
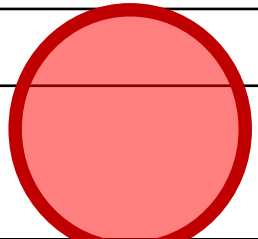


IEEE 802.3 Opening Report Call-for-Interest Beyond 10km Optical PHYs

John D'Ambrosia

Futurewei, Subsidiary of Huawei

Today's Point-to-Point SMF Ethernet Family

	500m	2km	10km	20km	40km
10GBASE-			L4		ER
25GBASE-			LR		ER
40GBASE-	PSM4		LR4		ER4
		FR			
50GBASE-		FR	LR		
100GBASE-		10X10			
	PSM4	CWDM4 / CLR4	LR4 / WDM4-10	WDM4-20	ER4 / WDM4-40
	DR				
200GBASE-		FR4	LR4		
400GBASE-		FR8	LR8		
	DR4				

Black Text

IEEE Standard

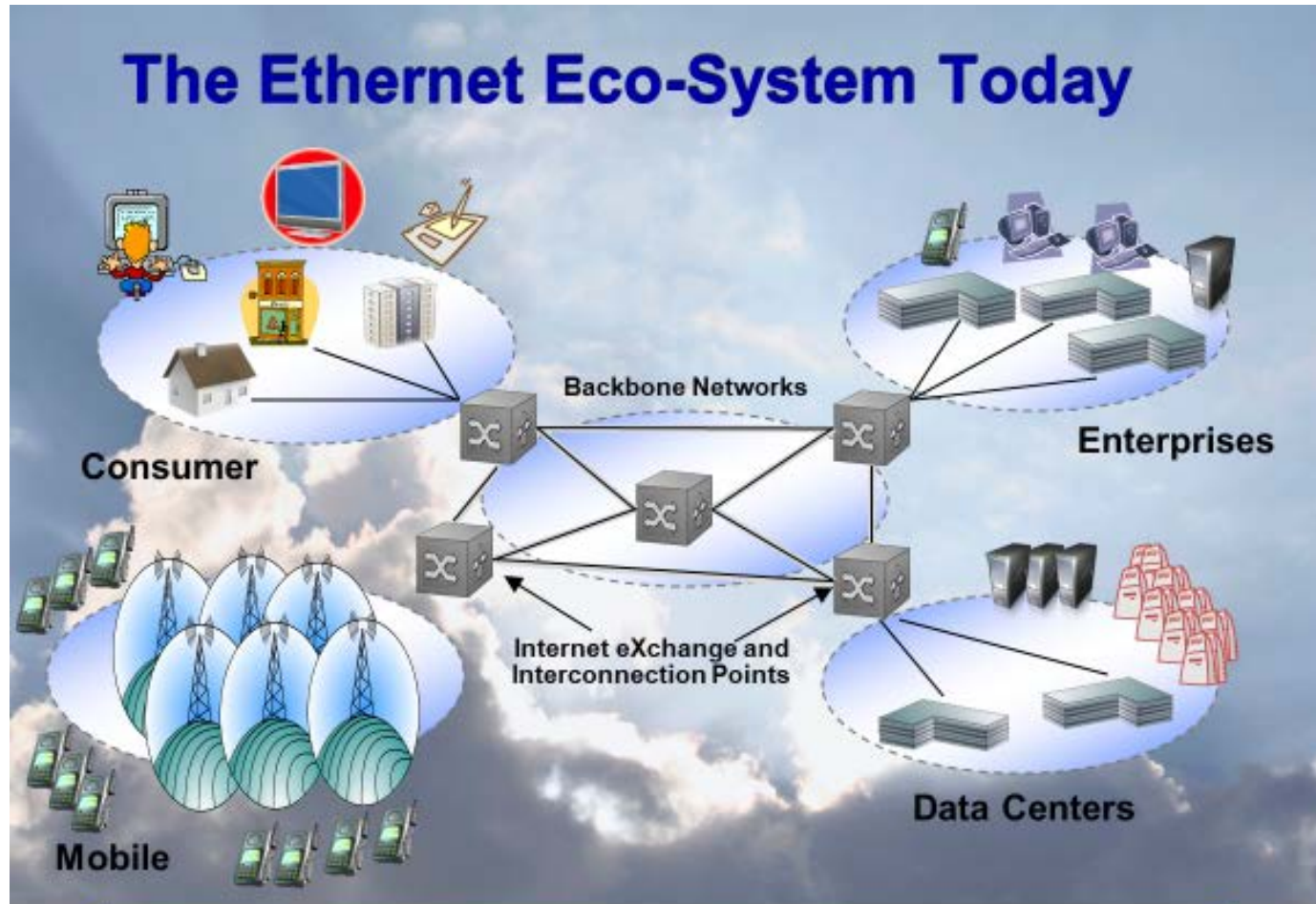
Red Text

In Standardization

Blue Text

Non-IEEE standard but complies to IEEE electrical interfaces

Beyond 10km Optics Throughout The Eco-System



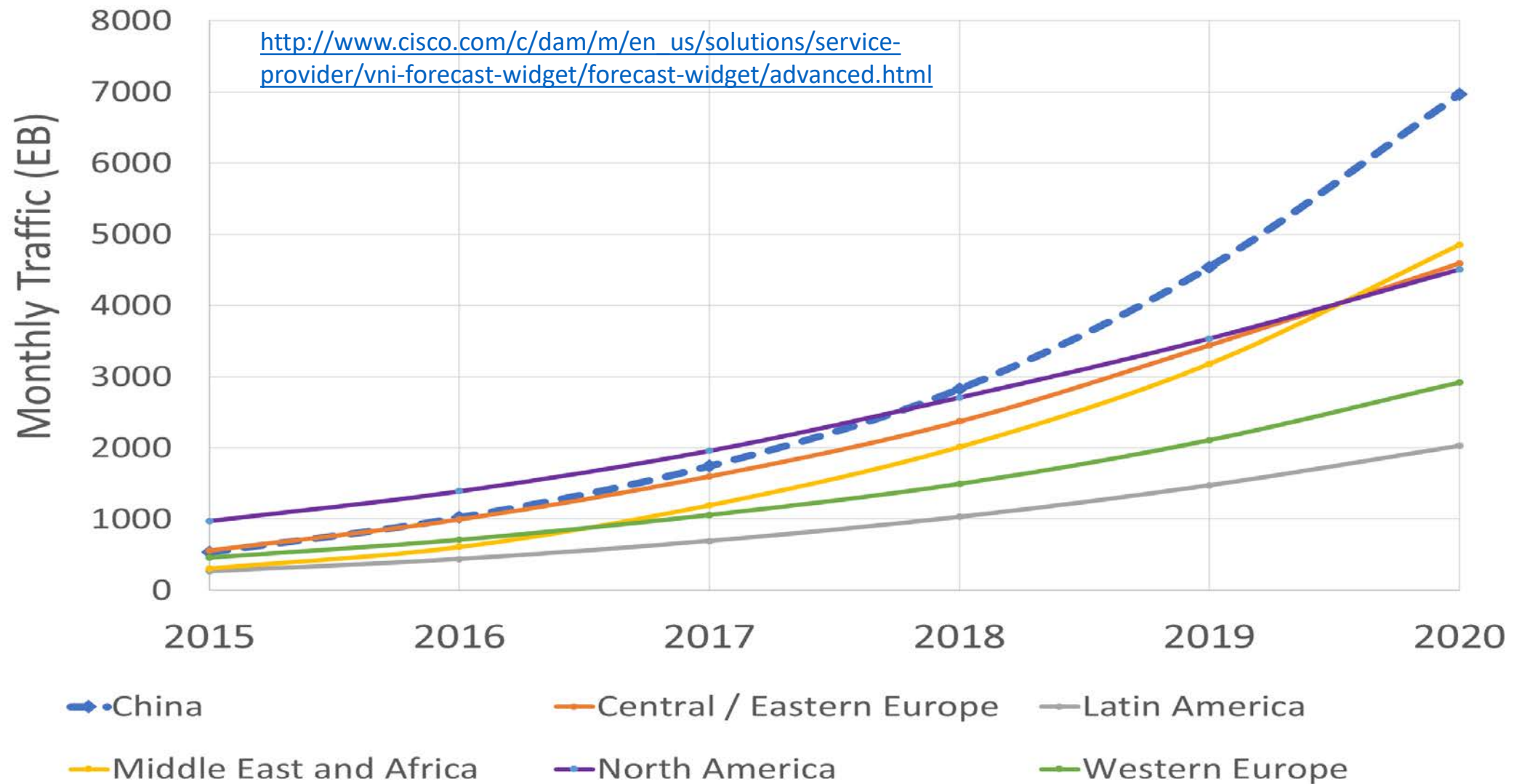
- Not “Data Center”
- Exists throughout the Eco-System
- 3 Million units for 40km and beyond shipped annually
- Continuing bandwidth growth factors resonate throughout the ecosystem

March 19, 2013

400 Gigabit Ethernet Call-For-Interest Consensus, V1.0
Orlando, FL, USA

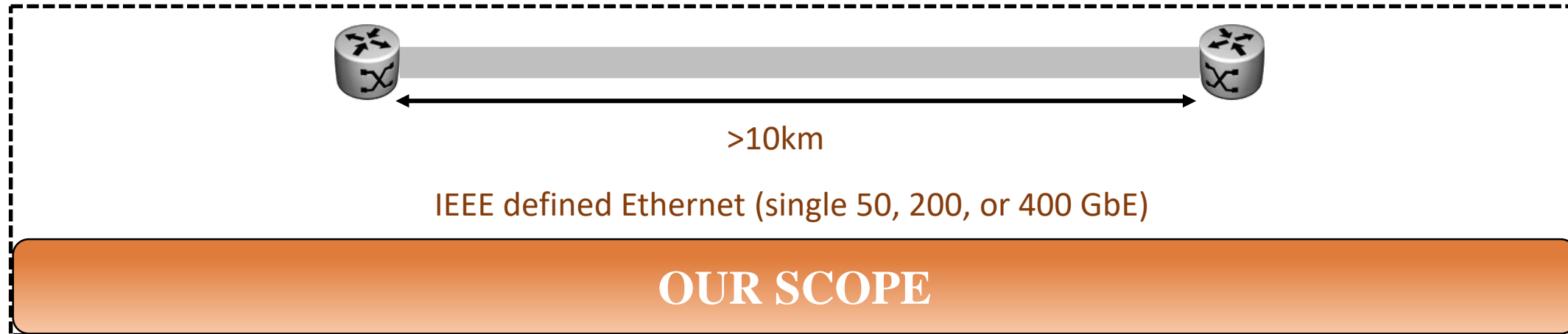
6

Mobile Networks Bandwidth Trends

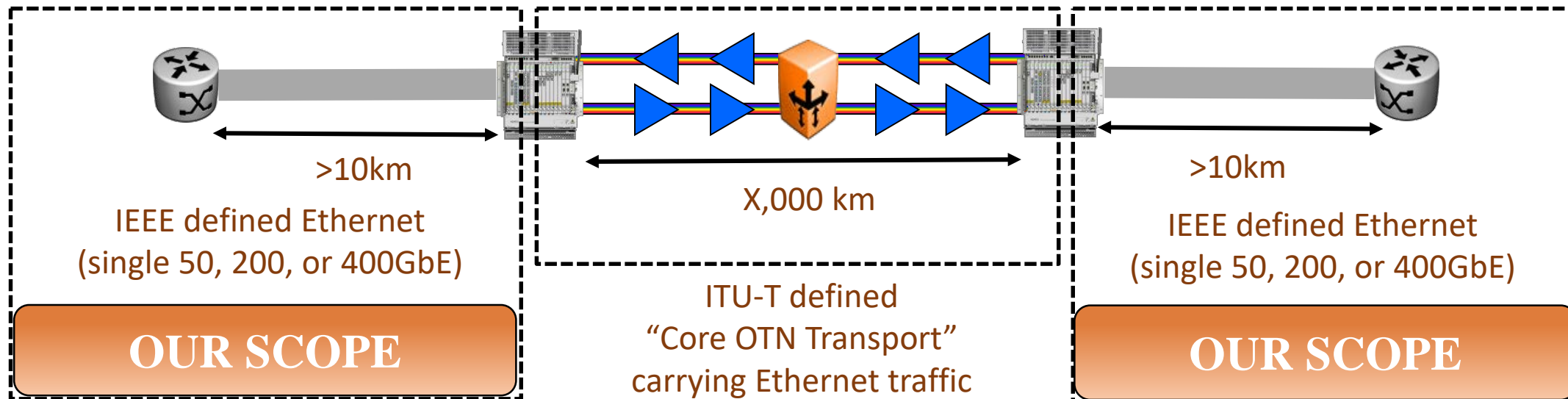


What Are We Talking About?

Scenario #1



Scenario #2



Call For Interest – Beyond 10km Optical PHYs

- Over the past four years, the IEEE 802.3 Ethernet WG has initiated several projects that were chartered with developing new Ethernet rates, including 50GbE, 200GbE, and 400GbE. The optical focus of these efforts has been solutions that address reaches of 10 km or less. There is an emerging need to provide Ethernet solutions at these data rates to support the bandwidth growth of applications that extend beyond 10km. This Call for Interest is to request the formation of a study group to explore the development of new single mode fiber PHYs that address reaches greater than 10km for 50GbE, 200GbE, and 400GbE.