# 100G-EPON:
## Channel bonding for downstream

ZTE
Tomorrow never waits

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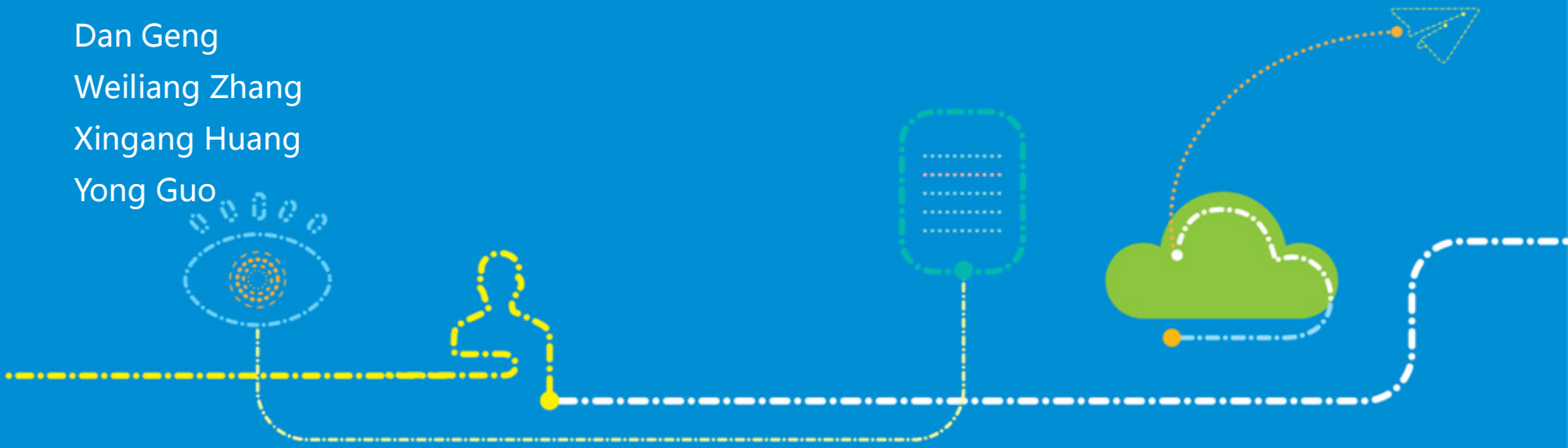

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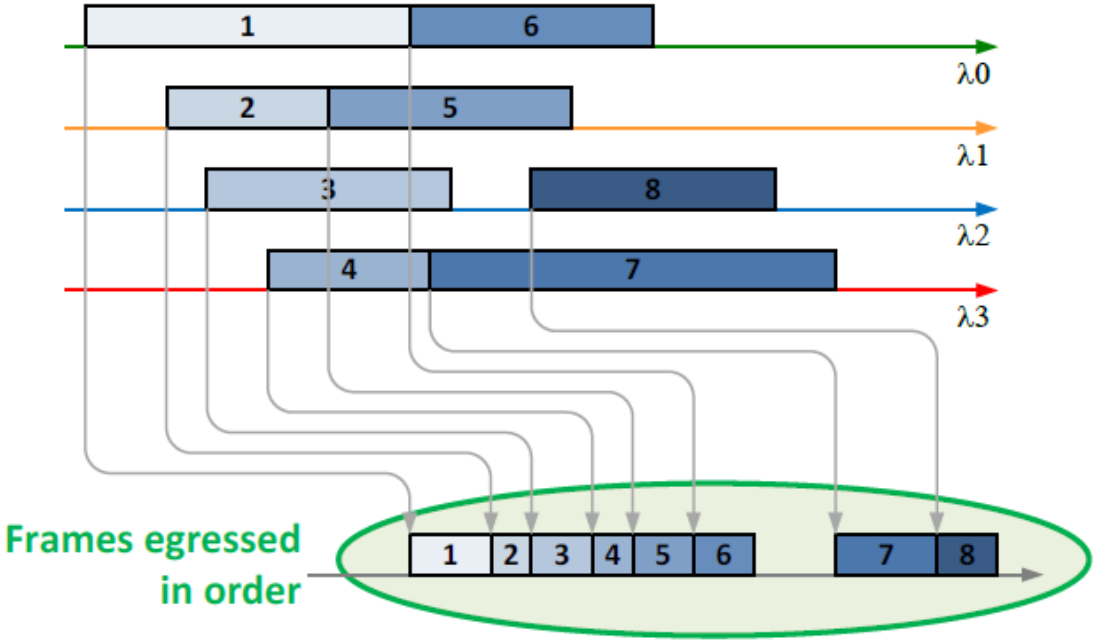
*IEEE p802.3ca Task Force meeting, Whistler, Canada*

# Content

- Potential issues in current downstream channel bonding solution
- Proposal

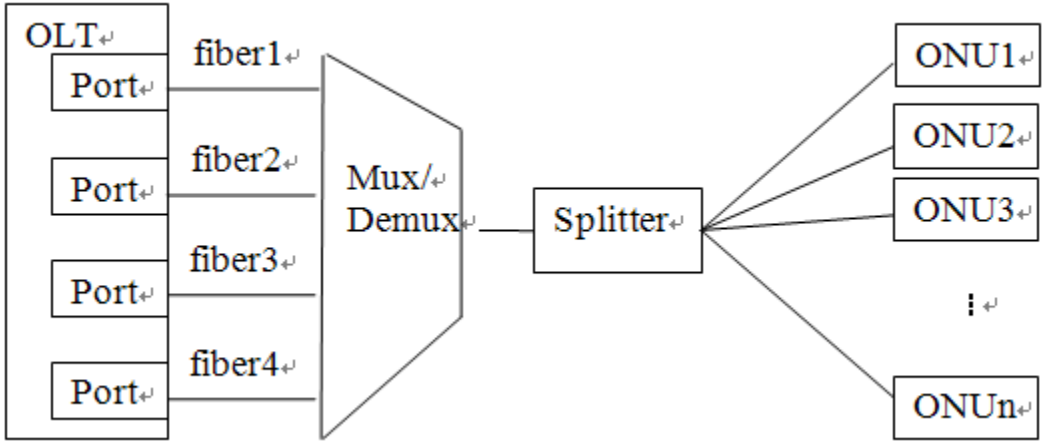
# Downstream channel bonding agreed in Macau

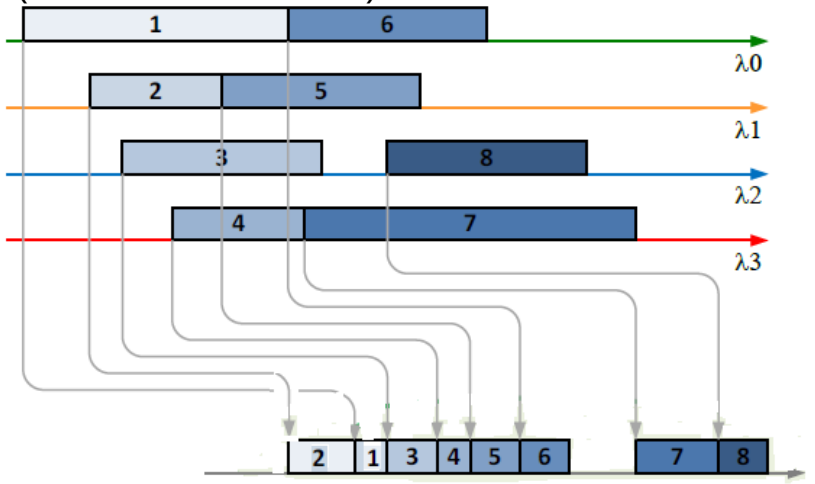


# Potential issue

There still have edge cases where later transmitted packet arrives earlier, due to

1. The fiber length between OLT port and MUX/DEMUX may not be the same.
2. The unexpected downstream delay variation (no more than 16ns).

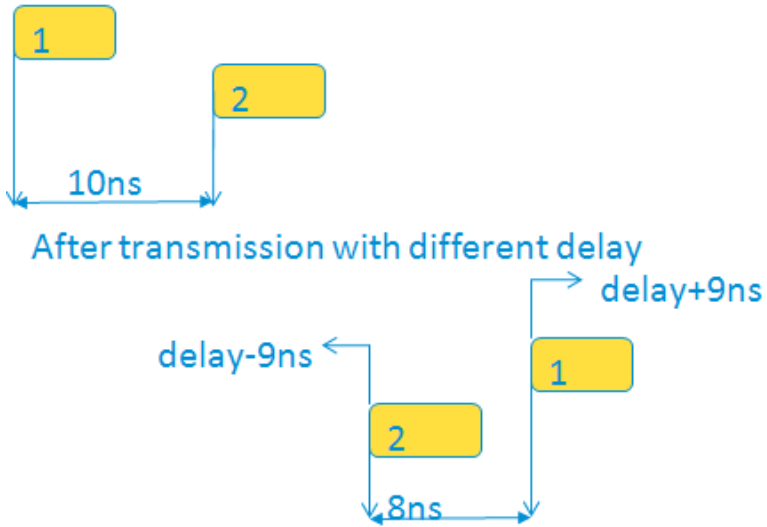


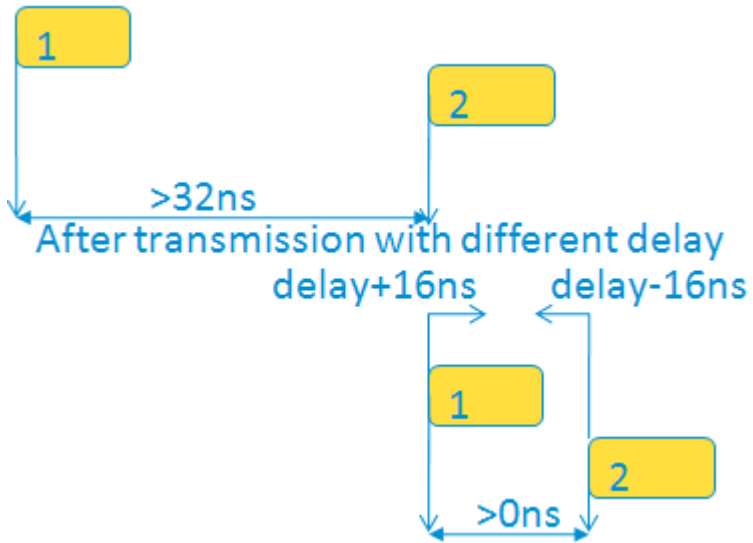



# Proposal

• 1. Making fibers between OLT port and MUX/DEMUX equal, or OLT add certain TX delay to compensate shorter fiber channel. Values of delay compensation can be obtained through ranging process.

• 2. Considering the delay requirement ( 16ns, 802.3-2012-Clause 77.3.2.4 ) , the difference of TX time of the first bit of packet on different channel should be longer than 32ns.



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# Thank you

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