



A Core Component of the BKW

Daily reading of the load profile meters of network operators and industrial facilities is an extremely important business for BKW, the power production and distribution utility with headquarters in Bern. In the past, this was implemented analogously in the distribution network of BKW using telephone lines or GSM modems. For some time now, an all-IP solution from Aartesy does the job.



The top 3000

The distribution network of BKW relies on a total of 330,000 electricity meters. These register approximately 7 terawatt hours of energy per year. However, just 3000 meters account for the lion's share of 5 TWh! These load profile meters form part of industrial facilities and network operators and are naturally very important for the company's core business. It goes without saying that these few devices receive the most attention. As early as 2010, BKW had realized that the technology used for reading these meters had reached the end of its life-cycle. Consequently, the company decided to introduce a digital, data-based technology.



A future-proof project

The contemplated change provided the additional incentive of a possible reduction of IT and communication costs. Artesys had already been known to the company, and thus a close cooperation was formed to implement a pilot project that used 150 EasyGateways®. What convinced the client was the fact that the used technology not only permitted efficient and cost-effective implementation of the data read-out, but also that additional services, such as for example remote access and parametrization, could be implemented.

The flexibility factor

In 2012, the actual roll-out in the network began. The solution is based on EasyGateway® devices and on the AMIRA management system. This all-IP solution works completely independently of meters, it is also capable of reading sensors and can control various actuators. This is a particularly future-proof approach as it allows for the integration of industrial applications and the monitoring of substations. The solution thus represents a piece of Smart Grid.

Reliable and secure

Naturally, security and reliability are extremely important aspects in this BKW core business. The implemented systems and devices have been used successfully in thousands of applications and, thanks to encryption, they offer a very high security for two-way communication via HTTPS protocol. AMIRA also proved its flexibility when ideas and requirements defined by BKW resulted in the need to implement a few changes – which could effortlessly be implemented



BKW headquarters in Bern (Picture supplied by: BKW)

jointly. Besides, the project also includes a well-thought-out maintenance and support contract.

An App for the technician

In the course of the project, the two partners also designed a joint App which will make initial operation on site easier and cheaper. The technician connects with AMIRA, reads the barcodes of the devices and can even make these communicate among each other. Once again, Artesys could prove that it is capable of responding to the needs of the customer at any time.

Strategic partner



Jesko Herre
Head of Meter-to-Cash
Division

Dr. Jesko Herre has headed the Meter-to-Cash division at BKW since 2013. He became involved in the project in its end phase, and then managed it together with Artesys until it reached its current stability. «From my vantage point, Artesys stands, above all, for smart customized specialist solutions», he says. “In the present project, it was vital to convince my predecessor’s team of the reliability and security of the technology. I myself have seen that Artesys is capable to respond to evolving customer needs at any time.,, Jesko Herre even thinks that it will be possible to use the advantages offered by the gateways, in particular their multi-utility capability and the numerous interfaces for controlling infrastructures, for other customer groups in future. “We are pursuing this further. Artesys certainly has what it takes to become a strategic partner for such a project as well.,,