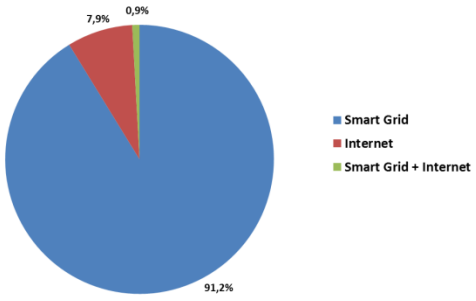
Worldwide Broadband PLC Atlas 2016

An analysis of Broadband over Powerline deployments worldwide

From a technology that was often written off, **Broadband over Powerline** (BPL) has come a long way in turning today into a promising flagship technology, triggering a renewed interest amongst operators and utilities alike. BPL is increasingly representing a technology of choice in many domains, not only for **smart grid/metering** projects, but also for emerging arenas such as **Internet of Things** (IoT). As observed from the bmp TC's worldwide analysis, there are well **above 110 ongoing identified BPL projects**, mostly in the smart grid domain. While the market for BPL as an Internet access technology has decreased, it is still employed in underserved areas to fight the digital divide.

With achieved standardization regulation, BPL has finally moved towards a **coexistent**, if not partially interoperable, **ecosystem**. For utilities, BPL provides a solution incurring significantly **low OPEX**. It also provides a **continuous connectivity** over the electric grid along with a **full control** of ICT platforms (no third-party operator involved). Offering a common infrastructure and an integrated IP with high data rates, BPL enables utilities to **optimize their investments** while heading towards a smarter grid and smarter city.

Therefore, it is no surprise that BPL is **increasingly deployed in the smart grid** domain. From initial pilot projects, quite some large-scale BPL implementations have been undertaken by various utilities worldwide in the recent years. Today, smart grid projects represent more than 90% of all BPL projects.



Projects application distribution in 2016

Key Features:

- More than **100 pages** analysis of BPL market, technology and suppliers
- Positioning of **15+ suppliers** for BPL
- Market **statistics from 2004 up to 2016**
- Brief assessment of the scope of worldwide, regional and national activities

BPL is a favoured communication technology for utilities like Iberdrola (Spain), Senelec (Senegal) etc. be it as backhaul for AMI (Automatic Metering Infrastructure) or for monitoring MV (Medium Voltage) lines. In 2015, Iberdrola has already equipped **more than a dozen of thousands MV links** with BPL for its STAR project (set up of 10,5 million PRIME smart meters by 2018). In Qatar, Kahramaa has announced a decision on implementation of a BPL backhaul for smart metering on several hundred of MV/LV substations.

BPL is also widely tested by utilities for **smart metering**. Some recent implementations include the extensive deployment of **2 million smart meters** by KEPCO, South Korea. On top of quite a number of pilots in Europe, Asia, and Africa, Germany stands out with several dozen BPL projects and the recommendation by the national technical & scientific organisation **VDE**[1] in favour of BPL.

Besides smart grid/smart metering, BPL also appears as a suitable solution for the emerging **IoT market**, meeting the requirements of various applications. Growing at a frenetic pace all over the world, the IoT sector is today representing a good opportunity for BPL players to step into a new market. An increasing number of BPL projects for **electric mobility, smart home/building, smart lighting**… are emerging, leading by the inherent features of the technology, such as pervasiveness, reliability, two-way communication etc.

As an Internet access technology, BPL helps to cover **broadband exempt areas**. It has been successfully employed to provide data rates up to 4 Mbps TCP/IP in various projects such as Serv26, France. In Ivory Coast, AWALE (joint-venture with the utility CIE) has demonstrated up to **10 Mbps TCP/IP per end user** with its pilot project on 200 households, triggering the interest of telecommunication operators.

In addition to BPL pioneers established and large industry groups have now positioned themselves into the market as well as quite a number of new entrants. Find a complete list of suppliers and integrators with a brief description of their positioning and strategy.

- Project track down by country & suppliers
- Analysis of about ongoing and previous BPL projects in the last 5 years
- **110+ detailed project descriptions** on utility/operator, location & coverage
- Highlighted narrowband PLC/BPL projects

[1] **https://www.vde.com/de/Verband/Pressecenter/Pressemeldungen/Fach-und-Wirtschaftspresse/2015/Seiten/19-2015.aspx**

Highlights of the 8th Edition

- Over the decade, the market landscape of BPL has shifted from an Internet access technology to a **smart grid technology**
- Within the smart grid domain, BPL is extensively deployed as **backhaul** for **Automated Metering Infrastructure** and for **monitoring** of **MV lines**
- BPL represents a **technology of choice** for utilities heading towards **IoT and smart city** services
- BPL is still a reliable choice for **Internet access** in broadband **underserved areas**
- **Increased interest** as major smart grid suppliers enter the BPL market
- BPL is foreseen to be the **lead technology** of numerous projects outside Western Europe in the next few years

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