

1. DINAR – Pool-BEMI (Germany)

2. What is integrated with DSM

DG

Energy storage

Smart grid technologies

3. What is the level of commercialization

Research project

Demonstration

Field test

Existing practice

4. Where to find more information?

<http://www.iset.uni-kassel.de>

5. Objectives of the case

Finding a technically and economically suitable solution for a bidirectional energy management in the LV grid considering both generation and consumption.

6. Business rationale/model

7. Technologies used

Intelligent interface (BEMI) at the consumer's connection point and at DG production sites. Platform (Pool-BEMI) to aggregate several BEMI.

8. Short description of the case

The BEMI interface at the consumer's connection point can control some of the different loads. The purpose of this control can vary according to the program of the BEMI device. It can be to simply move a part of the consumption from high to low prices of electricity or to a time when the production from variable DG sources is expected to be high.

Note that the BEMI devices are not designed to communicate permanently with a centralised unit. The communication is now done once a day.

9. Achieved/expected results (operational savings, CO₂, efficiency enhancement)

Shifting of consumption from high to low electricity prices (achieved)

Improve the use of fluctuating DG

10. Lessons learnt