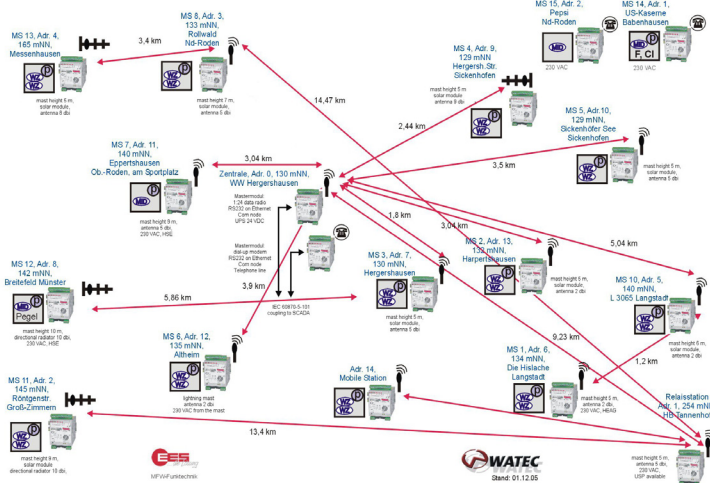


Dieburg group waterworks association

The operators of municipal supply facilities in particular have the problem of having to monitor and to control plant components which are far apart. The solution is known as telecontrol. As the tele-transmission of the local transmission ducts at the Dieburg group waterworks association shows, it can be multifaceted and heterogeneous.

Dieburg group waterworks association watersupply, metering ducts



The radio telecontrol master is partly used as relay for substations far away

The drinking water is transferred from the regional pipelines to the local networks via transmission ducts and measurement stations in which composite water meters or magnetic induction throughflow meters are installed for monitoring the volumes of water delivered.

The EES-MFW telecontrol family is used in the transmission ducts, which number around 14. These EES-MFW substations are an economical way of combining in one unit the two separate tasks of telecontrol and logging.

In the substations, the data are acquired, analysed (creation of mean, minimal and maximal values) and stored. If there is no infrastructure, the data loggers are powered by normal or rechargeable batteries and by solar energy. Thanks to the low-power technology used, the batteries last for more than one year.

The data comprise throughflow, quantity values, network pressures and operating and fault notifications. They are used for monitoring their own operating data and for functional security.

The data are transmitted periodically via 1: 24 radio or are transmitted on an event-controlled basis to EES-MFW master stations, which are directly connected by IEC protocol 60870-5-101 to Cegelec's process control system in the central station.

Advantages for the operator

- Flexible implementation: Transmission via radio and modem
- No one-sided radio communication: Radio illumination means certainty
- Data loggers ensure transparency and security
- Data to dial-up telecontrol via modem, with a phone call
- Everything integrated as far as the control system

EES products used

MFW substation
DU-XX-DIA-BF-0x0

Power supply
WSN 0.9A 24V

Aerial set Px3
ANT-SATZ-PVX3

Solar module
Z-SOLA-55

Persons in charge at EES

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