



## **Solutions**

PRIME focuses on the communication needs for urban, suburban and rural deployments of energy companies (utilities), supporting specific application profiles beyond smart metering and providing an end-to-end solution. This is thanks to an IP multi-protocol technology platform that integrates medium and low voltage networks over PLC and radio systems, in-home and distributed energy resources.

PRIME specifications include all lessons learned from large-scale deployments, ensuring a future-proof solution for any application scenario. PRIME specifications evolve according to utility needs and ensure backward compatibility to integrate future communication, monitoring and control requirements.



## **Applications**

PRIME is leading the future of smart grid communications, focusing on four main areas of development:

- Narrowband PLC (NB-PLC) for AMI services and LV grid control.
- Broadband PLC (BPL) for enhanced MV and LV smart grids services.
- A Hybrid open PLC and RF IP multi-protocol platform to cover the more complex topologies and enable connectivity with smart infrastructure.
- PRIME+, A comprehensive, ready-to-use open DLMS/COSEM Companion to complete the end-to-end interoperability of any deployment.

PRIME specifications have evolved to optimize system performance in all scenarios. PRIME solutions can be deployed even in the harshest network conditions. PRIME has already been extensively deployed for smart metering applications, and with the set of NB-PLC, BPL, and

Hybrid communication alternatives, it places itself as a valid alternative for other evolving smart grid applications. MV scenarios, feeder and phase connectivity identification/mapping for smart meters, and LV remotecontrol applications have now become a reality.

## **Specifications**

The features and capabilities of PRIME specifications have been developed to address the evolving challenges of Power Line Communications where systems need to work in harsh environmental conditions; PRIME has emerged as a proven, open, ITU-T- and IEEE-standardized technology that makes smart grids real.

PRIME today fits into a telecommunications architecture that supports Low and Medium Voltage Smart Metering, Demand Response, Integration of Renewables and Electrical Vehicles and Home Area Networks functionalities - making the electricity networks of the future a reality.



Field-proven PRIME technology is currently deployed in many pilots and rollouts globally, with a total of over 20M installed smart meters with more than 20 different utilities and utility associations. The multi-vendor approach places a critical focus on interoperability, which is validated by a strict certification process: over 130 products certified today from more than 40 different vendors and millions of compliant, interoperable elements currently performing in utilities networks.

Sponsoring Members:

