

# Smart Metering



## Software development for recording meter readings

### Customer requirement

The objective was the development of software for an intelligent electricity meter.

The existing system should be extended with a communication interface.

The meter should exchange messages with a module from another manufacturer in Smart Message Language (SML). In turn this module should directly input the data into the back-end systems of an energy provider.

In addition to the recording of energy consumption data, solar energy systems should also be integrated so the feeding direction can be taken into consideration.



### comlet solution

First of all the existing system was inspected extensively in an analysis phase.

This was necessary because there was very little documentation regarding the software architecture.

Once this information had been gathered the communication module was designed and implemented according to the specification.

To allow the correction of potential errors and to make it possible to add new functionalities to the system after the meter is placed into operation on-site with the customer, a software update mechanism was set up.

Finally the integration of feeding and bidirectional counters was implemented. This feature was delivered later via a software update.

The meter indicating device was also adapted.

#### Technologies used:

C, Lua, Linux, ARM9, Qt embedded

