network

Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji SA Krakow [MPWiK, Municipal Waterworks and Sewerage Company] built new cisterns in the area of the river embankment in Rajsko, to the south of Krakow. The tanks provide water for several townships in that area. The gate valve chamber in Rajsko comprises delivery, outlet, overflow and fall pipes and a hydrophore room and ensures supply of water for the so-called upper zone of Rajsko. The cisterns themselves are fed from a branch of the **RABA** main pipeline.

MPWiK retained a specialised company, COMPTUR (Microcomputer Systems) from Krakow, to develop a system of monitoring and data transmission via radio, between the Cisterns in Rajsko and the dispatch room Piaski Wielkie. The Rajsko Cisterns site controller sub-

system was incorporated into a large hierarchical micro-processor system: **Raba II centralised recording of data and controlling** (fig. 1), operated since the early 90s. COMPTUR provides technical assistance and current maintenance for that system.

### Radio modems chosen for transfer of data

Considering the closeness of the sites (crow-fly distance 2 km approx.) direct visibility, and lack of conventional communication, the designers opted for low power radio modems ensuring synchronic (periodic) data transmission and instantaneous warning about burglary alarms. After performing a market analysis, the company selected wireless transmission based on a SATEL modem. The radio modem was connected by an RS-232 interface to

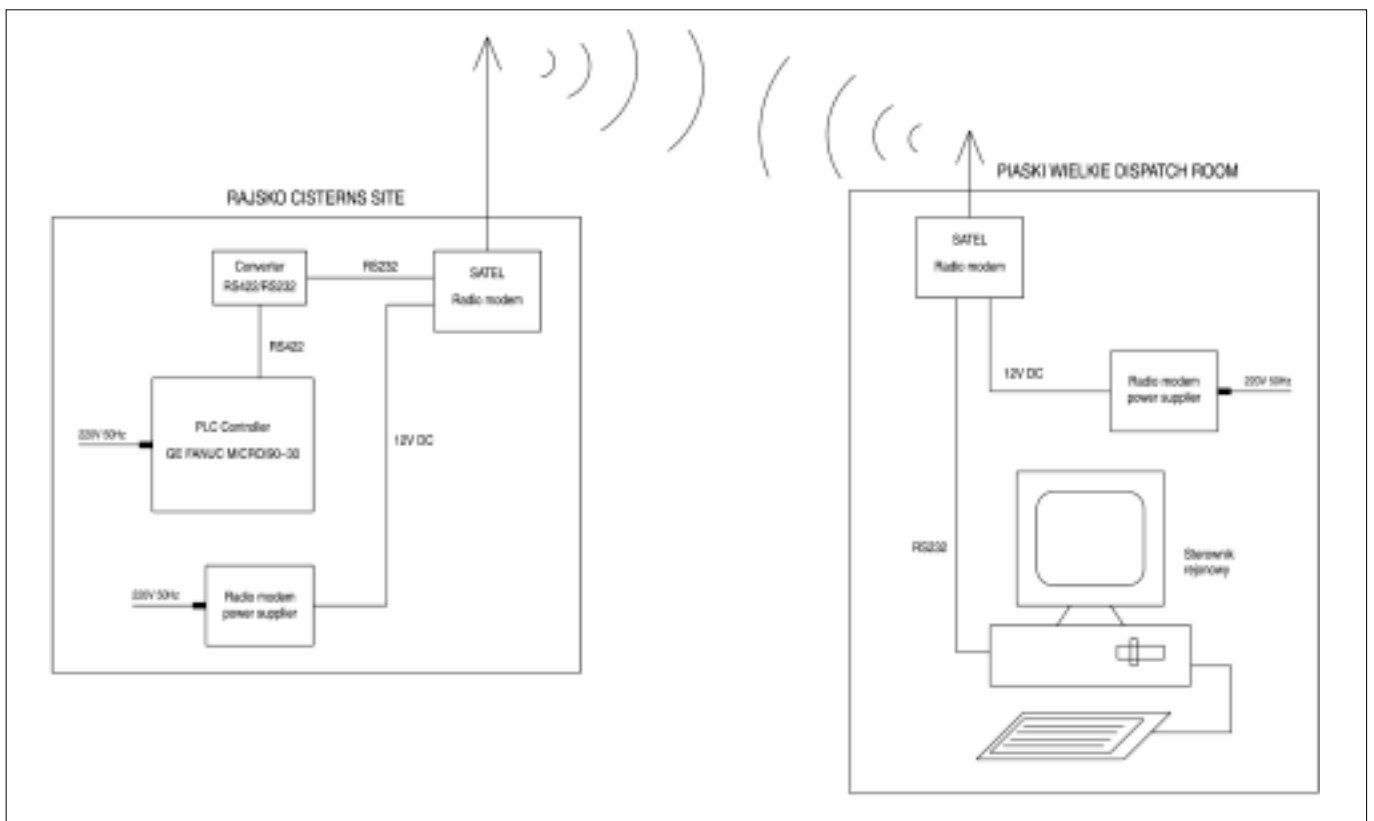


Fig. 1 - Structure of RABA II system of centralised recording of data and controlling

