



## From Smart Metering to Smart Grids – European experiences

Panel discussion within forum „Life Needs Power“ at Hannover Messe 2011

**Time: Wednesday, April 6, 2011, 14:30 – 15:30 h**

### Planned participants:

- Moderator: Dr. Uwe Braun, PPC
- Herbert Brunner, Landys + Gyr
- Eckardt Günther, Siemens
- Prof. Gady Golan, HIT Israel
- Prof. Dr. Michael Laskowski, RWE
- Robert Pflügl, E.ON Metering
- Guiseppe Salaris, Enel

### Subject of panel discussion

#### Customer view

- From Consumer to Prosumer
  - Participation in new Smart-Grid Structure, Micro-Grid, Virtual Power Plants
  - Time of Use Tariffs – Benefit to the Customer?
  - In-house Use of produced Energy versus Export to Grid
- The need to get the customers involved
  - How to make them aware?
  - How to get them on board?
  - Communication Strategies for Customer involvement
- Experience & Feedback from Pilots & Projects
  - Benefit for the Customer – Savings? Quality of Life?
  - Fade-out or sustained Interest?
  - Customer View on Data Privacy and ICT Security in different Countries

#### Technology

- Future ICT Backbone Infrastructure for Consumer / Prosumer
- Communication Infrastructure and Performance Needs in future Distribution Grids
  - Performance Needs for Smart Metering?



- Performance Needs for Smart Grid Automation & Monitoring?
- Separate or complementing Infrastructure?
- Load Management / Load Shaping
  - Experience with TOU-Tariffs
  - Which Loads are really useful (Fridge, PEV, Electrical Heating, ...) for Load Management / Load Shaping
  - How will sampled Values be matched? Time-stamping in Meter necessary?
- Data Privacy and ICT Security
  - Management & Protection of large ICT Systems with easily accessible End-points (Meters, White Goods, ...)
  - Which Approaches / Technologies should be used ... AES-Encryption, Authentication, ...?

#### Legal & Regulatory Framework

- Regulatory Setup for Customer Participation in different Countries
- Actual Road-blocks for Customer to really become involved.
- Regulatory Requirements on Data Privacy
  - "Need-to-know Principle", "My Meter is my Castle" → Minimum amount of data disclosed
  - or
  - "What's the problem? Nobody has a problem with his mobile phone to give away position data, billing is done real-Time ... People disclose most private details on Facebook"