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## **REDUCTION OF DRINKING WATER LOSSES IN THE TOWN OF POLTÁR**

**Proposal of Separately Measurable Districts**

### **Abstract**

The article deals with the problem of „*Reduction of drinking water losses*” in particular distribution systems, the definition and specification of some terms related to water loss issues and selection of appropriate indicators for water loss comparison. Another important task described in the article relates to the water loss monitoring in distribution system together with characterization of requirements during the measurement.

This task is important not only for providers and owners of distribution network, but also for the entire society with respect to vital protection of natural non-renewable resources.

The article also discusses possibility of comparison of the water losses through long-term and short-term monitoring by using the methods of mathematical modelling and hydraulic assessment of distribution network with proposal of separately measurable districts for particular case, which has been compared with the results of works performed in other reference polygon of Slovakia. Mathematical models with hydraulic assessment of the distribution network and method of separately measurable districts represent technology that includes active control with the requirement for detailed analysis by using technical equipment for detection of water losses and measurement of hydraulic parameters as well as hydraulic modelling. This technology becomes more significant for providers and owners of distribution networks also because of reason that an amount of water loss is the main indicator of technical quality of distribution network and useful tool for providers and owners of distribution network in decision making process related to reconstruction or replacement of water supply pipelines.