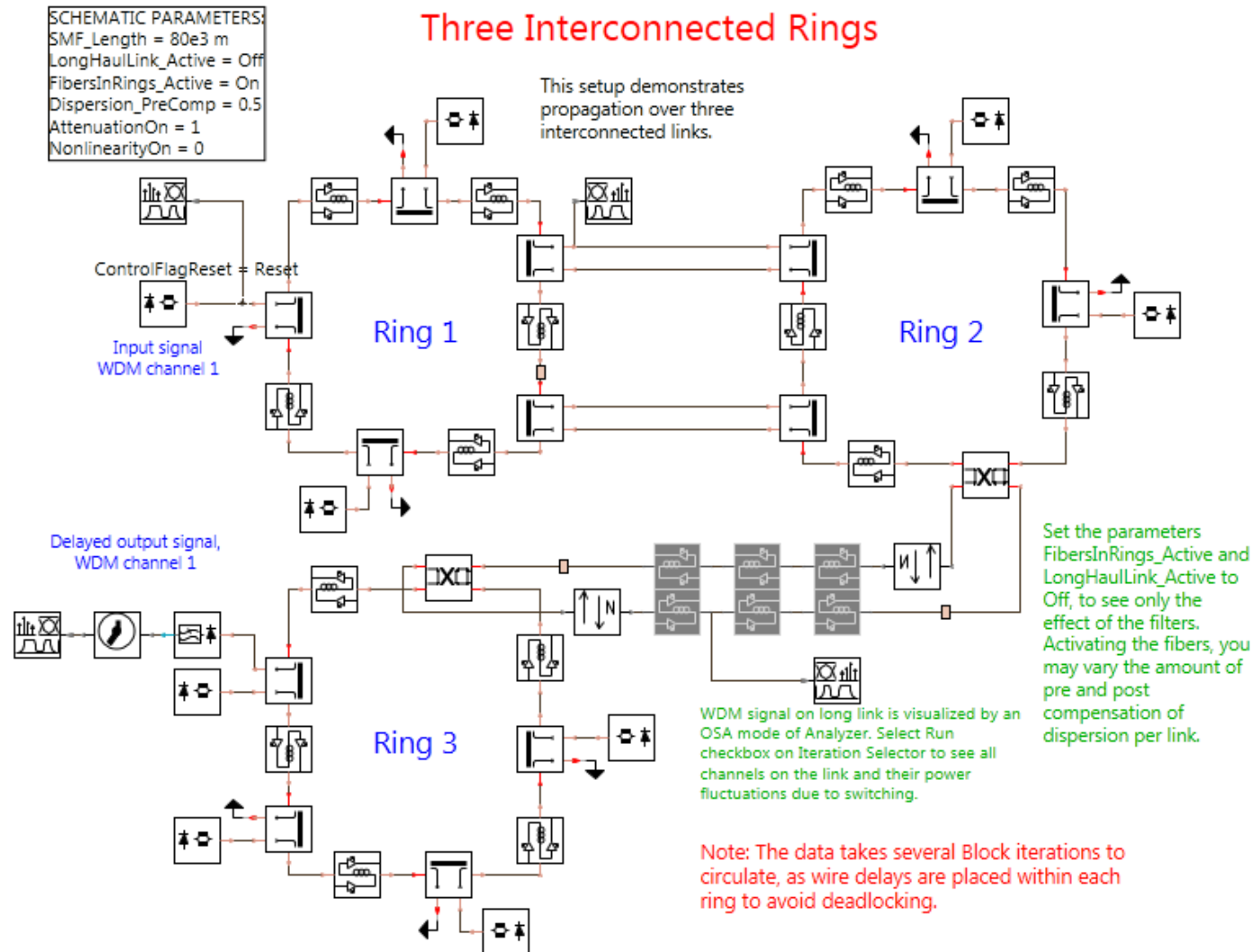


3x Ring with OXC & ADM (1)

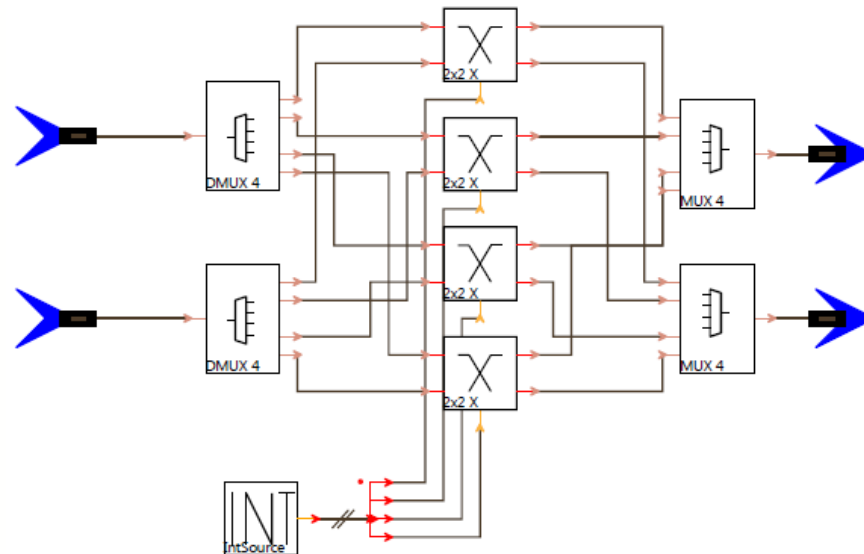
- The second ring system consists of three rings linked by ADMs and Optical Cross Connects (OXCs).
- Open the simulation file OS5 and examine the construction, in particular identify the ADMs.
- Execute the simulation.
- **Question 5A:** How many wavelengths are extracted in each ADM?
- **Question 5B:** How many channels can be exchanged between ring 1 and ring 2?
- **Question 5C:** How many channels can be exchanged between ring 3 and ring 2?
- **Question 5D:** How is the signal routed from the entry points to the exits?
- **Question 5E:** Set the parameters `FibersInRings_Active` and `LongHaulLink_Active` to Off, to see only the effect of the filters. Activating the fibers, you may vary the amount of pre and post compensation of dispersion per link and discuss the results.

3x Ring with OXC & ADM (2)



Inside the OXC

Optical crossconnect using space switches.
 Both WDM input channels must have equal frequencies.



Note: Each 2x2 switch crosses inputs if the control parameter is equal to one, and leaves inputs and outputs unchanged if it is zero.
 The OXC in ring 2 is driven by the sequence (1,1,0,0), and the OXC in ring 3 is driven by the sequence (1,0,1,0).