

IEEE ratifies **1901™ Broadband over Power Line (BPL) standard**, expecting its standard to be the key enabling technology for a wide range of applications including *smart energy, transportation* (AV in planes, trains etc) and *LANs in the home and the enterprise*.

Networking products that fully comply with IEEE 1901 will deliver **data rates in excess of 500 Mbps** in LAN applications. In first-mile/last-mile applications, IEEE 1901-compliant devices will achieve ranges of up to 1500 m. The technology specified by IEEE 1901 uses sophisticated modulation techniques to transmit data over standard AC power lines of any voltage at transmission frequencies of less than 100 MHz.

"More than 94 corporations, trade associations and universities contributed to the standard's evolution through the IEEE 1901 Working Group," says Jean-Philippe Faure, Chair, IEEE 1901 Working Group, "to create **the world's most innovative, mature and unified BPL standard.**"

Although IEEE 1901 targets the standard that will enable universal communications in Smart Grid applications, it will also have significant impact in other applications.

In the transportation sector, for example, the standard's data rates and range make it possible to deliver A/V entertainment to the seats of airplanes, trains and other mass transit vehicles. **Electric vehicles can download a new entertainment playlist to the A/V system while the car is charging overnight.**

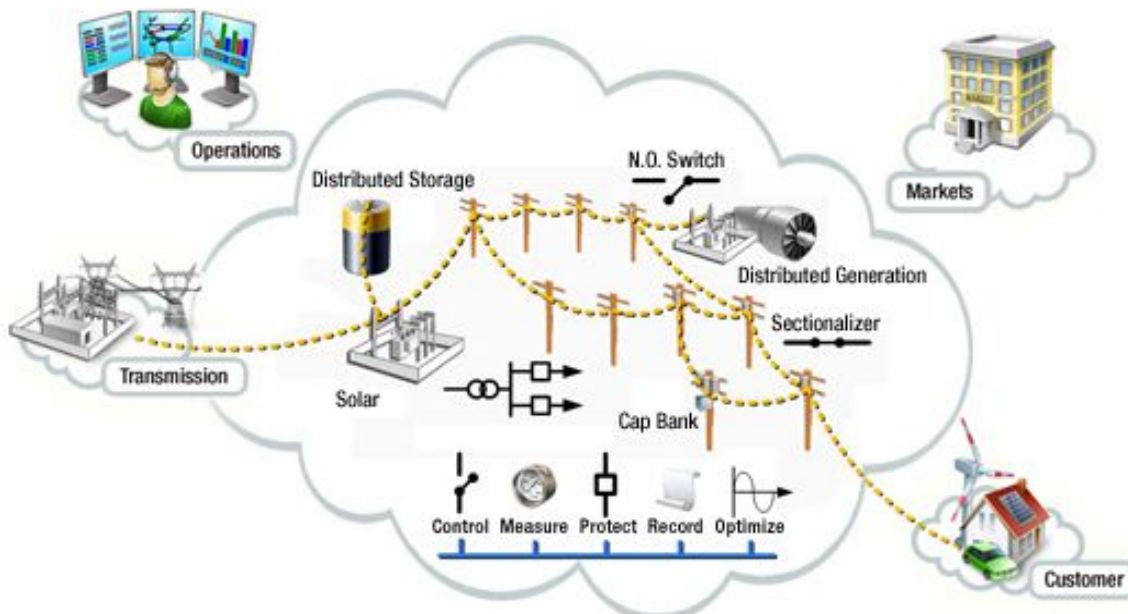
In the home, PLC will complement wireless LANs by providing a link through walls and other RF impediments as well as over distances beyond the normal range of wireless networks. It will complement wireless networks in hotels and other multistory buildings by carrying multimedia data over the longer distances and allowing wireless to complete the communication link over the last few meters.

## Broadband over Power Line to Rule, Says IEEE

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