

LTE and Copper Joining Forces For Faster Broadband *An Innovative Approach*

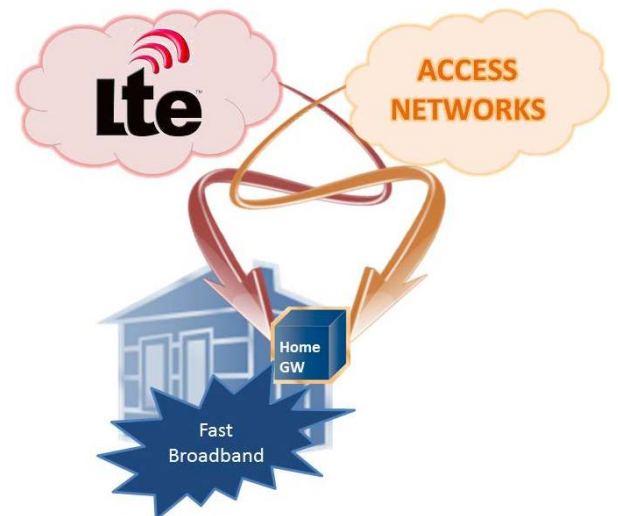
The Challenge

Service operators are struggling to find cost effective solutions to enable them to offer faster broadband to their residential and SME customers before losing business to competitors. FTTH/B cannot be justified everywhere. Moreover service providers worldwide indicate that although FTTH is a solution that they will continue to deploy it would not be THE solutions for the large BB deployments in the next years.

Service operators are looking to optimize utilization of their current broadband infrastructure in order to close the bandwidth gap and offer residential and SME customer's services that can cost effectively compete against the cable companies offering. A common target among fix line service operators is an offering of dedicated 100 Mbps downstream and significant upstream.

Deutsche Telecom (DT) has indicated similar targets as part of their VDSL-Vectoring webinar (June 2013). DT Integrated Network Strategy (INS) offers a smart and innovative approach to compete and meet current demands while progressing cost effectively towards FFTdp/FTTB/FTTH.

DT is combining existing investments in fixed-line and mobile networks to create a hybrid solution that utilizes VDSL2 with vectoring in a Fiber to the curb (FTTC) rollout, complemented by LTE.



Further Copper Utilization with Actelis

Actelis Broadband Accelerator (BBA) solutions can further help Service operators by providing additional optimization level boosting the DSL signal level even further allowing services of greater bandwidth to be offered to customers over greater distances.

Actelis BBA is augmenting service providers' investments in copper network and DSL. It is fully compatible with Vectoring and can work with any vendor's DSLAM or DSL modem. The BBAs work on the same line with ISDN/telephony, are remotely line powered from POTS, and are quick and easy to install.

Typical early results (without vectoring) indicate the following performance with the VBA (VDSL2 Broadband Amplifier)

- **Ultra-Premium:** 50 Mbps up to 3,900 ft (1.2 km)
- **Premium:** 25 Mbps up to 7.7 kft (2.4 km)
- **IPTV Service:** 15 Mbps up to 9.8 kft (3 km)
- **High Speed DSL:** 6 Mbps up 11.1 kft (3.4 km)

To learn more: [Actelis BBA](#), [Residential Broadband Solutions](#), [Business Ethernet Solutions for SMEs](#)