

SCTE ISBE CABLE-TEC
EXPO.'16
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Remote PHY Device Deployment Models

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Executive Director

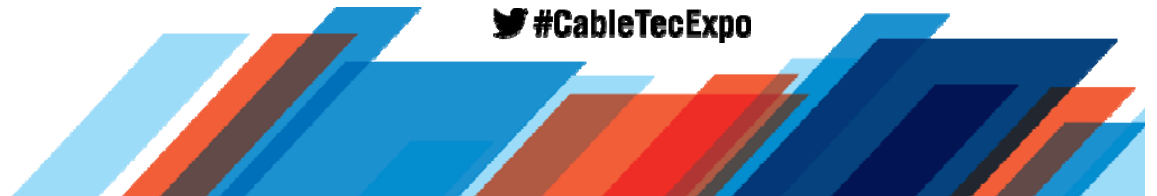
Cox Communications



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Executive summary

Access Summary

- About ~85% of annual Network Capex is in the Access Network that includes Edge, OSP & CPE, but excludes Backbone & Metro
- We satisfy the customer demand growth by managing available plant bandwidth and subscribers sharing the bandwidth

Engineering Guidelines

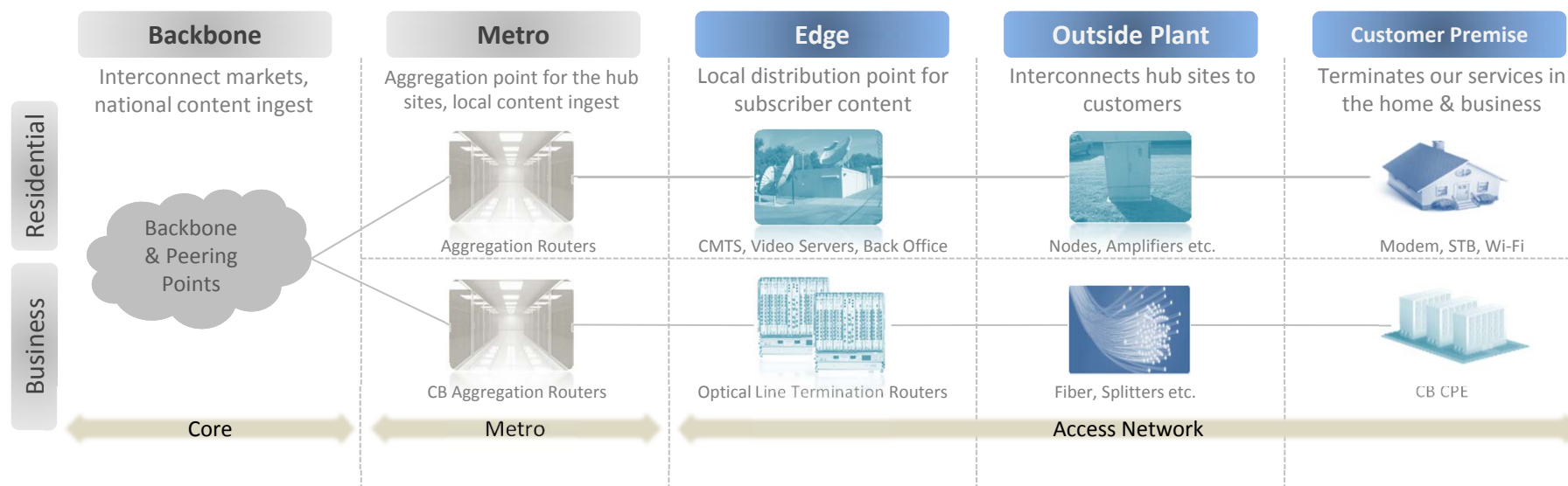
- Access network is planned to offer an optimal customer *Quality of Experience* during peak hours (typically 7 – 10 PM)
- Currently carrier additions and node splits are used to meet the speed plan and tier penetration

DOCSIS 3.1 to 1 Gbps and beyond

- DOCSIS 3.1 will enable a 1 Gbps product offer
- A Fiber Deep strategy leverages our HFC network while maintaining a path to future access technologies (FTTH, FDX, RPHY)

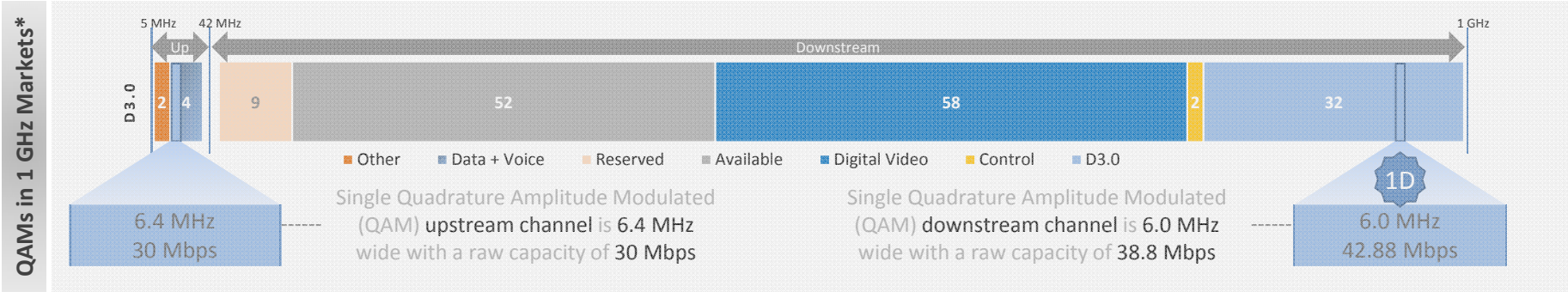
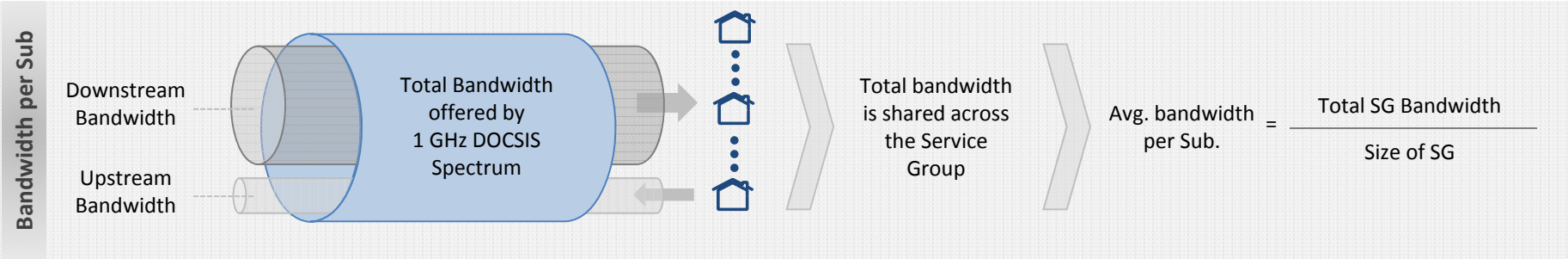
Network Overview

Networks are segmented into five areas – Backbone, Metro, Edge, Outside Plant (OSP), and Customer Premise Equipment (CPE).



Bandwidth Basics

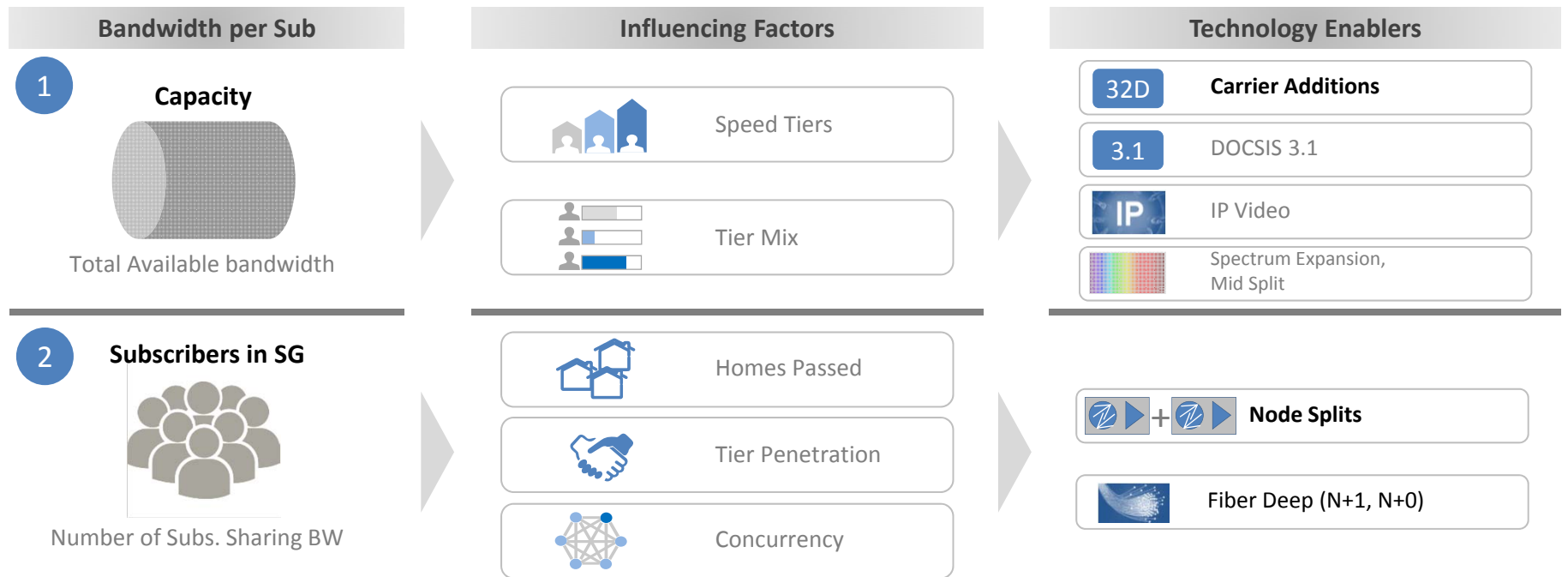
The total downstream and upstream bandwidth is shared across all subscribers in a Service Group.



(*.) Example assumes All-Digital in the market

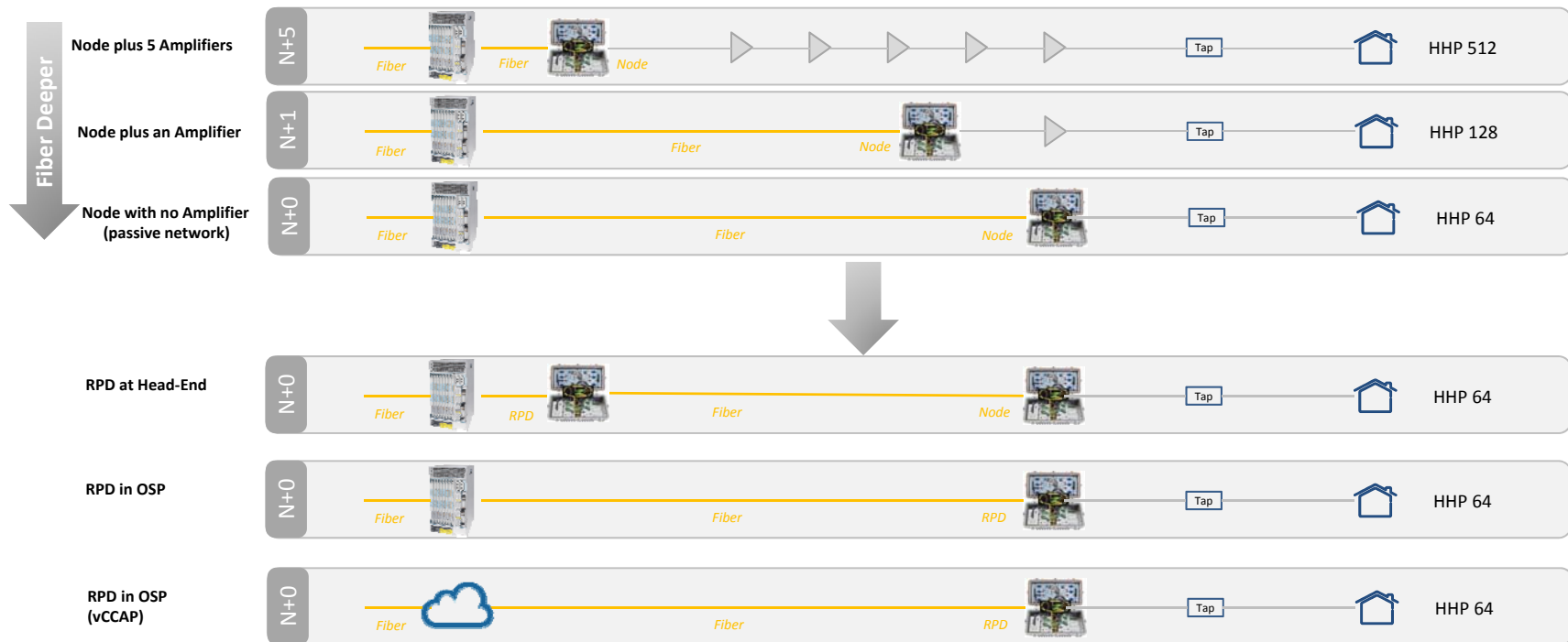
Bandwidth Management

We manage bandwidth per service group by carefully managing the capacity and reach on the network.



Access Network Evolution

Access Network evolution from today at node plus 5 amplifiers to node plus no amplifiers. Once at node plus no amplifiers (passive coax) we introduce the remote PHY device in the head-end, then move it into the field.



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