

Bidirectional 50Gb/s Optical Access PHYs Call For Interest Opening Report

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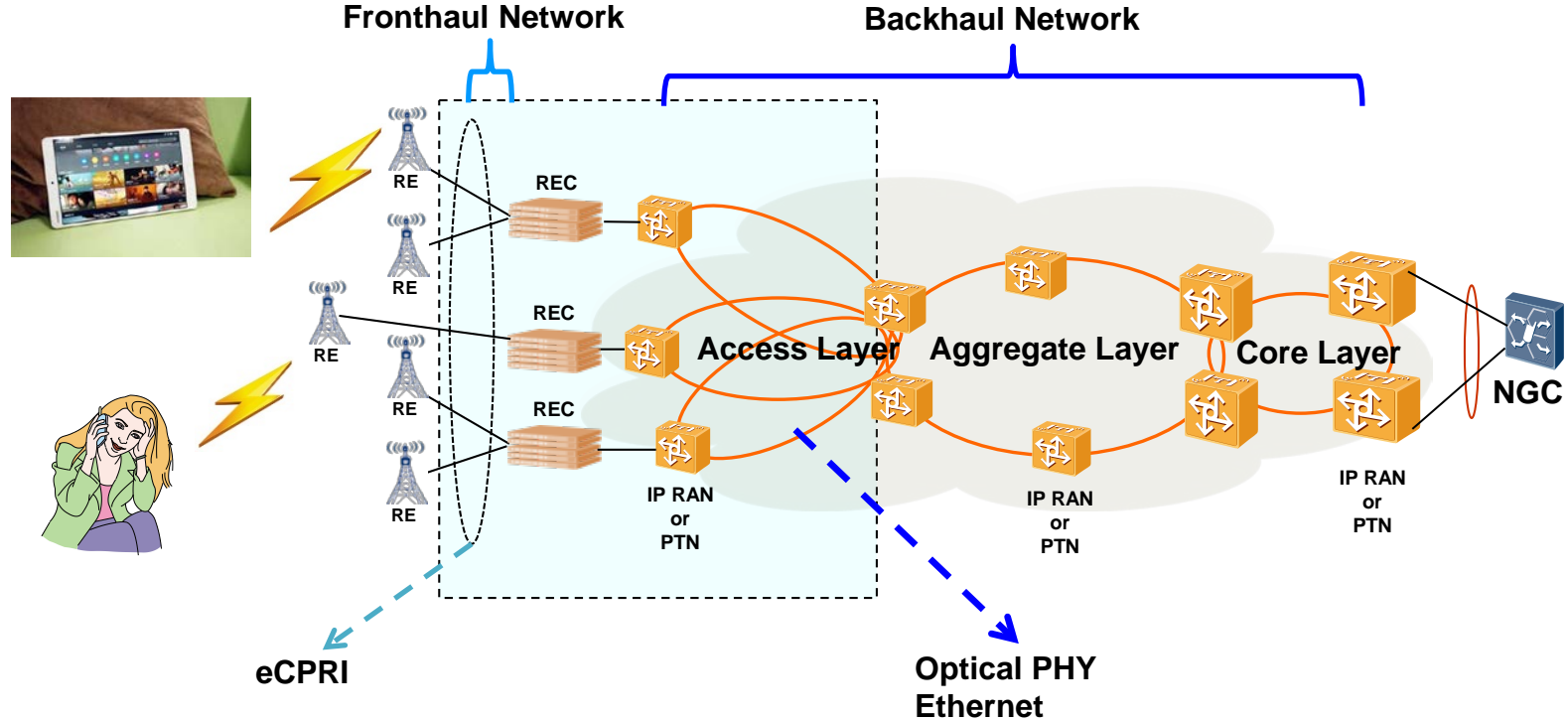
San Diego, CA, USA

9 July 2018

Background and Motivation

- IEEE 802.3 Bidirectional 10 Gb/s and 25 Gb/s Optical Access PHYs Study Group project started May 2018 meeting
 - Based on the network operator request the project was started
 - Network operators use bidirectional optics in their access networks and want to use standardized Bi-Di optics
- The study group currently considering to develop the following PHYs
 - 10 and 25 Gb/s PHY for operation over at least 10 km
 - 10 and 25 Gb/s PHY for operation over at least 20 km received more support
- With ever increasing BW in emerging 5G application, network operators can also benefit from ASIC and optics migration to 50G IO

Application of Mobile Fronthaul and Backhaul Network



- Potential Growing diversity in bandwidth requirements, driven by specific network needs caused by emerging 5G applications. There are network operators who could use 50GbE bidirectional optics for their particular needs.

Call for Interest

- In the past, the IEEE 802.3 Ethernet Working Group has standardized bidirectional optical PHYs running at 100Mb/s and 1Gb/s over one single mode fiber, that are intended for optical access applications. Presently, the bidirectional 10 Gb/s and 25 Gb/s Optical Access PHYs Study Group has started. In the near future, due to the high bandwidth requirement of 5G mobile networks, bidirectional links running at 50 Gb/s will be needed. This Call for Interest is to assess the support for the formation of a study group to explore the development of 50Gb/s bidirectional optical access PHYs.

Logistics

□ Consensus Building Meeting

- Tuesday, 10 July 2018

- 19:30-20:30

- Harbor A/B - 2nd Level

- CFI Presentation:

- http://www.ieee802.org/3/cfi/0718_2/CFI_02_0718.pdf