

**Metro DWDM Market Opportunities, Strategies, and
Forecasts, 2003 to 2008**

Metro DWDM



Picture by Susie Eustis

MOUNTAINS OF OPPORTUNITY

**WinterGreen Research, Inc.
Lexington, Massachusetts**

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CHECK OUT THESE KEY TOPICS

METRO DWDM MARKET SHARES

METRO DWDM MARKET FORECASTS

SERVICE PROVIDER METRO DWDM MARKET

Fundamental Changes of Metro Optical Networking Economics

DWDM Applications

XML Challenges For An Organization Increases Exponentially

NETWORK APPLIANCES

DISTRIBUTED COMPUTING ENVIRONMENTS

INTERNATIONAL ORGANIZATION FOR STANDARDS (ISO)

WAVE BAND ARCHITECTURES

METRO DWDM GROWTH OPPORTUNITIES

WIRE SPEED XML PROCESSING

METRO DWDM MARKET DYNAMICS

XML SWITCHING

MARKET CHALLENGES

METRO DWDM LINE SYSTEMS

OPPORTUNITY ABOUNDS

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With the growth of the Internet, demand for high bandwidth continues to increase. The ability to increase transport capacity is needed to permit development of consumer markets for video and data services. High bandwidth is needed by business to improve productivity, permit working from home, and increase supply chain efficiency.

Metro DWDM markets are shifting as the prices for laser components come down. Optical micro components promise to include more integrated functionality, at less cost per component, increasing the efficiency of metro DWDM systems.

Metro DWDM brings innovative technologies to the broadband market. Platforms are evolving that extend transmission systems into access, supporting the engagement of multiple value added services on DWDM platforms. There is a convergence of transmission and digital loop carrier platform technology.

Companies need to have a technology that combines both time-to-market and time-to-volume production. Market advantage is achieved by a sustainable product offering. Metro DWDM represents a major market shift impacting DWDM inventory and products, creating a differentiation between products and a major product advantage for companies with affordable lasers and components.

IP traffic is growing faster than IP service revenue. Economic law states that optical expenditure per bit must decline faster than revenue per bit. A change to the business model is needed. Service provider metro DWDM equipment markets are stung by the fact that revenue persists to come from landline voice services. The service provider revenue per bit is down 51%. Traffic is up 113%. Revenue is up 4%.

Optical metro transport equipment markets are projected to have growth through 2008. Three optical segments: DWDM Metro, SONET/SDH MS, and optical switches are forecast to resume growth in 2004 and grow through 2008. Growth of these three segments will not be sufficient to offset further decline of long haul DWDM terrestrial markets. Metro applications of optical equipment are expected to recover prior to long haul applications, as service providers continue to deploy revenue-generating connections to consumers.

Companies Profiled

Market Leaders

Nortel Networks
Ciena
Lucent Technologies
Alcatel
Tellabs
Siemens
Sorrento
NEC

Other Market Participants

ADVA Optical	JDS Uniphase
Agilent Technologies	Huawei
Avici Systems	Lightbit
Avonex	Lumentis
Cisco	Manticom Networks
Corning	Marconi
ECI Telecom	Optical Micro-Machines
Ericsson	PacketLight
Fujitsu Optical Transport Solutions	Sycamore Networks
Hewlett Packard	Telect

Metro DWDM Market Strategies and Forecasts, 2003-2008

REPORT METHODOLOGY

THIS IS THE *TWO-HUNDRETH* REPORT IN A SERIES OF MARKET RESEARCH REPORTS THAT PROVIDE FORECASTS IN COMMUNICATIONS, TELECOMMUNICATIONS, THE INTERNET, COMPUTER, SOFTWARE, AND TELEPHONE EQUIPMENT. THE PROJECT LEADERS TAKE DIRECT RESPONSIBILITY FOR WRITING AND PREPARING EACH REPORT. THEY HAVE SIGNIFICANT EXPERIENCE PREPARING INDUSTRY STUDIES. FORECASTS ARE BASED ON PRIMARY RESEARCH AND PROPRIETARY DATA BASES. FORECASTS REFLECT ANALYSIS OF THE MARKET TRENDS IN THE SEGMENT AND RELATED SEGMENTS. UNIT AND DOLLAR SHIPMENTS ARE ANALYZED THROUGH CONSIDERATION OF DOLLAR VOLUME OF EACH MARKET PARTICIPATION IN THE SEGMENT. INSTALLED BASE ANALYSIS AND UNIT ANALYSIS IS BASED ON INTERVIEWS AND AN INFORMATION SEARCH. MARKET SHARE ANALYSIS INCLUDES CONVERSATIONS WITH KEY CUSTOMERS OF PRODUCTS, INDUSTRY SEGMENT LEADERS, MARKETING DIRECTORS, DISTRIBUTORS, LEADING MARKET PARTICIPANTS, OPINION LEADERS, AND COMPANIES SEEKING TO DEVELOP MEASURABLE MARKET SHARE. OVER 200 IN DEPTH INTERVIEWS ARE CONDUCTED FOR EACH REPORT WITH A BROAD RANGE OF KEY PARTICIPANTS AND INDUSTRY LEADERS IN THE MARKET SEGMENT.

YOU MUST HAVE THIS STUDY

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ABOUT THE COMPANY

WINTERGREEN RESEARCH, FOUNDED IN 1985, PROVIDES STRATEGIC MARKET ASSESSMENTS IN TELECOMMUNICATIONS, COMMUNICATIONS EQUIPMENT, HEALTH CARE, AND ADVANCED COMPUTER TECHNOLOGY. INDUSTRY REPORTS FOCUS ON OPPORTUNITIES THAT WILL EXPAND EXISTING MARKETS OR DEVELOP MAJOR NEW MARKETS. THE REPORTS ASSESS NEW PRODUCT AND SERVICE POSITIONING STRATEGIES, NEW AND EVOLVING TECHNOLOGIES, AND TECHNOLOGICAL IMPACT ON PRODUCTS, SERVICES, AND MARKETS. MARKET SHARES ARE PROVIDED. LEADING MARKET PARTICIPANTS ARE PROFILED, AND THEIR MARKETING STRATEGIES, ACQUISITIONS, AND STRATEGIC ALLIANCES ARE DISCUSSED. THE PRINCIPALS OF WINTERGREEN RESEARCH HAVE BEEN INVOLVED IN ANALYSIS AND FORECASTING OF INTERNATIONAL BUSINESS OPPORTUNITIES IN TELECOMMUNICATIONS AND ADVANCED COMPUTER TECHNOLOGY MARKETS FOR OVER 30 YEARS.

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ELLEN T. CURTISS, TECHNICAL DIRECTOR, CO-FOUNDER OF WINTERGREEN RESEARCH, CONDUCTS STRATEGIC AND MARKET ASSESSMENTS IN TECHNOLOGY-BASED INDUSTRIES. PREVIOUSLY SHE WAS A MEMBER OF THE STAFF OF ARTHUR D. LITTLE, INC., FOR 23 YEARS, MOST RECENTLY AS VICE PRESIDENT OF ARTHUR D. LITTLE DECISION RESOURCES, SPECIALIZING IN STRATEGIC PLANNING AND MARKET DEVELOPMENT SERVICES. SHE IS A GRADUATE OF BOSTON UNIVERSITY AND THE PROGRAM FOR MANAGEMENT DEVELOPMENT AT HARVARD GRADUATE SCHOOL OF BUSINESS ADMINISTRATION. SHE IS THE AUTHOR OF RECENT STUDIES ON WORLDWIDE TELECOMMUNICATIONS MARKETS, THE TOP TEN INTERNET EQUIPMENT COMPANIES, THE TOP TEN CONTRACT MANUFACTURING COMPANIES, AND THE TOP TEN TELECOMMUNICATIONS MARKET ANALYSIS AND FORECASTS.

SUSAN EUSTIS, PRESIDENT, CO-FOUNDER OF WINTERGREEN RESEARCH, HAS DONE RESEARCH IN COMMUNICATIONS AND COMPUTER MARKETS AND APPLICATIONS. SHE HOLDS SEVERAL PATENTS IN MICROCOMPUTING AND PARALLEL PROCESSING. SHE HAS THE ORIGINAL PATENTS IN ELECTRONIC VOTING MACHINES. SHE HAS NEW PATENT APPLICATIONS IN FORMAT VARYING, MULTIPROCESSING, AND ELECTRONIC VOTING. SHE IS THE AUTHOR OF RECENT STUDIES OF THE REGIONAL BELL OPERATING COMPANIES' MARKETING STRATEGIES, INTERNET EQUIPMENT, BIOMETRICS, A STUDY OF INTERNET EQUIPMENT, WORLDWIDE TELECOMMUNICATIONS EQUIPMENT, TOP TEN TELECOMMUNICATIONS, DIGITAL LOOP CARRIER, WEB HOSTING, WEB SERVICES, AND APPLICATION INTEGRATION MARKETS. MS. EUSTIS IS A GRADUATE OF BARNARD COLLEGE.

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