

Summary

The aim of this project is to prove that intelligent metering systems (iMSys) in combination with CLS-control boxes are suitable for the operation of Smart Grids based on international standards. Existing components of prosumers shall be integrated in the electricity grid in order to achieve better feed-in management as well as adjustment and control of system services, and secure market integration. This includes, for example, PV plants, heating rods, cooling systems, and e-car charging stations as well as battery storage systems. The integration of two already available applications and the development and integration of nine new CLS-applications in a CLS-control box are examined in this context and tested in the Smart Grid Laboratory at the Ulm University of Applied Sciences. In addition, the applications are verified by on-site tests together with partners from industry and electric utilities.