

Dateiname: BA102_Peters _W

Titel:

Smart Meter Simulator

Bearbeiter:

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Text der Kurzfassung:

To check an SMGW a smart meter is needed which allows to control dedicated parameters of the meter e.g. communication timings or responses given to so-called OBIS (Object Identification System) numbers. In the scope of this bachelor thesis such a smart meter simulator for wire-bound communication is to be designed and implemented.

The necessary communication stack for the encrypted communication in the LMN has been developed in another thesis and is working on PCs and embedded systems running embedded Linux. This bachelor thesis will use the stack and apply the required changes. The simulator will have some kind of GUI and a parameter file to control the parameters needed. Some functions will be located on top of the communication stack whereas others such as adjustments of timings need changes in the communication stack itself. The list of parameters to implement will be determined during the thesis work in cooperation with the PTB depending on their needs and possible solutions. To verify the correctness of timings respective hardware outputs of the embedded system are needed which will be checked against calibrated external measuring equipment.