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Opportunities for New Data Architectures in U.S. Incumbent Service Provider Networks

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Methodology

This analysis defines the Total Available Market for new technologies that are being proposed for the U.S. incumbent fiber networks, including:

- ***Next Generation SONET***
- ***Switched Gigabit Ethernet***
- ***Resilient Packet Ring (RPR)***
- ***Passive Optical Network (PONs)***

Gigabit Ethernet can be implemented in the core network, in the access network, and can deliver services to subscribers. RPR fits into the access network and also can deliver services to subscribers. PONs is used only to provide services to subscribers.

This analysis was accomplished by using a detailed database from Qwest that describes the details of their fiber network and the fiber systems installed in their fiber access network that have customer-facing interfaces. The FCC ARMIS database was used to make estimates for all of the major U.S. incumbent networks.

This analysis concludes that 25% to 75% of the 59,000 fiber nodes in the U.S. incumbent carriers 'networks are candidates for these new technologies.

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