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How Does Improving the Existing DSL Infrastructure Influences the Expansion of Fiber Technology?

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Abstract : Experts, enterprises and operators expect that the bandwidth request will increase up to rates of 100 to 1,000 Mbps within several years. Therefore the most important question is, which technology shall satisfy the future consumer broadband demands. Currently the consensus is, that the fiber technology has the best technical characteristics to achieve such the high bandwidth rates. But fiber technology is so far very cost-intensive and resource consuming. To avoid these investments, operators are concentrating to upgrade the existing copper and hybrid fiber coax infrastructures. This work presents a comparison of the copper and fiber technologies including an overview about the current German broadband market. Both technologies are reviewed in the terms of demand, willingness to pay and economic efficiency in connection with the technical characteristics.

Keywords : broadband customer demand, fiber development, g.fast, vectoring, willingness to pay for broadband services
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