

- Michael Ding (Presenter) – IGRS Alliance, China
- Panelists:
  - Stefano Galli – ASSIA, USA
  - Weilin Liu – China Electric Power Research Institute, China
  - Alfredo Sanz – Atmel, Spain
  - Qingyang Liu – Gridcom, China
  - Andrew Goedhart – Util Labs / University of Johannesburg, South Africa

- Benefit
  - Why standardization: energy saving, cost reduction, better/ more efficient transmission techniques
  - What should be standardized: balance competition and innovation
- Current standards relevant to the powerline technologies:
  - Broadband: OPERA, HomePlug, HD-PLC, IEEE1901, G.hn...
  - Narrowband: IEEE1901.2, G.hnem, CENELEC...
  - Smart grid/energy management: ISO/IEC, ITU, G3
  - EV: SAE, IEEE
  - High/medium/low voltage power line transmission
  - Internet of Things – appliances
- Strength and weakness

- Key factors for industry success:
  - Adaptation obstacles
  - Market drivers and cost issues
  - Standard co-existence
  - Reliability and security
  - Policies and regulations – frequency band allocation, EMC, regional differences...
  - Other implementation issues
- Too many or too few standards? Or perhaps only one standard to address one area of need?
- Future standardization trends