Module 6
Homework Project,
Odds and ends

Problem Statement

Architect (design) an 16 wavelength DWDM optical network for metro application
The requirements are:
Low cost,
Modularity, flexibility and upgradeability.

Do not forget a network supervisory system.

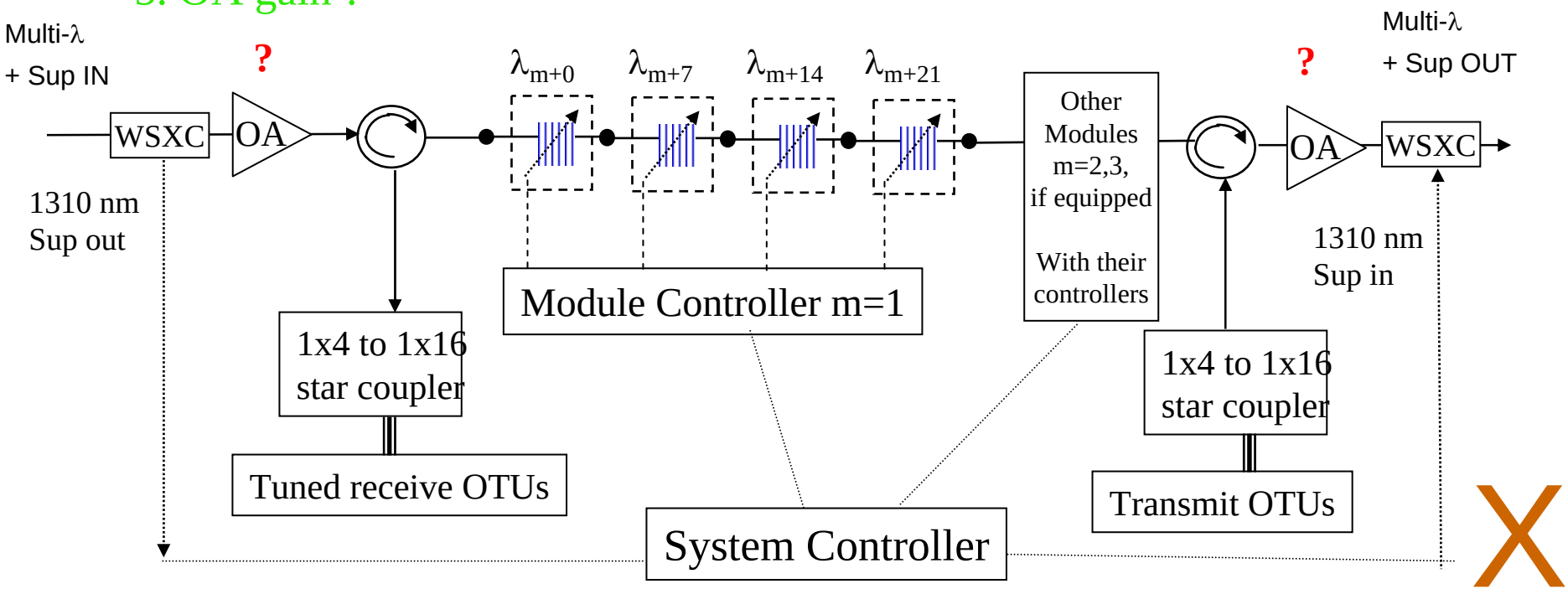
Solution follows. But do not look at it until after you have designed one yourself.

Solution to the Metro Problem

Let us architect a modular OADM

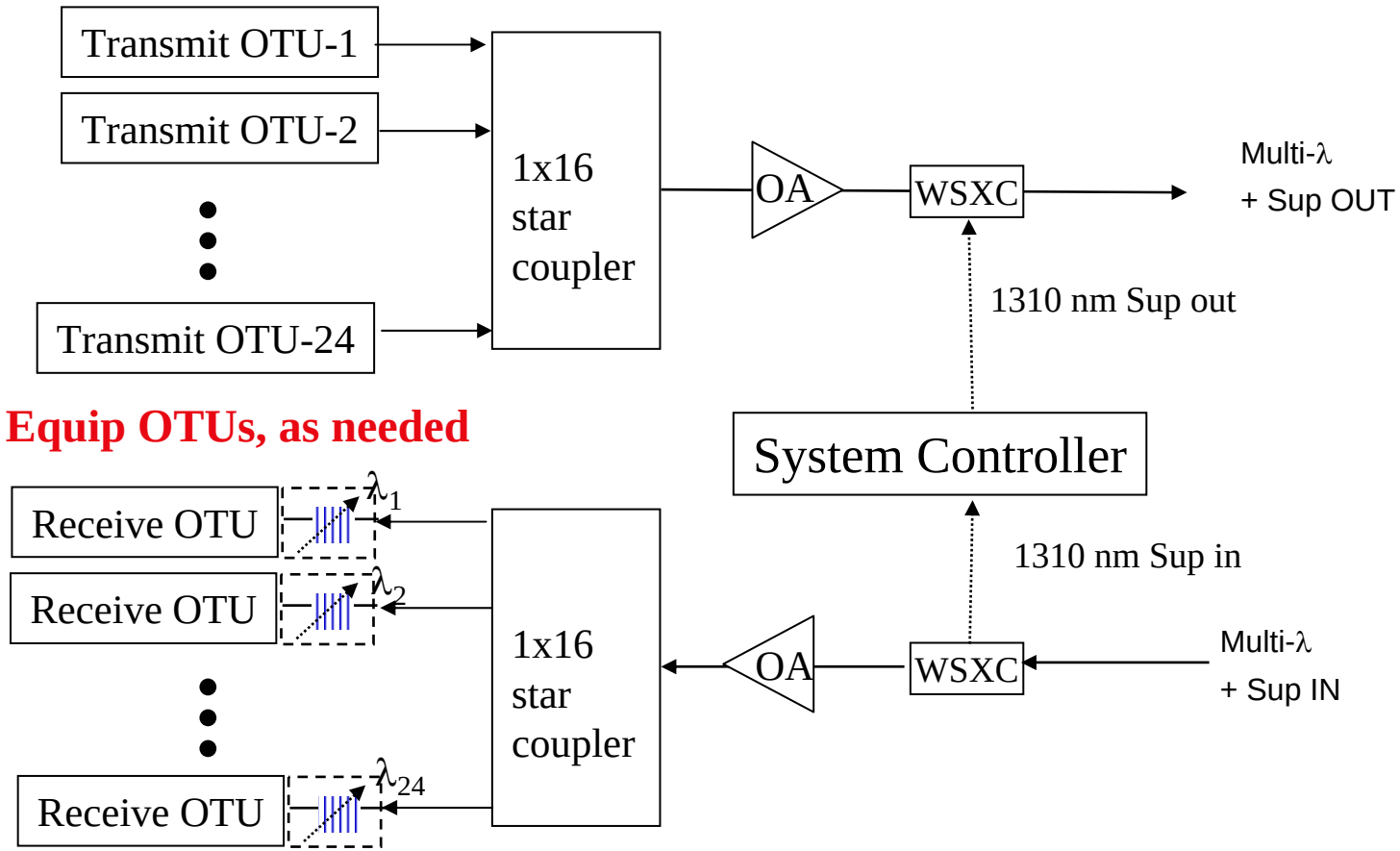
We assume: 16 λ

1. use tunable FBG with interleaved λs
2. a site may have as many as 3 modules plus OAs
3. If more than 12 λs, then use full terminals from long-haul product line
4. Need same thing for opposite direction of traffic, of course
5. OA gain ?



Problem solution continued

Terminal Architecture
Adds/Drops all 16 λs + **the Supervisory Channel**



Anything else?

- Add your own comments