



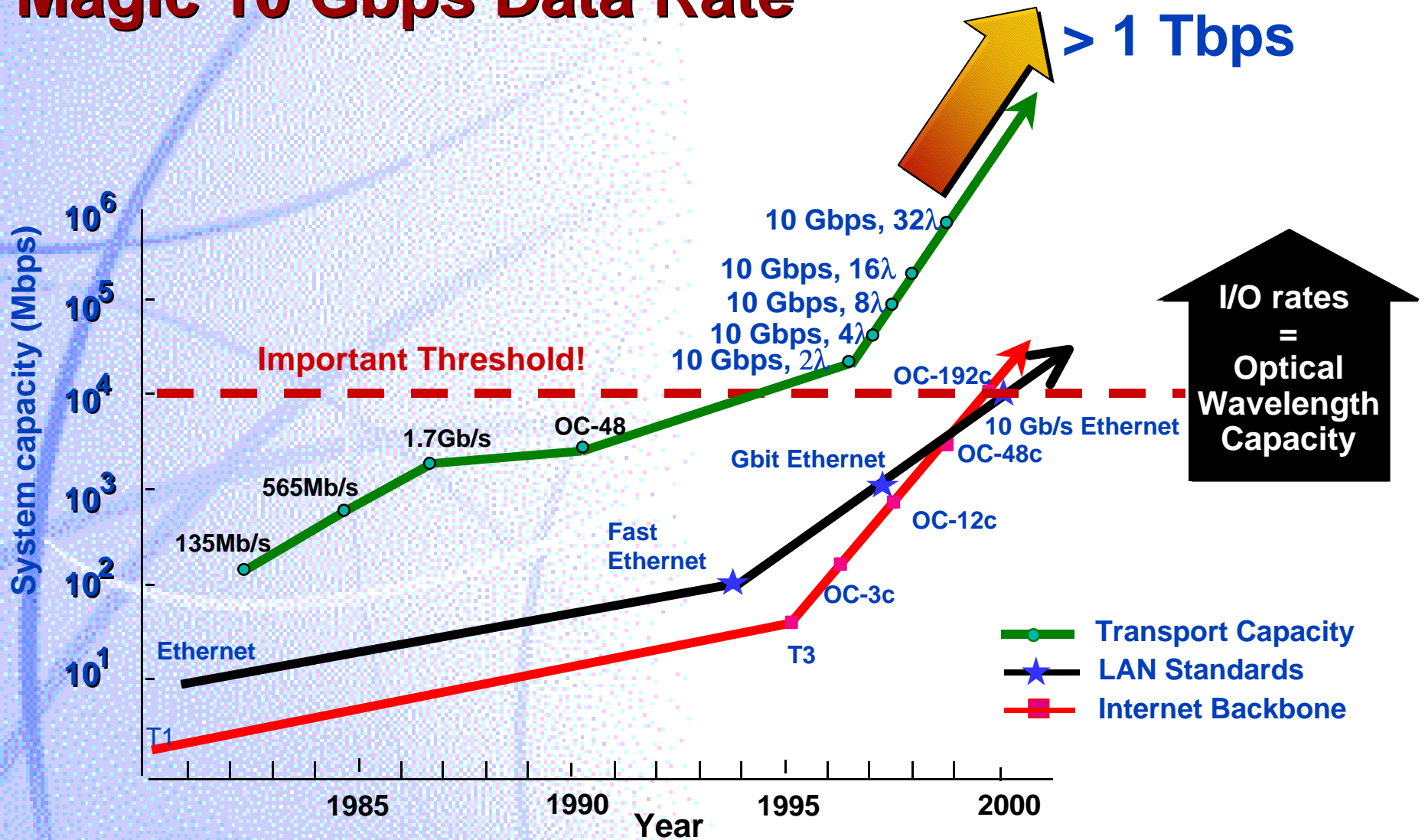
# **Market Potentials for 10 GbE in Metro, and Wide Area Networks**

**Nan Chen**

**Director, Architecture Lab**

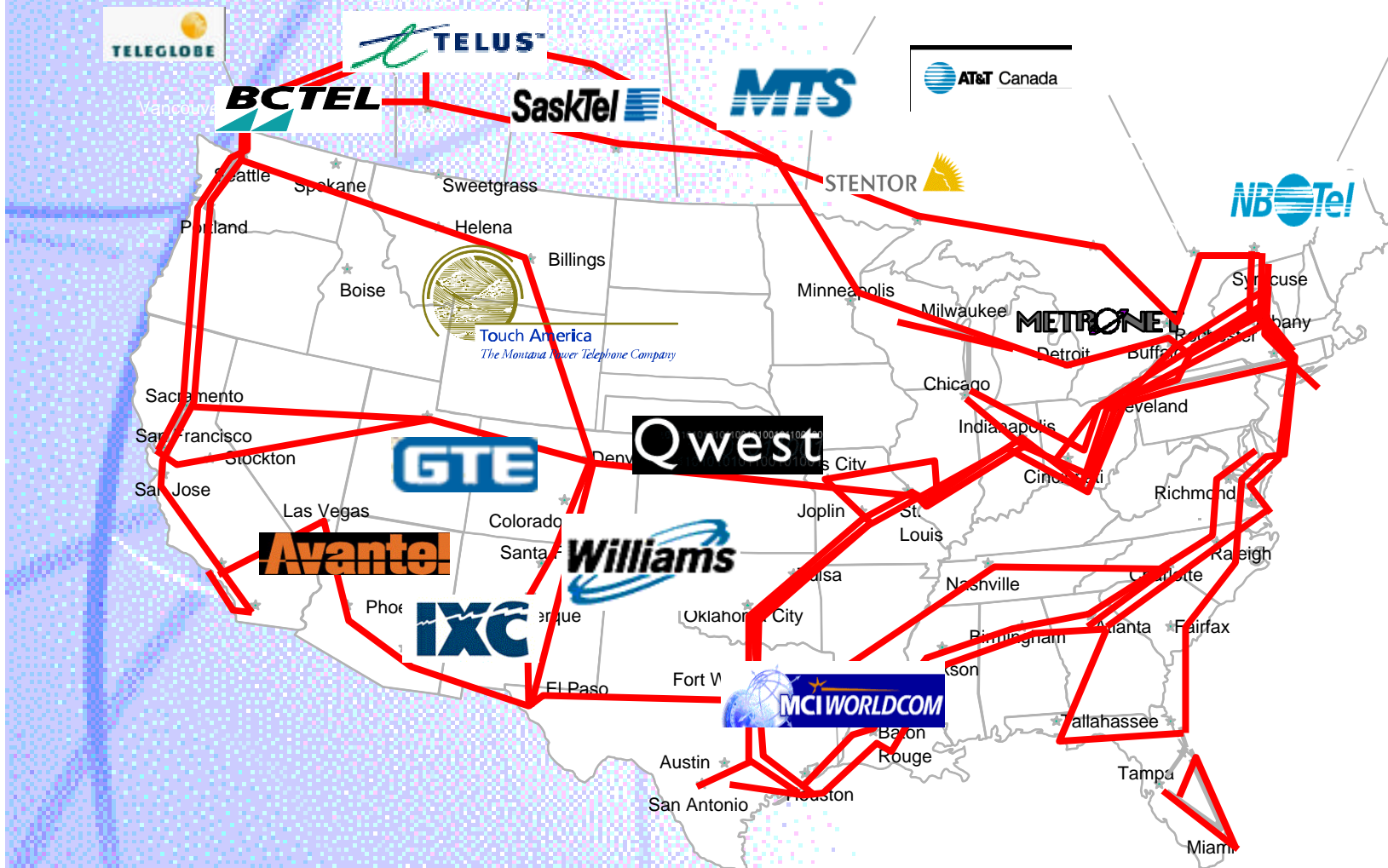
**Santa Clara, California**

# Magic 10 Gbps Data Rate



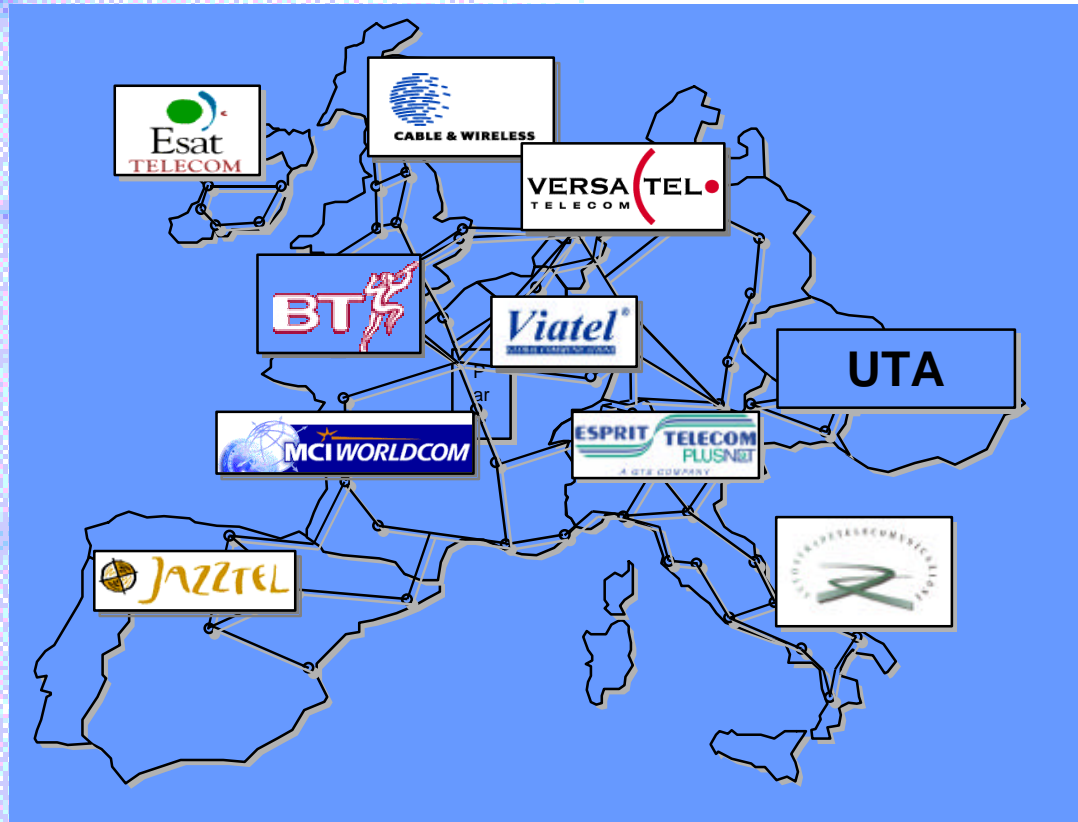
**Unification is logical and inevitable!**

# DWDM 10 Gbps Deployment In North America



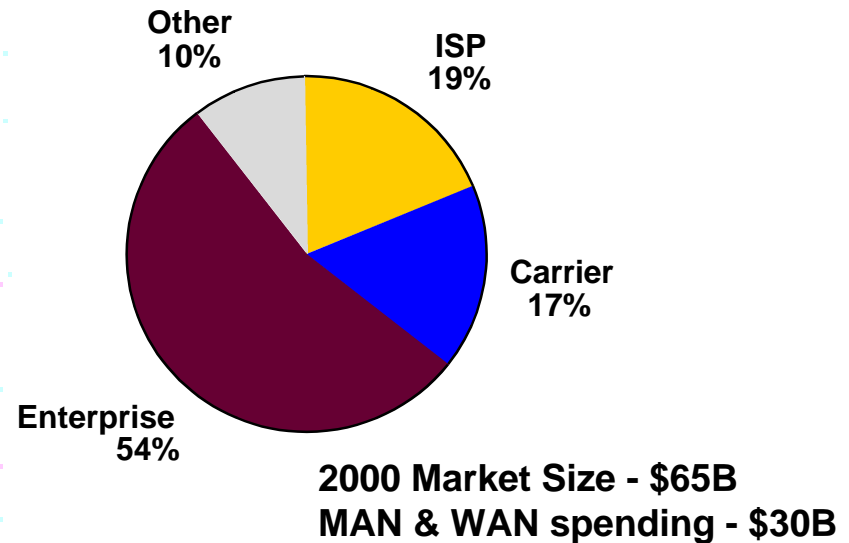
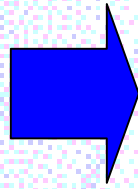
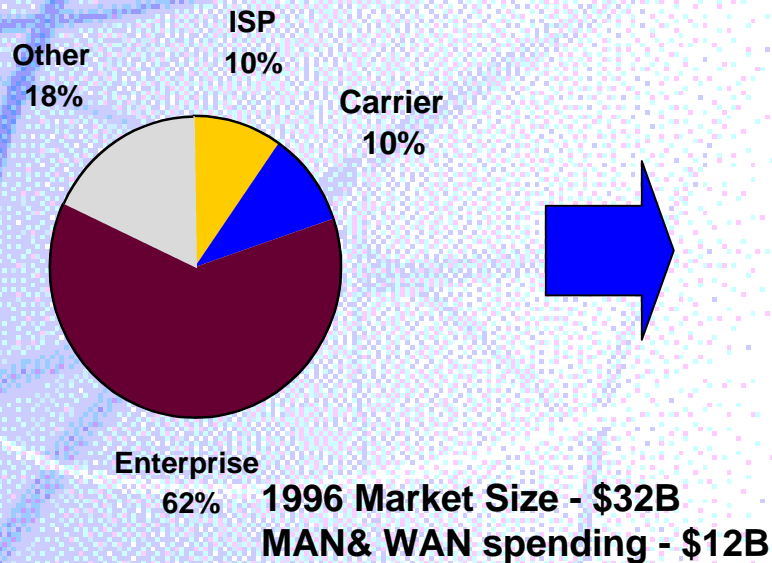
- > 48% of DWDM Network Deployment
- > 36% of the Internet Backbone In North America

# ...10 Gbps Deployment In Europe and China



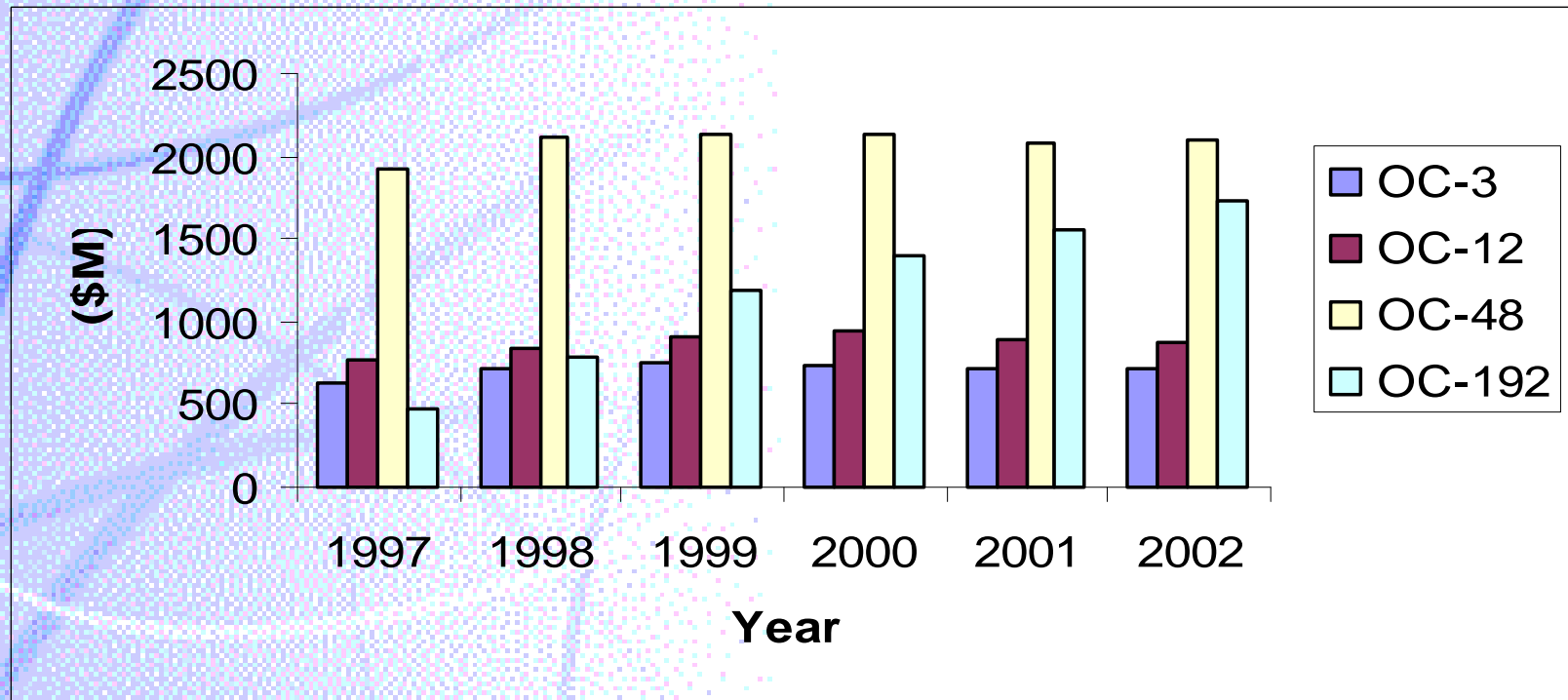
- 7 of Last 9 Pan-European Builds, and
- All China Optical Transport from now on...

# Global Data Communications Market, 1996-2002



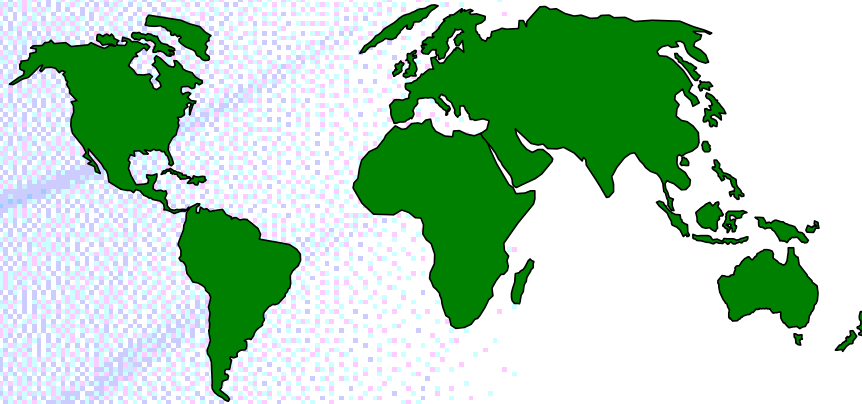
While Local area market increases 19%/year,  
**Metro and Wide area market increase 38%/year.**  
Enterprise market is \$49 billion in Year 2002;  
**MAN & WAN market is \$58 billion in Year 2002.**

# Total All Operator Spending Forecast on SONET Systems



**While all other speeds holding still,  
10 Gigabit system increases 31% a year on average.**

# Nortel Networks' Global 10 Gbps Projections

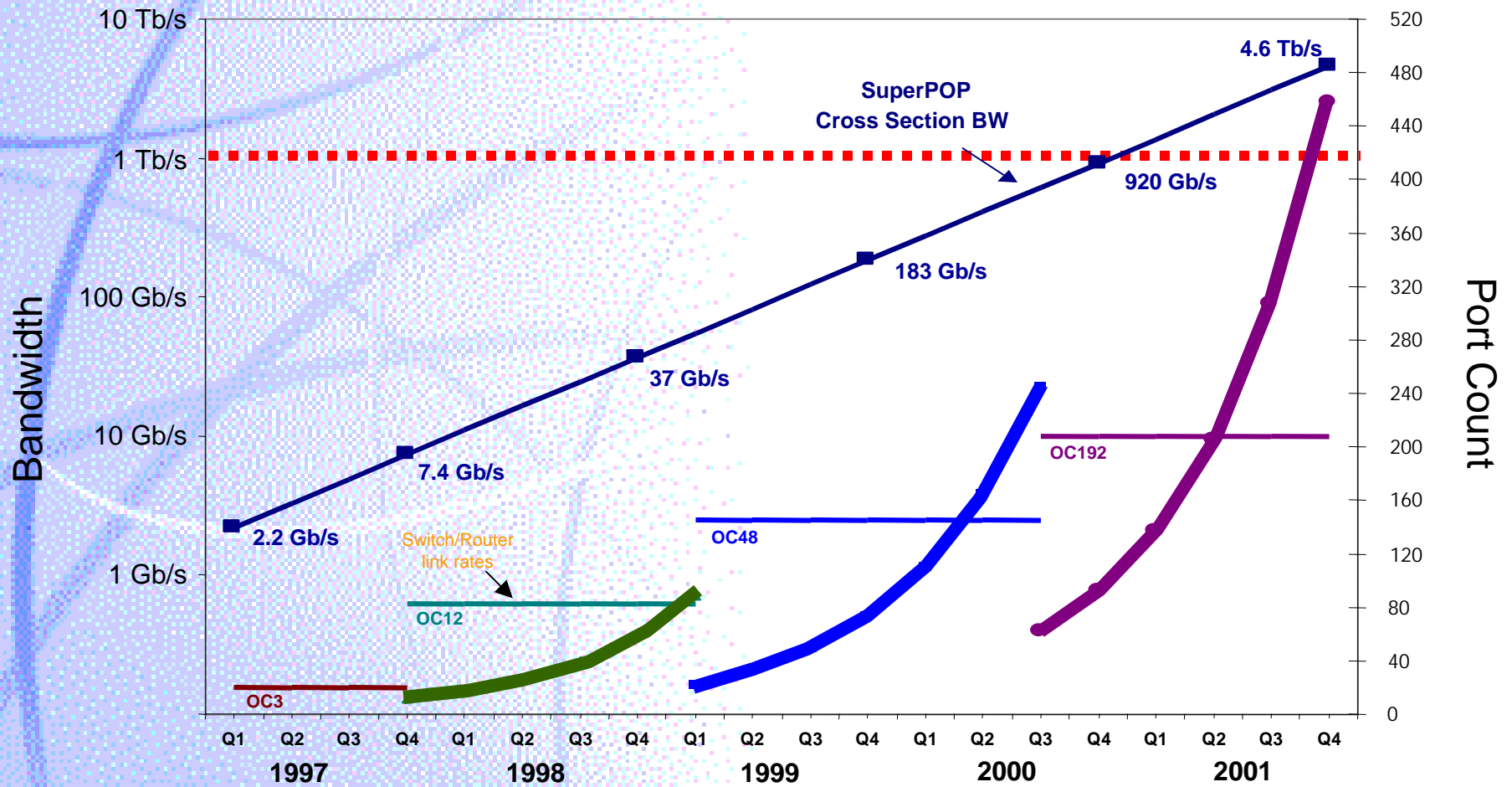


Year	10 Gbps Ports
1990 - 1998	76,922
1999	82,285
2000	1,120,000
2001	1,467,200
2002	1,922,000

**Nortel alone will ship 2,000,000 10 Gigabit ports in Year 2002**

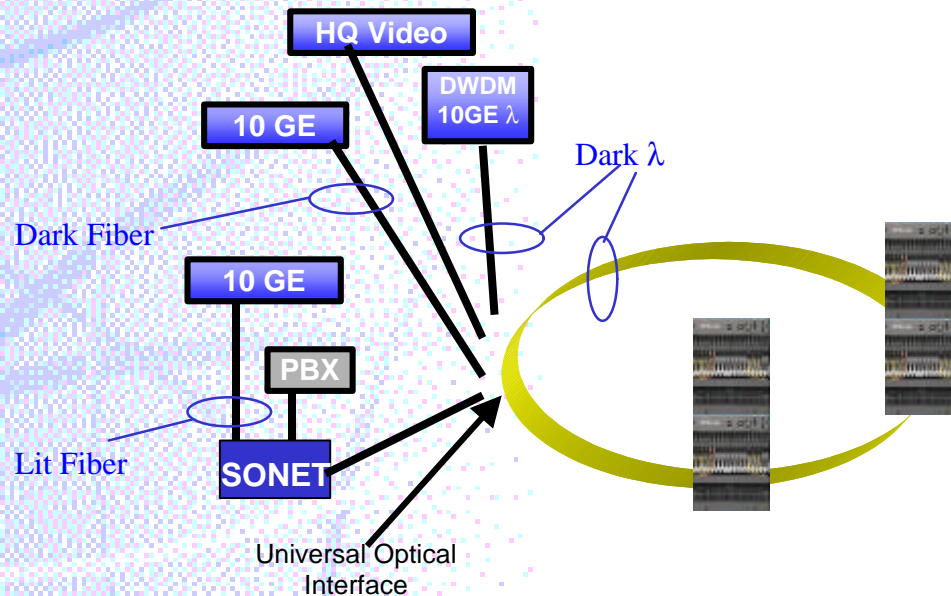
based upon 31% year to year growth from 2000 to 2002

# TeraPop Scale Requirements





# 10 Gigabit Ethernet - for Dark Fiber, Lit Fiber & Dark $\lambda$



**Using Ethernet as the ubiquitous link layer protocol for all networks**

**Using Ethernet as next generation DS0**

# **“Show Me the Power!”**

- **It’s magic time to unify the local, metro and wide area networks, and 10 Gbps Ethernet is a logical candidate**
- **By defining a SONET compatible 10 Gbps Ethernet, this committee serves right for the Ethernet community**

# “Show Me the Money!”

- It's magic time to unify the local, metro and wide area networks, and 10 Gbps Ethernet is a logical candidate
- By defining a SONET compatible 10 Gbps Ethernet, this committee serves right for the Ethernet community
- **Number of 10 Gbps ports is exploding over the next 3 years. 2 millions ports will be shipped by Nortel Networks alone in Year 2002**
- **And we ALL will make LOTS of money out of it!**