

### Smart Grid Communications: A Great Business Opportunity



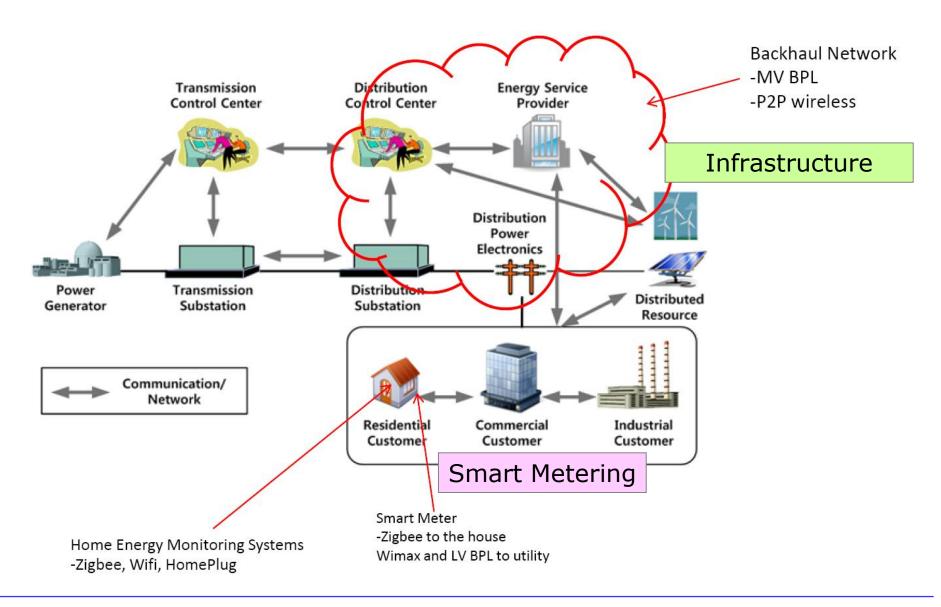




- Smart Grid Needs for Communications
- High-Growth Market
- Technological Leadership
- Patents & IEEE 1901 Standard
- Prototypes & Field Trials
- ACN's Products and Chip Initiative
- Summary



# Smart Grid Needs for Communications





- Analysts estimate that the global Smart Grid industry will be worth more than Euro 200 billion over the next five years.
- Pike Research Report (July 2010):

The Smart Grid Communications Node Shipments to total 276 million through 2016, corresponding to Euro 3.1 billion.

 Based on weighted forecasts from potential customers, ACN estimates that it will sell Smart Grid Communications products for more than Euro 500 million through 2015.

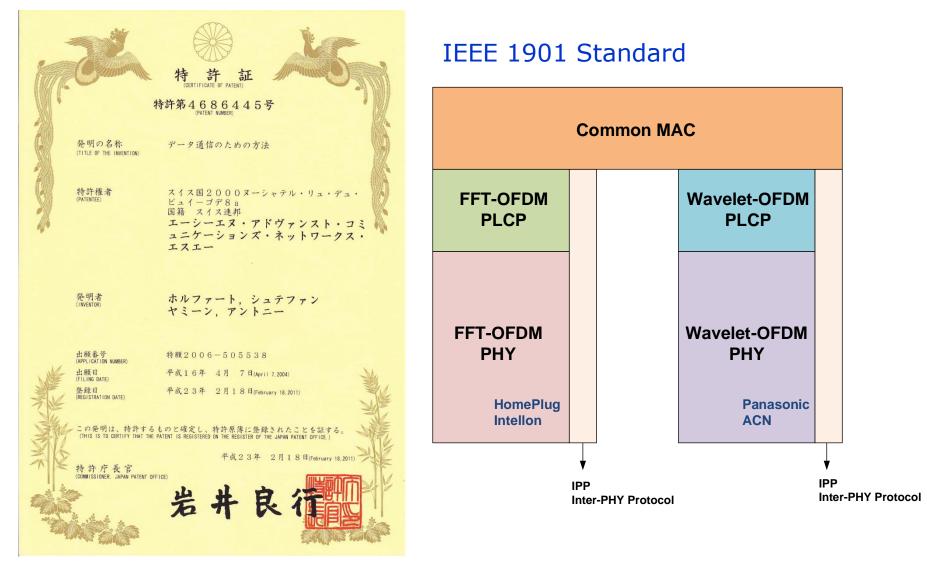


- ACN has developed a unique technology for Smart Grid Communications. Its technology is part of the new IEEE 1901 standard.
- The Company's technology is using the electricity distribution network for data transmission. The transmitted data can be used to monitor in real-time the power grid status and the power consumption as well as sending commands for load balancing and for load control, and also providing internet connectivity.
- The Company has successfully validated its technology in several Smart Grid Communications field trials using prototypes.



#### Patents & IEEE 1901 Standard





Dr. Stephan Horvath ACN © 2010



### Prototype & Field Trials



#### Smart Grid Communications Field Trial



ACN



## ACN's Products and Chip Initiative

Backhaul Network -MV BPL Transmission Distribution **Energy Service** -P2P wireless **Control Center** Control Center Provider Infrastructure SGC Gateway Distribution Power Electronics **BPL** Chipset Power Transmission Distribution Distributed Substation Generator Substation Resource Communication/ Network Residential Commercial Industrial Custome Customer Customer Communication Modules Smart Metering Smart Meter **NBPL** Chipset -Zigbee to the house Home Energy Monitoring Systems Wimax and LV BPL to utility -Zigbee, Wifi, HomePlug

**ACN** 



There is a Unique Business Opportunity for ACN in the Evolution towards the Smart Grid:

- High-Growth Market
- Unique Technology for Smart Grid Communications
- Advanced Product Development
- Unique Advantages over the Competition
- Just-in-time for the Window of Market Opportunity



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ACN