

# Multiple Modulation Profile Deployment Cases

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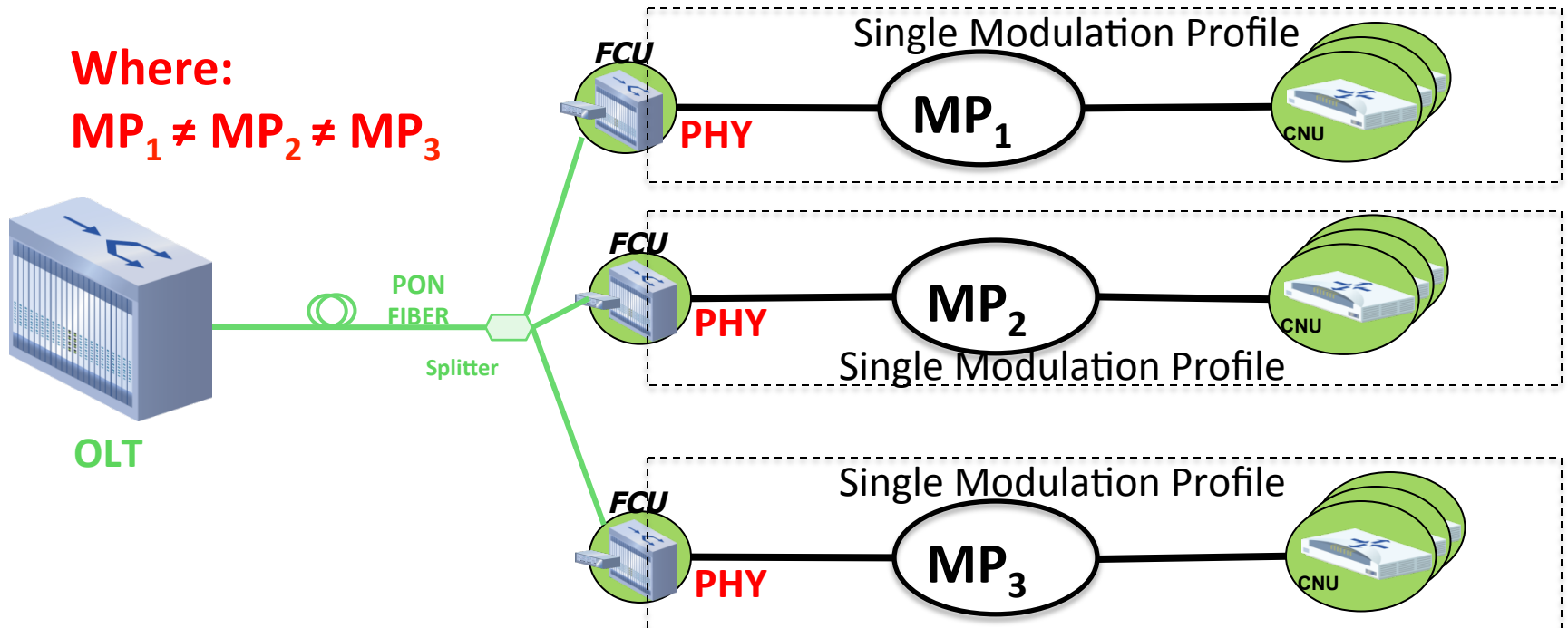
12/17/2012

# Overview

- © There are multiple ways an operator might deploy multiple modulation profiles in practice.
- © This presentation DOES NOT intend to advocate for or against a single EPoC PHY supporting multiple modulation profiles in the downstream direction.
- © This presentation DOES intend to describe some use cases for multiple modulation profiles across one or more serving groups.

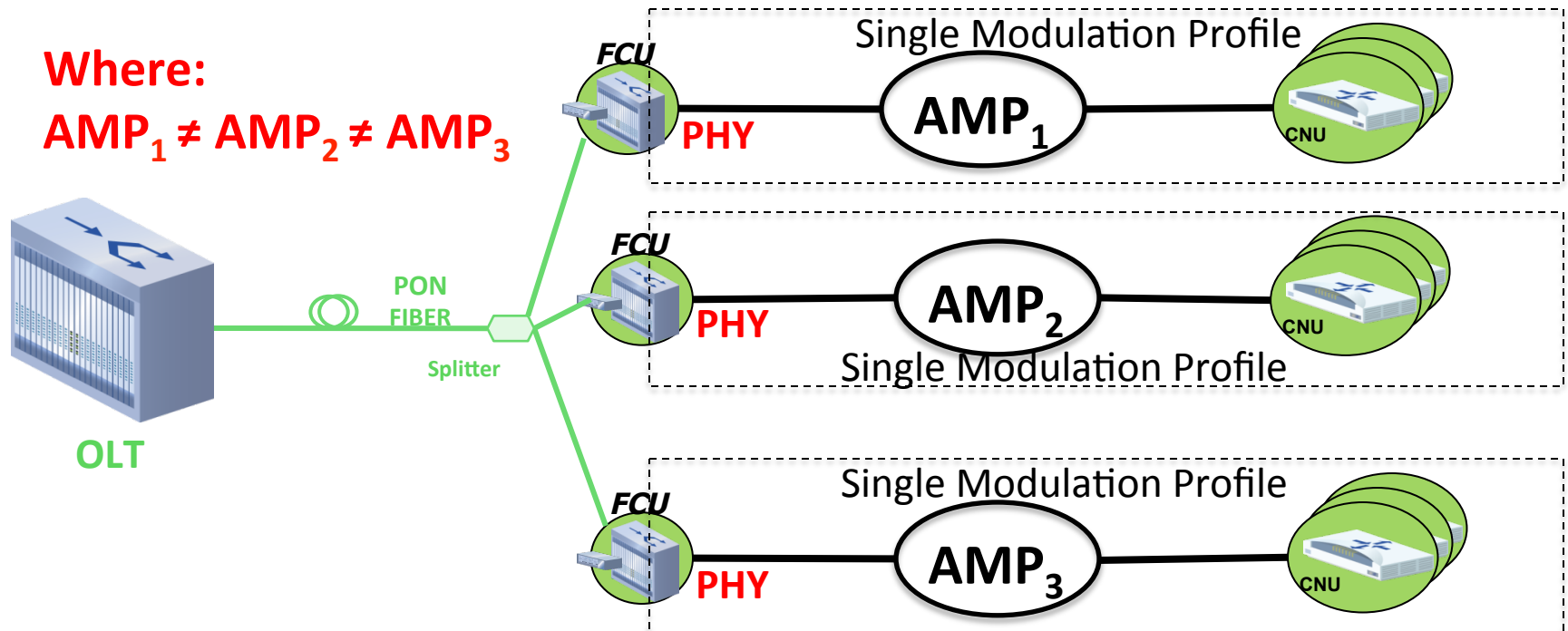
# Case 1: Multiple PHYs, Multiple Static Modulation Profiles

- © In the example below we have three EPoC PHYs each with a different static modulation profile – SMP1 – SMP3.
- © Thus the individual CNUs attached to each EPoC OLT PHY is associated with a different downstream modulation profile.



# Case 2: Multiple PHYs, Multiple Adaptive Modulation Profiles

- © In the example below we have three EPoC OLT PHYs each transmitting with an adaptive modulation profile
- © As is the nature with adaptive modulation profiles we would expect the AMPs to be different across serving groups. AMP1 – AMP3.
- © Thus the individual CNU's attached to each EPoC OLT PHY is associated with a different downstream modulation profile.

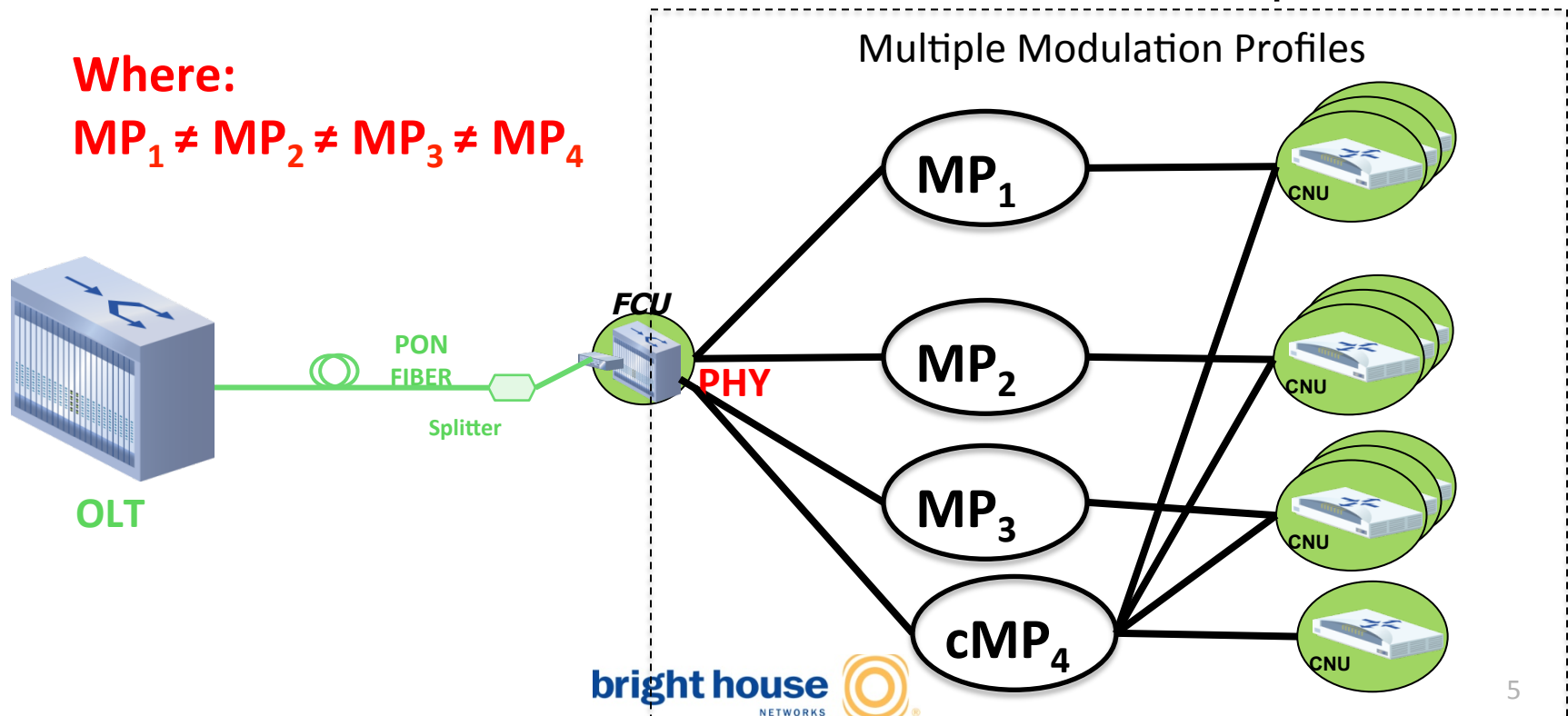


# Case 3: Single PHY, Multiple Static Modulation Profiles

- © In the example below we have three EPoC OLT PHYs each transmitting with an adaptive modulation profile
- © As is the nature with adaptive modulation profiles we would expect the AMPs to be different across serving groups. AMP1 – AMP3.
- © Thus the individual CNU's attached to each EPoC OLT PHY is associated with a different downstream modulation profile.

**Where:**

**$MP_1 \neq MP_2 \neq MP_3 \neq MP_4$**



# Closing Remarks

- © The concerned debate against MMPs is targeted at Case 3.
- © Case 1 and Case 2 should both be enabled without running into a number of the “MMP” challenges discussed.
- © Would like to have these assumptions validated.