

More F, Less C

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Why More F, Less C?



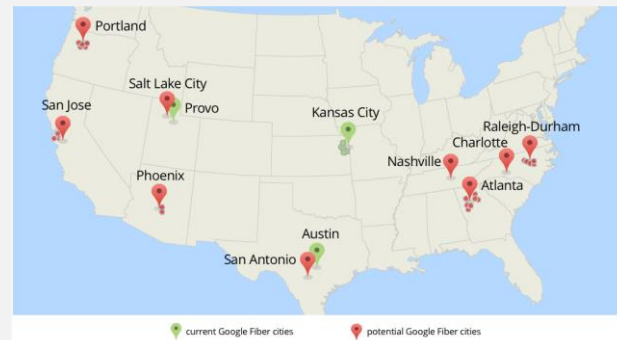
Why More F, Less C?

FiOS – THE POWER YOU NEED

For today and tomorrow.

Whatever your lifestyle, FiOS delivers the speed and entertainment you need through our 100% fiber-optic network connected directly to your home.

FiOS Internet: 100% fiber-optics to your home enable equal upload and download speeds



MUNICIPAL FTTH DEPLOYMENT SNAPSHOT

Greenlight – Wilson, N.C.

In Wilson, N.C., Greenlight means "go" – very, very fast. This fiber-to-the-home network, which offers 100 Mbps symmetrical services citywide and customized services for businesses, has proved popular with residents and serves a large segment of the business community. Our thanks to David Baumgartner of Greenlight for providing the information for this profile.

– BBC Editors

CenturyLink announces super-fast fiber Internet speed

Julio Ojeda-Zapata
jojeda@pioneerpress.com

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A screenshot of the AT&T Gigapower website. The main headline reads "U-verse with AT&T Gigapower IS EXPANDING". Below the headline, there is a sub-headline: "AT&T is bringing its 100% fiber-optic network to more towns than more about U-verse with AT&T Gigapower, which areas are being considered, and how to stay updated on the expansion." At the bottom, there is a question: "What is U-verse with AT&T Gigapower?"

tran·si·tion

/trənˈziʃ(ə)n, trənˈsiʃ(ə)n/


noun

1. The process or period of changing from one state or condition to another

verb

1. Undergo or cause to undergo a process or period of transition

fi·ber tran·si·tion

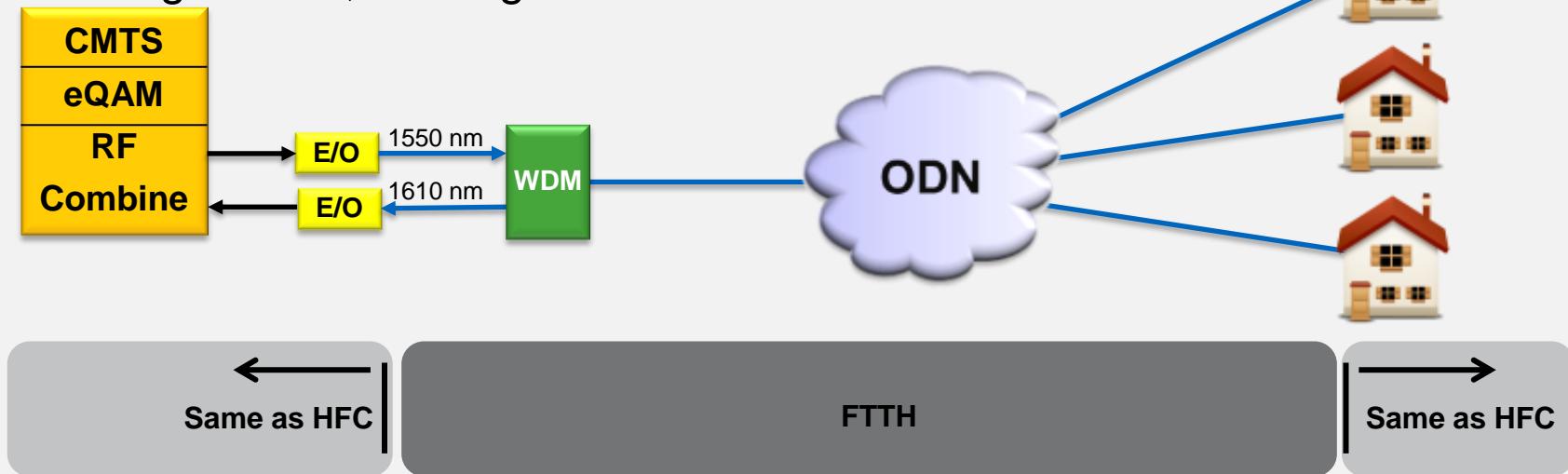
/ˈfɪbər/  /trənˈziʃ(ə)n, trənˈsiʃ(ə)n/

verb

1. Use more F, less C, in HFC

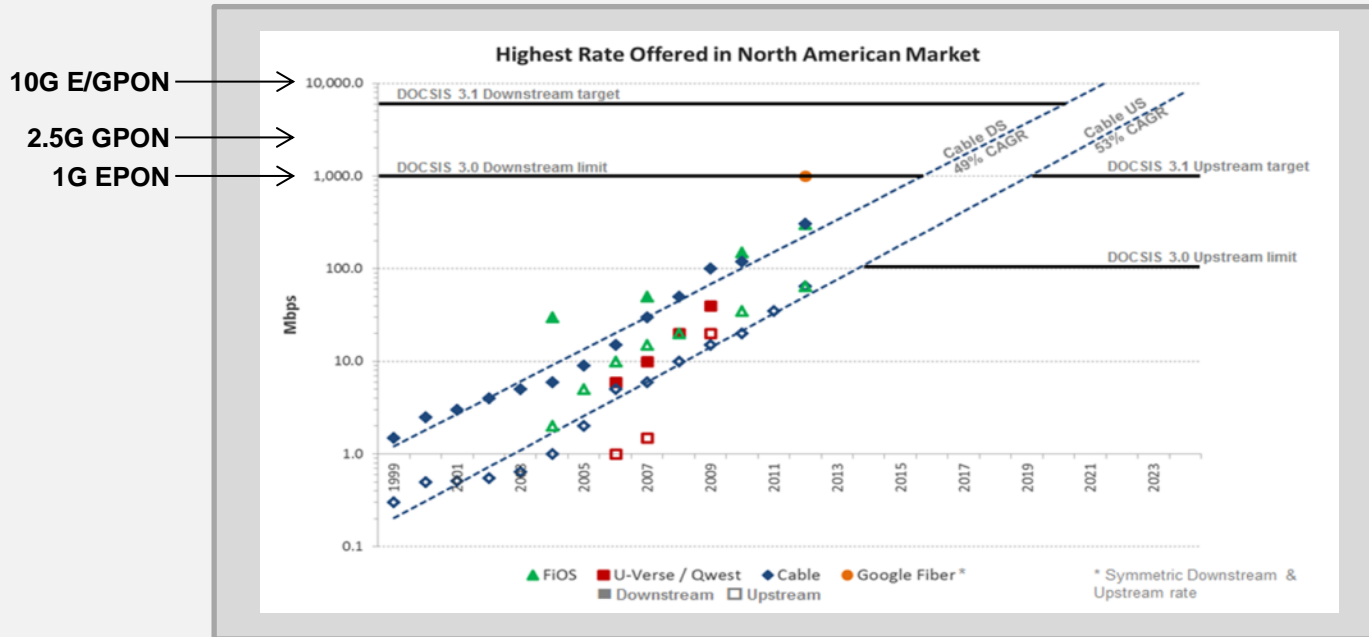
Cable's Initial FTTH :: RF over Glass (RFoG)

- Leverages current head-end and CPE devices and processes
- Allows for immediate FTTH triple play solution
- 99% of cable greenfield FTTH deployments use RFoG
- PON provides 5:1 to 10:1 OpEx improvement over HFC
- Challenges: OBI, training



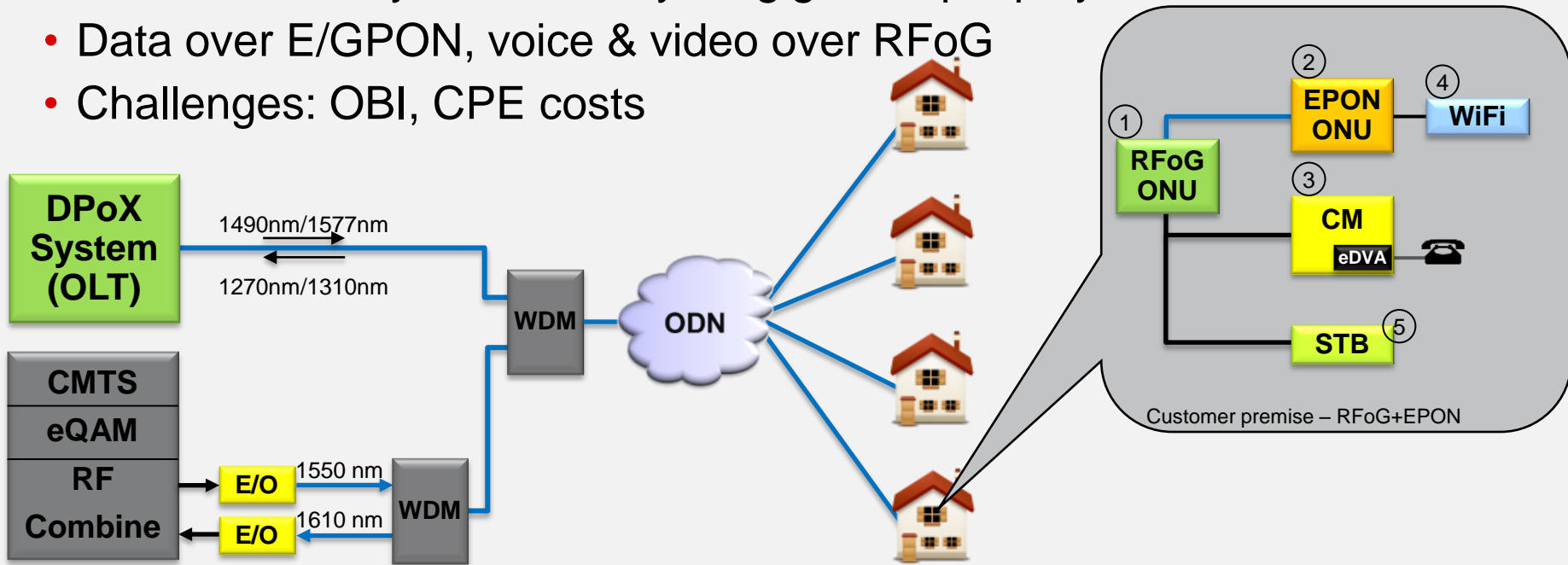
But...

Trend toward gigabit per second service offerings remains a challenge for RFoG deployments



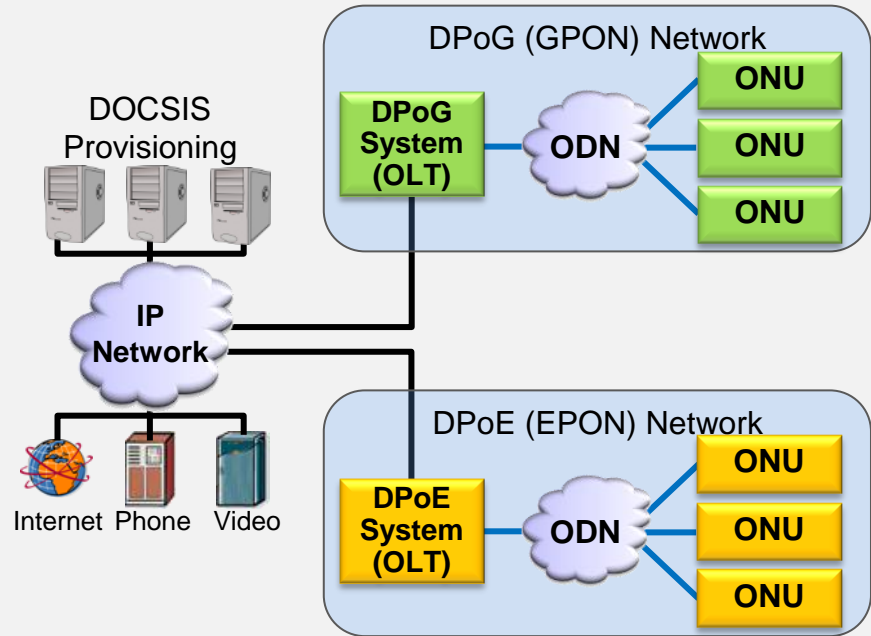
Cable's Step 2 FTTH :: RFoG + E/GPON

- E/GPON overlay is necessary for *gigabit* triple play services
- Data over E/GPON, voice & video over RFoG
- Challenges: OBI, CPE costs

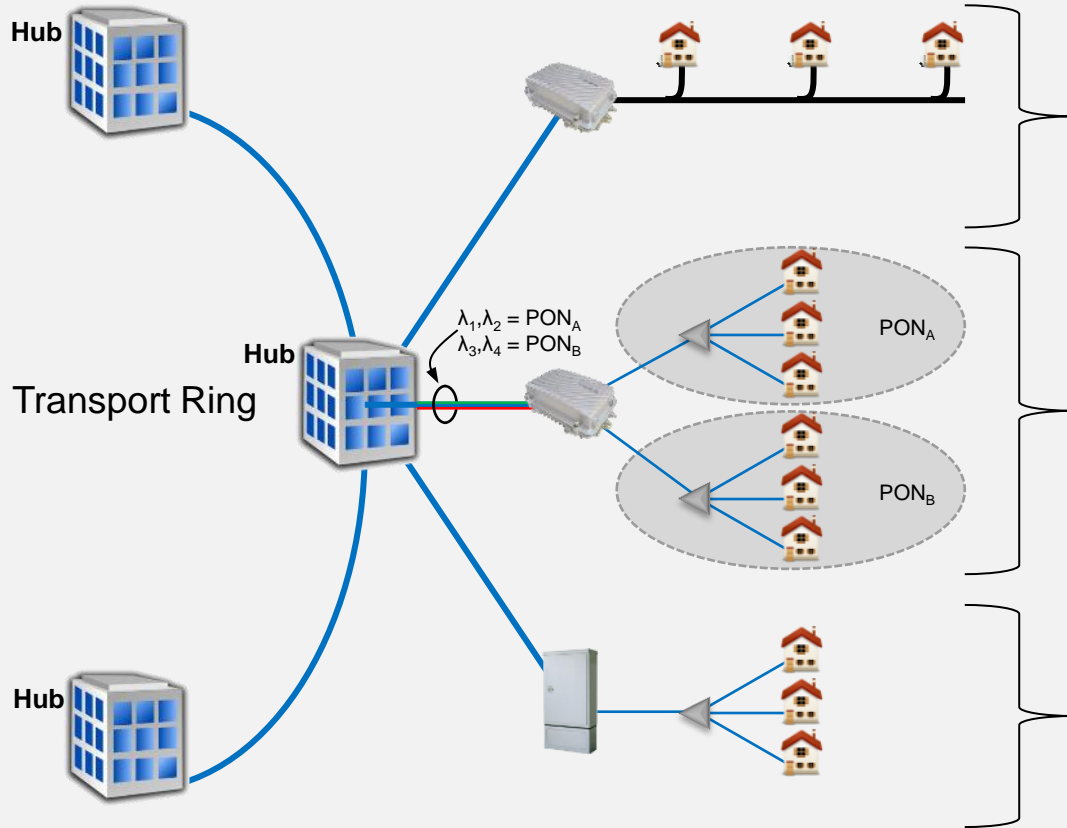


Cable's Step 3 FTTH :: E/GPON

- EPON/GPON technologies and unified provisioning are key strategic components
- Cable Industry remains divided between EPON and GPON, but more prefer EPON
- Requires IP video solution



FTTN – Distributed Solutions



Coax drop networks

Solutions for coax-based drop networks include Remote PHY, Remote MAC/PHY, mini-CMTS, DCCAP, EPoC

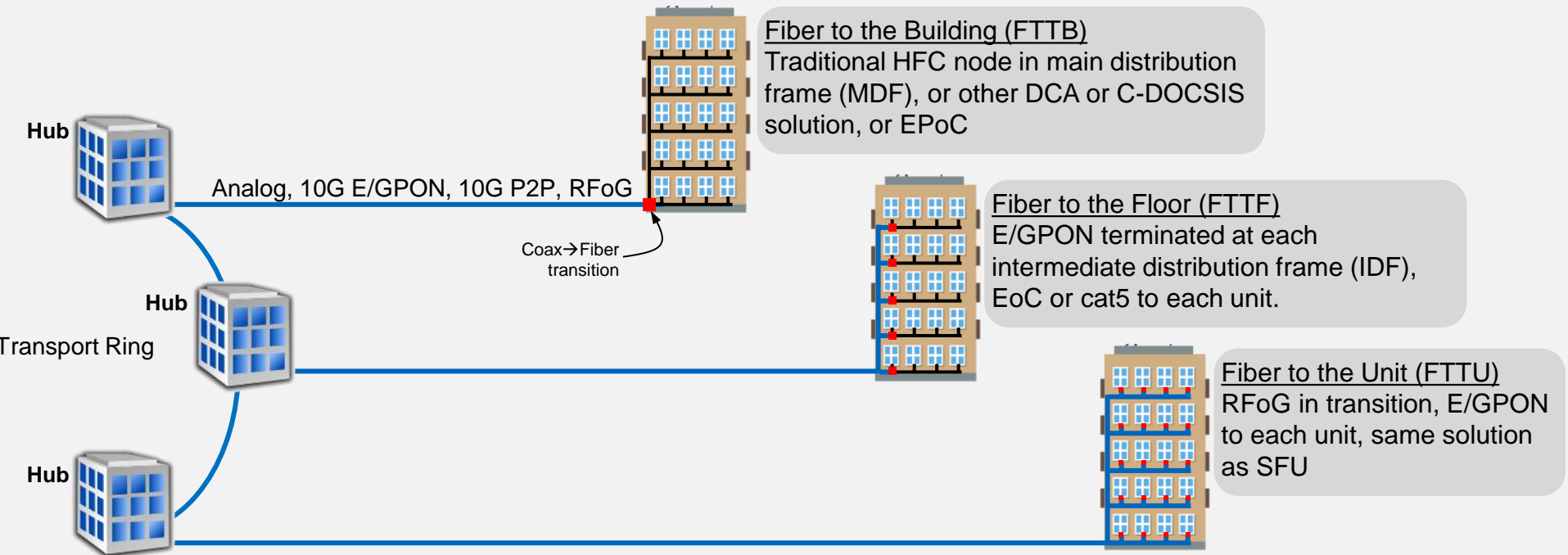
DWDM PON Aggregation

Use existing fibers to nodes, convert multiple PON wavelengths to DWDM grid for backhaul to hub sites. OLTs located in Hub.

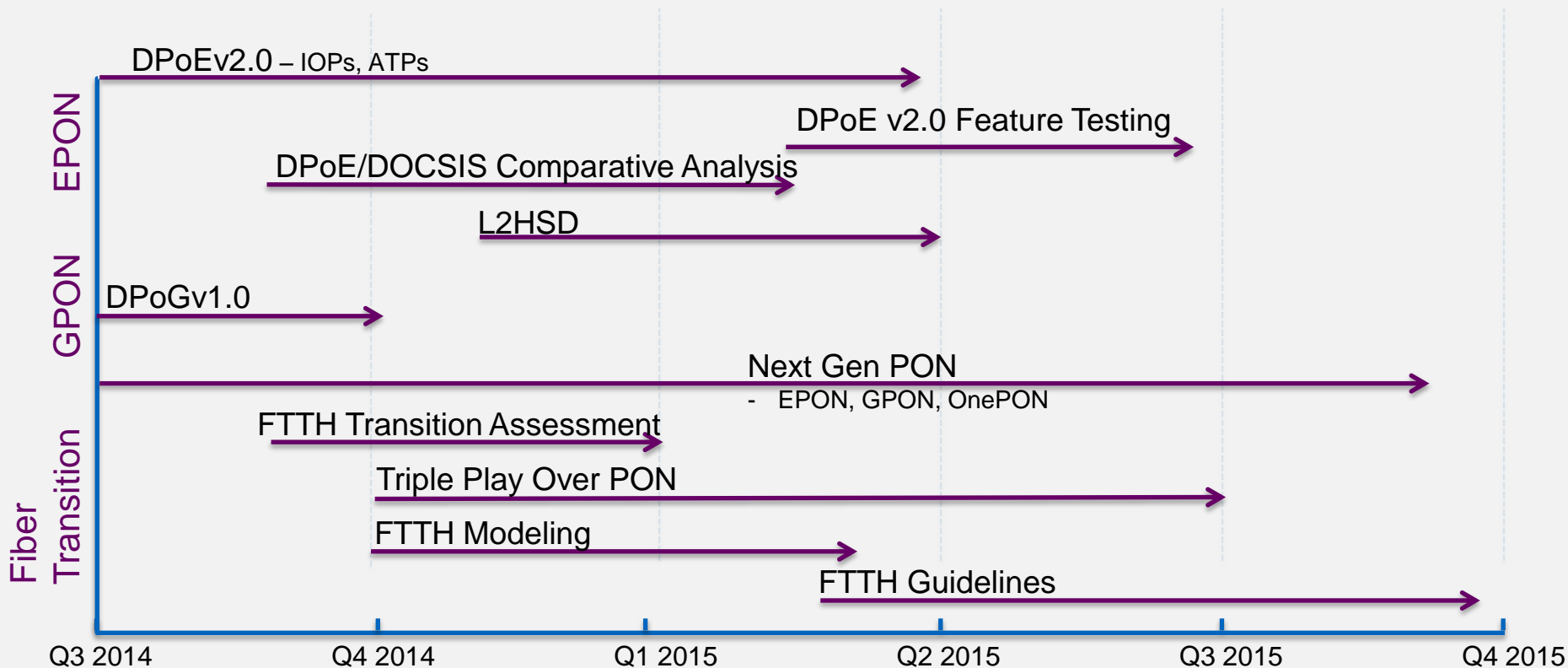
Remote OLT Solutions

The OLT-in-a-node, or cabinet-based OLTs are attractive solutions for some operators

- FTTMDU and in-building distribution solutions are a priority



CableLabs Fiber Transition Initiatives



CableLabs®