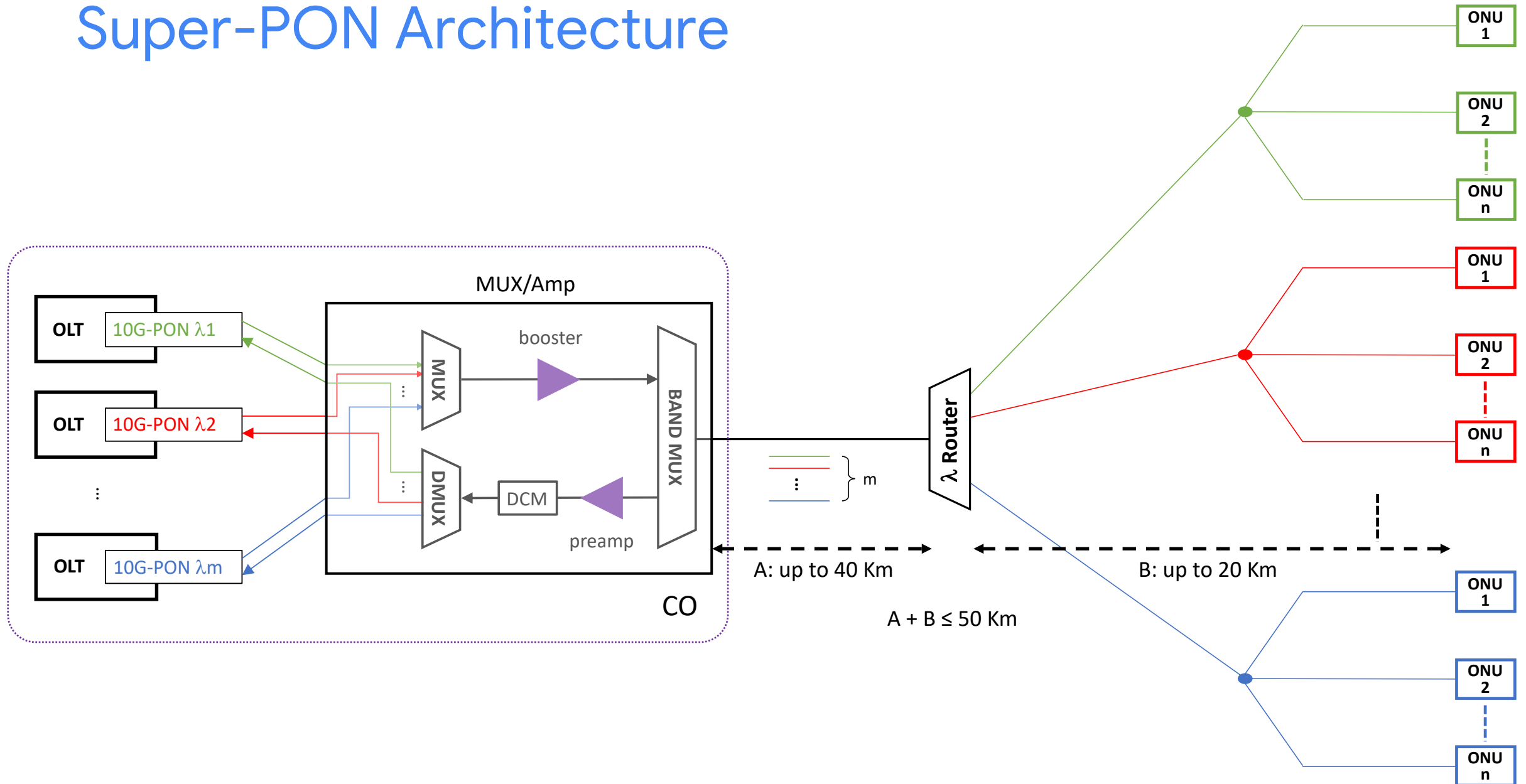


Specifying Super-PON

IEEE P802.3cs – March 12, 2019

Claudio DeSanti (Google)

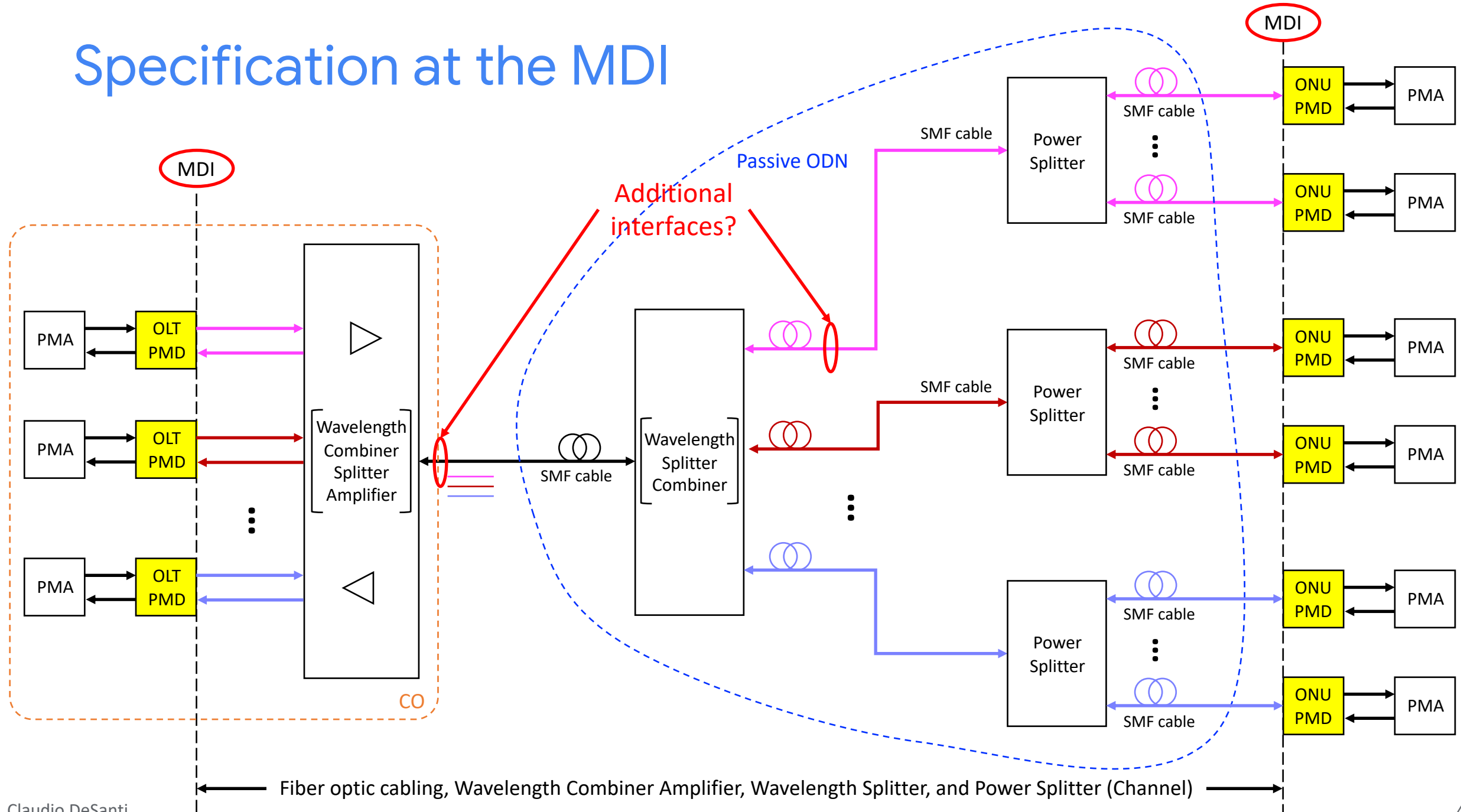
Super-PON Architecture



How to Specify Super-PON?

- 802.3 specifies PMDs at the MDI
- In Super-PON there are multiple devices between two MDIs
- How to specify the full system?

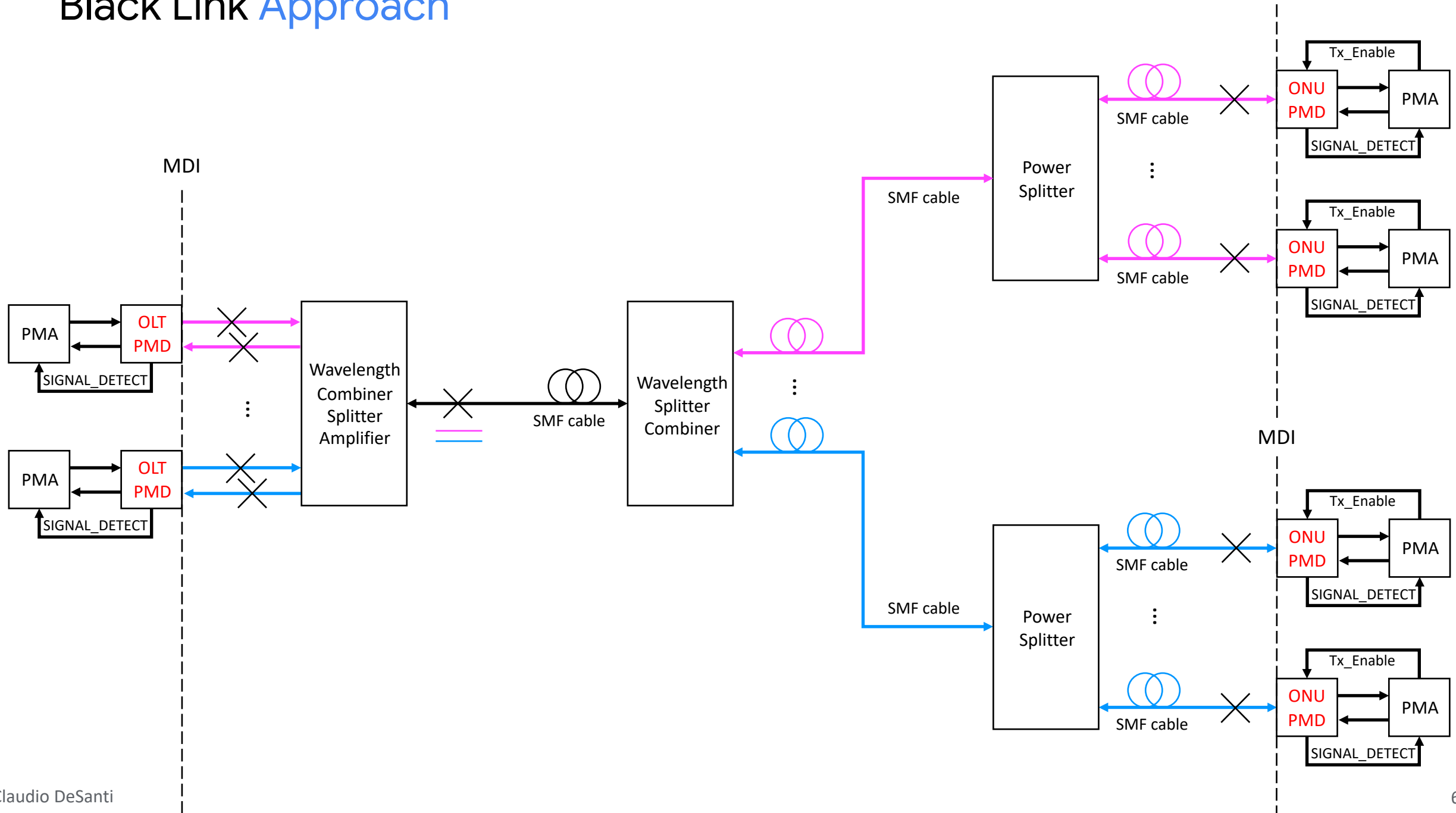
Specification at the MDI



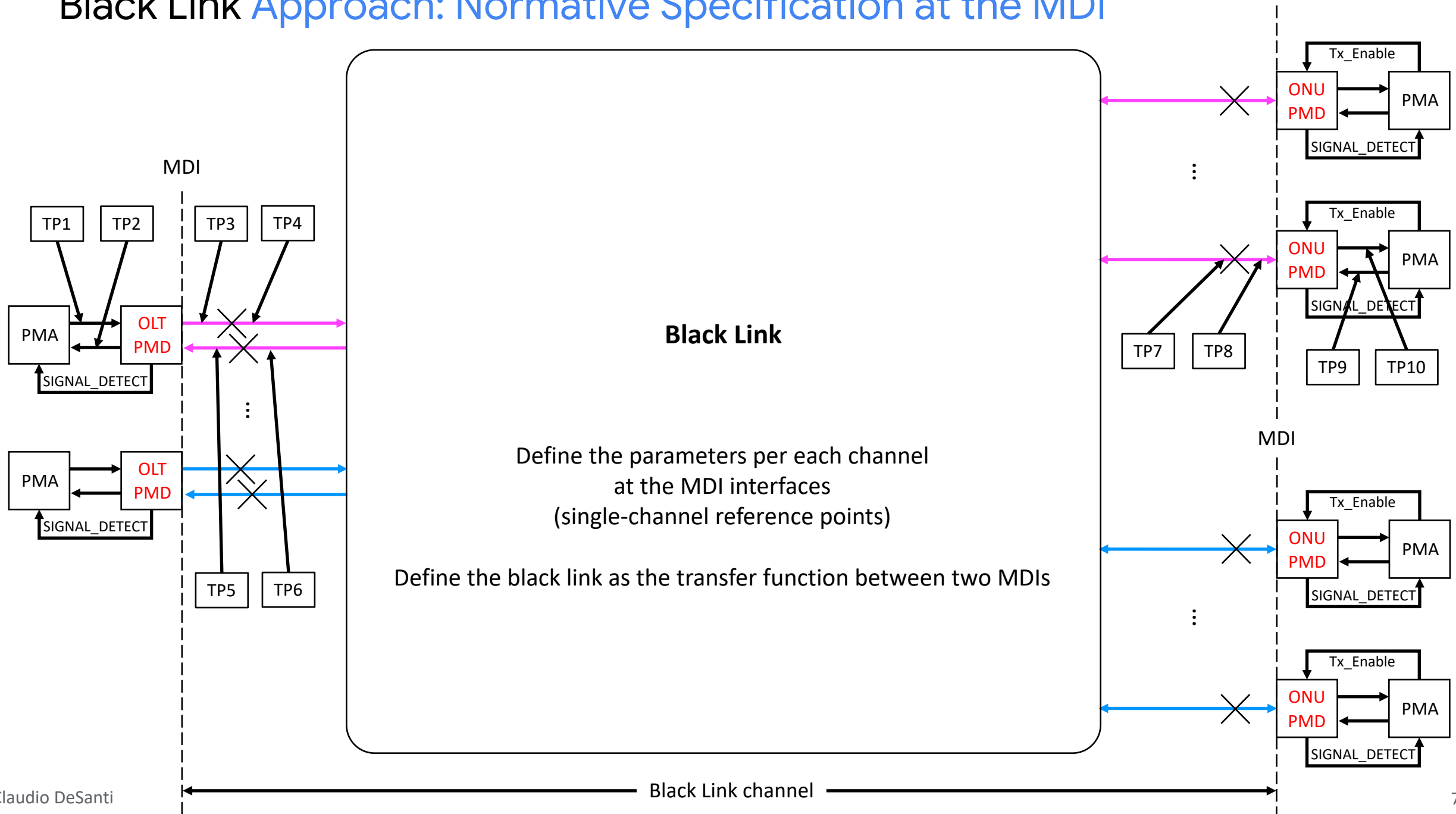
Proposal

- Use the 'Black Link' approach for the normative specification at the MDI
- Describe possible 'Black Link' examples as informative annexes

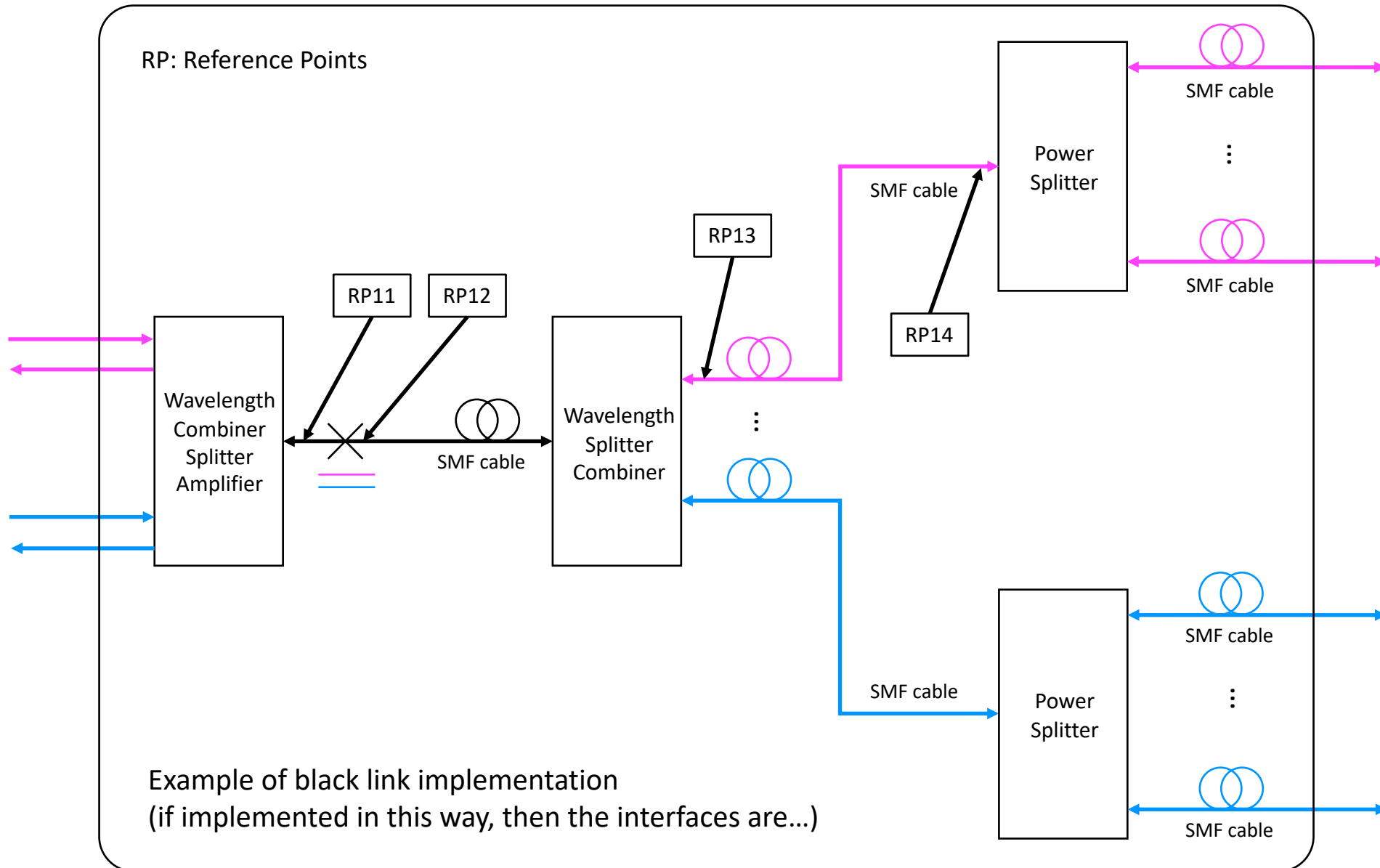
Black Link Approach



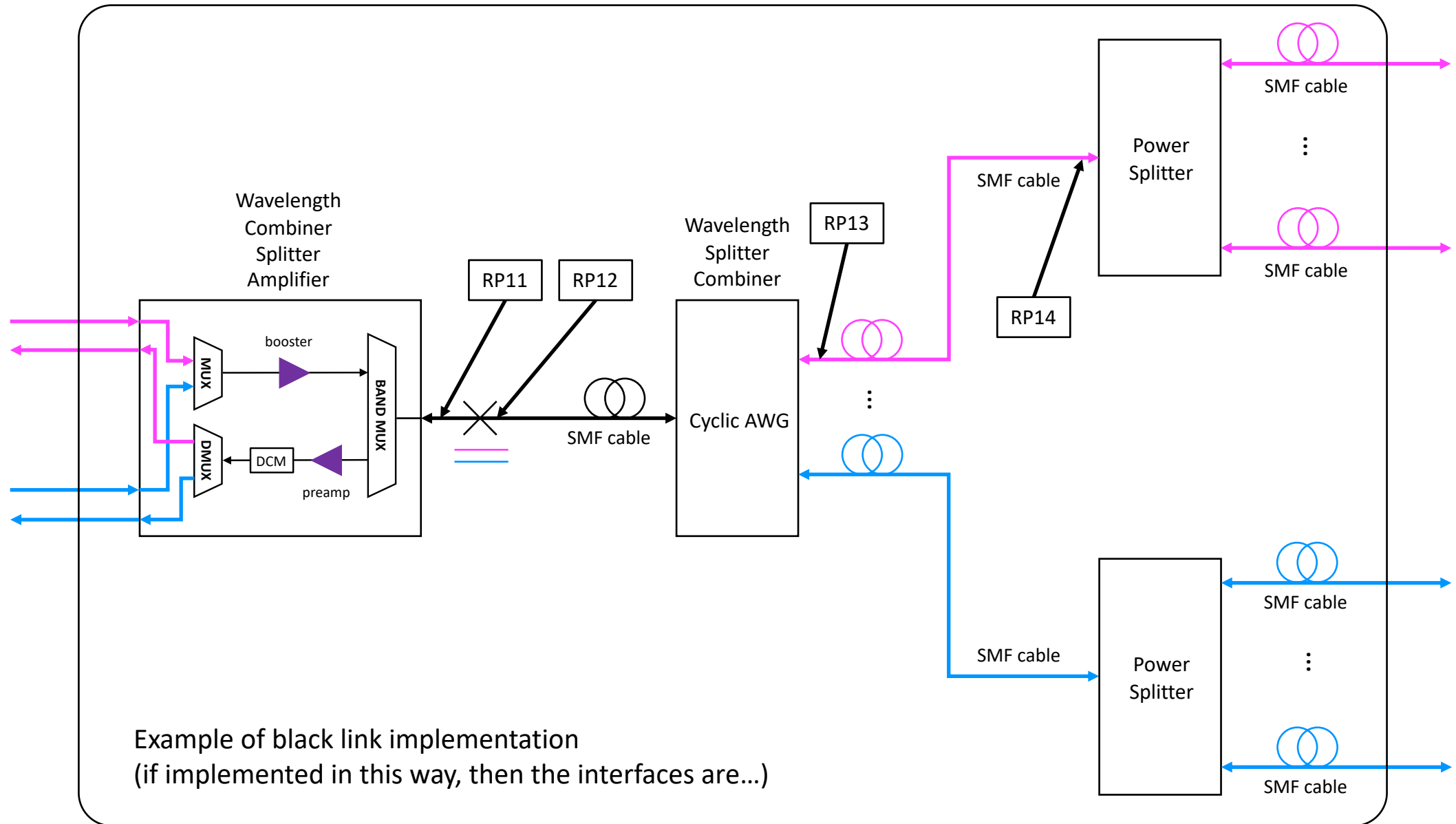
Black Link Approach: Normative Specification at the MDI



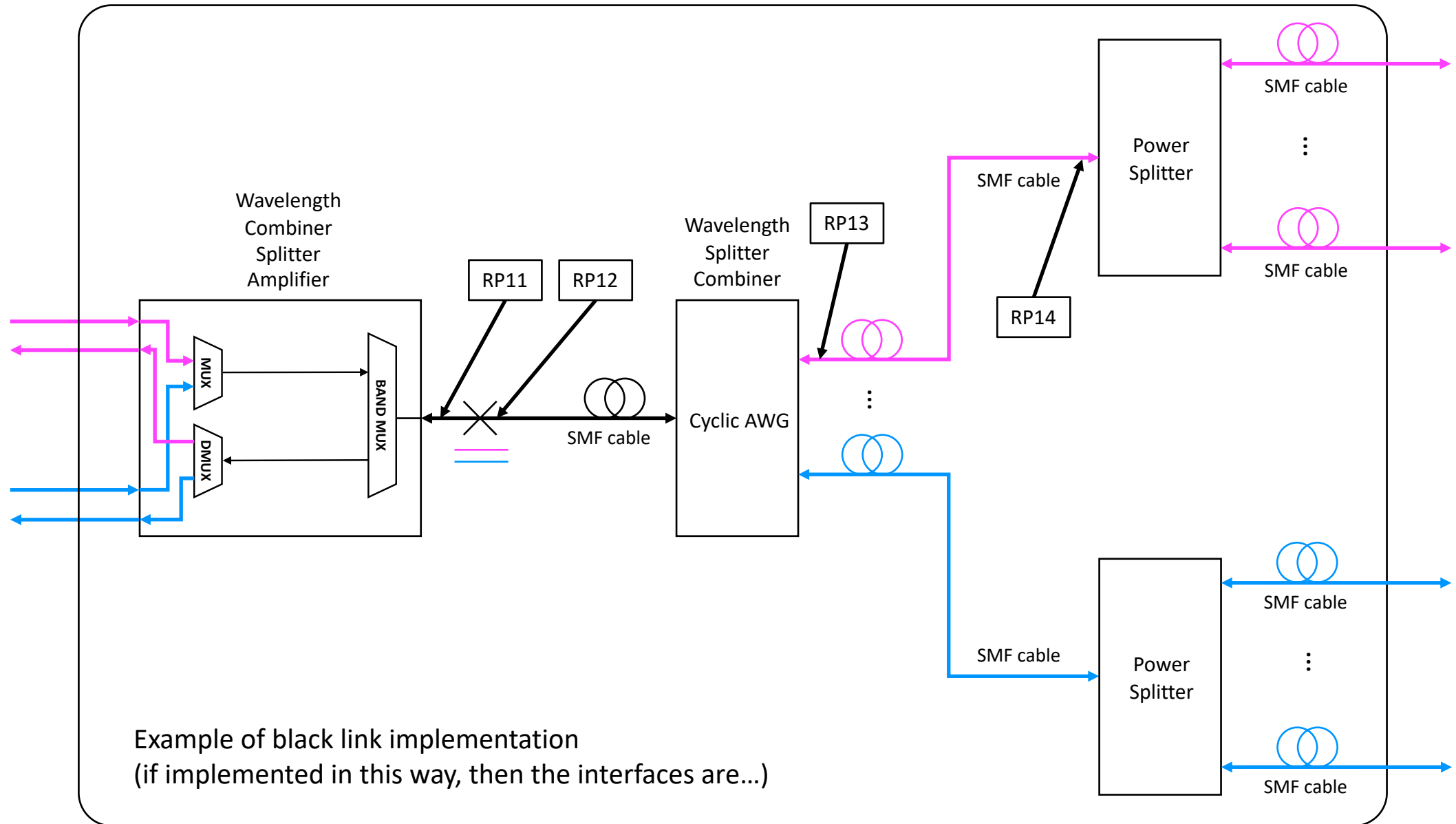
Black Link: Informative Description



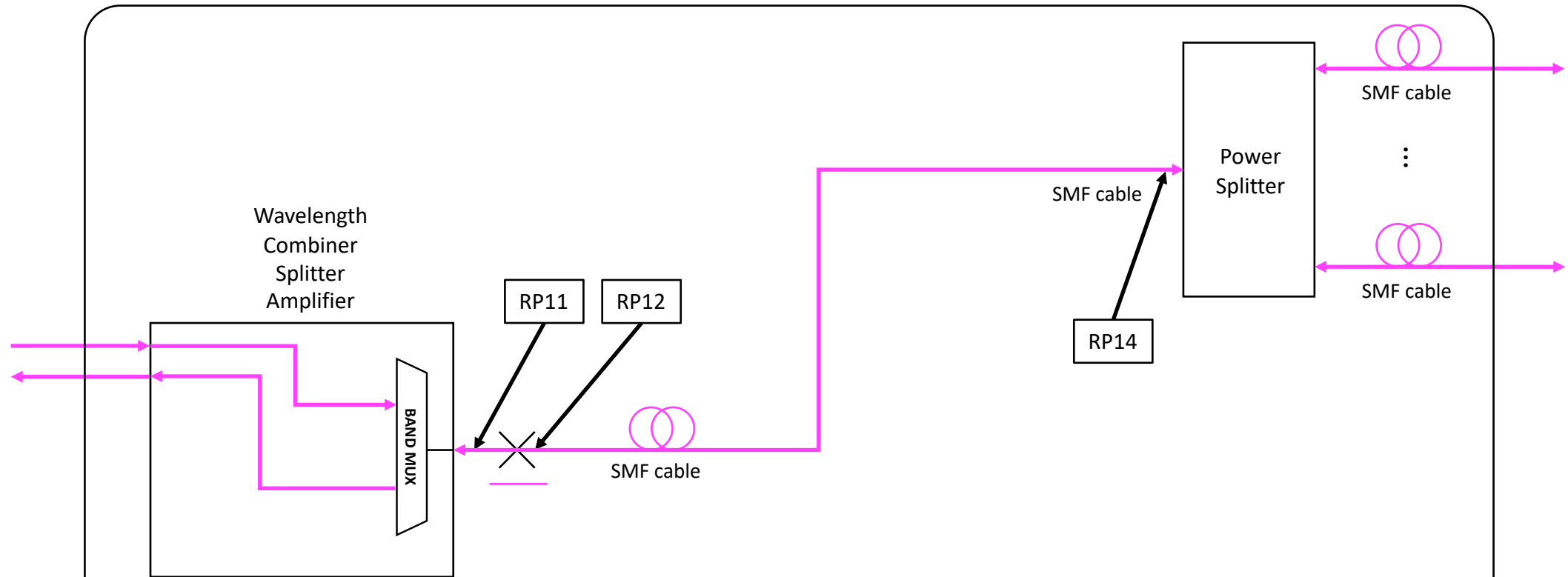
Black Link Description 1 (Informative)



Black Link Description 2 (Informative)

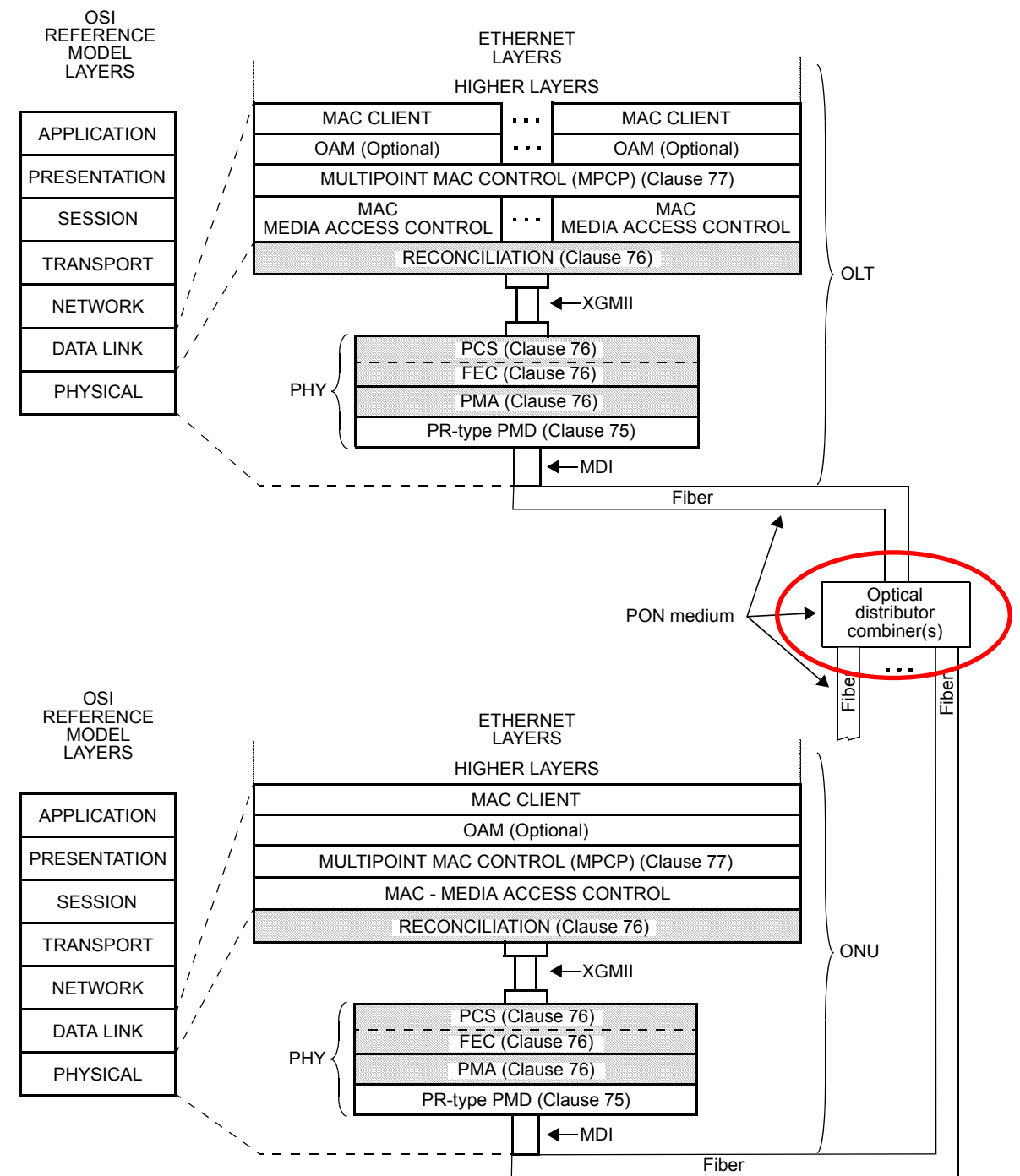


Black Link Description 3 (Informative)

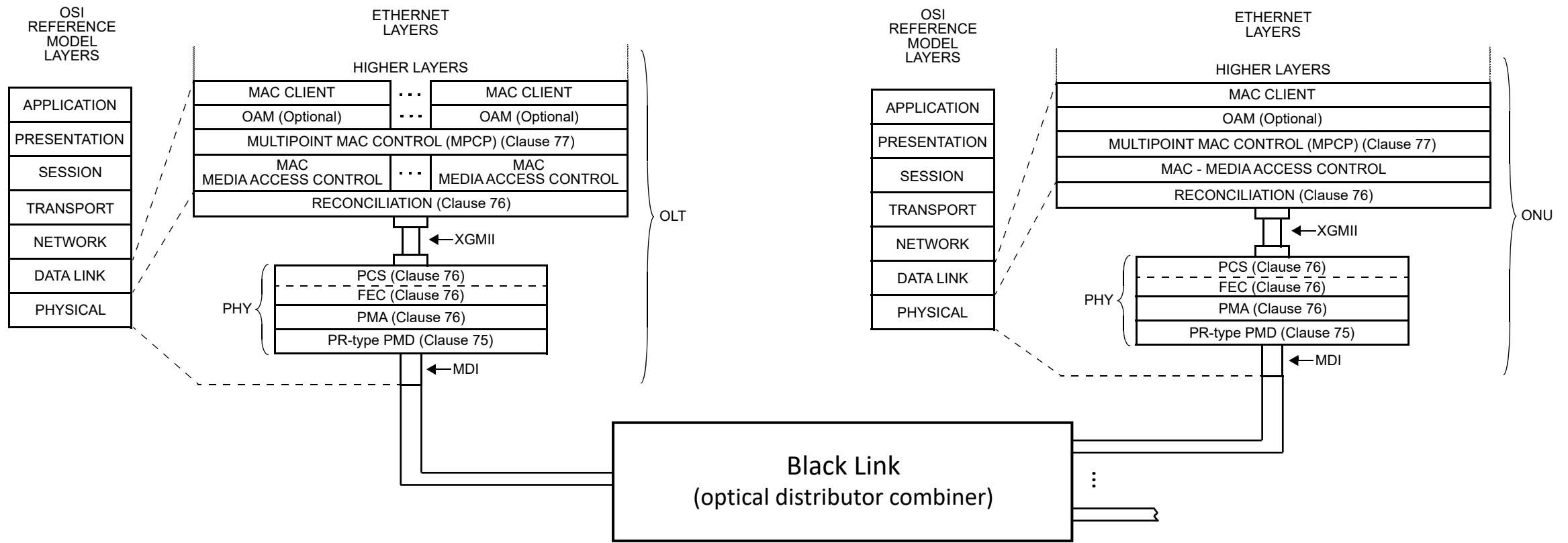


Example of black link implementation
(if implemented in this way, then the interfaces are...)

A Black Optical distributor combiner?



Black Link: Optical Distributor Combiner



Motion

- Move to specify Super-PON:
 - By using the 'Black Link' approach for the normative specification at the MDI; and
 - By describing possible 'Black Link' examples as informative annexes.

Thank you!