Accelerate into the Gigabit era with Fiber + 5G

Gigabit broadband to everybody, everywhere: that's the goal. When fiber and 5G join forces, they accelerate Gigabit broadband deployments.

Each complements the other:

- Fiber enables 5G to be deployed more quickly and cost-effectively.
- 5G helps fiber to get Gigabit connectivity to more people, more quickly.

5G transport over fiber access

This fiber infrastructure powers 5G transport over fiber access.

- The distributed nature of FWA in a dense urban area can be delivered using the existing fiber deployment.
- 5G can be delivered over fiber in large and small towns alike.
- 5G services can be delivered to more rural locations.

Operators need complementary technologies to complete Gigabit fiber deployments:

- Fiber + 5G fixed wireless access (FWA) increases the ROI on a 5G investment.
- Fiber + G.fast for Gigabit over copper.
- Fiber + vDAA for Gigabit over HFC.

Each step takes us closer to a full-fiber world.

5G traffic offload to Wi-Fi and fiber

Today, customers offload 70% of their cellular traffic to Wi-Fi. This will increase in a 5G world. Why?

- 5G signals don't penetrate into homes very well (especially mmWave).
- Mobile subscriptions usually have a data cap and cost more than fixed broadband.

Wi-Fi 6 matches the performance needs of 5G and enables data, signaling and voice traffic to be offloaded without compromise.

Nokia WiFi applies L4S (low loss, low latency, scalable throughput) technology for super-low latency apps.

Fiber + 5G: bringing the Gigabit experience to more people, more quickly, than either can alone.

Together, 5G and fiber:

- Reduce costs.
- Accelerate time to market.
- Create new business and revenue opportunities.
- Give every customer a Gigabit experience, at home and on the move.

Gigabit services throughout the home

Better customer experience

Lower TCO

Increased ROI

Connect faster with fiber access

Fiber + 5G brings the Gigabit experience to more people, more quickly, than either can alone.

Costs 50%

Scale

Easily handle 5G

TCO

Lower

Better customer experience

Data center, cloud, autonomous vehicles, connected industries, entertainment.

Network slicing provides a low-latency tunnel for Anyhaul on a shared infrastructure.

Only fiber can support the massive connectivity, super high data rates and low latency that 5G mobile transport demands.

Using an existing FTTH network for 5G transport makes perfect sense:

- Time to market and cost: FTTH is already where 5G is needed. There's no need to build a dedicated transport network. That reduces costs by 50%.
- Scale: fibre access can easily handle 5G densification and traffic increase.
- Performance: SDAN slicing creates discrete virtual networks for fixed and mobile traffic on a shared infrastructure, and enables a low-latency tunnel for Anyhaul.

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