Optical Networking for Tier 2/3 Operators in North America

EXECUTIVE SUMMARY

Historically, much of the attention in optical networking has centered on Tier 1 network operators. This is not particularly surprising, since big operators generate enormous amounts of revenue each year and, in turn, spend enormous amounts on equipment for their networks. However, looking at the Tier 1 network operators alone ignores much of the market: The FCC reports more than 5,000 active operators in the U.S. alone. And while the vast majority of these operators are clearly "Mom and Pop"-type operations serving only a few thousand subscribers each, there are also dozens of other operators that are easily classified as "large businesses" by any definition.

The structure, needs, behaviors, and suppliers of North America's Tier 2/3 operators are different – in some ways very different – from those of the Tier 1s. Optical Networking for Tier 2/3 Operators in North America provides a focused and in-depth analysis of the Tier 2/3 optical networking market in North America. The report includes Heavy Reading's first-ever forecast for optical transport spending among Tier 2/3 operators in North America, as well as a complete five-year forecast for optical transport spending across all operators in the region. The forecasts include a breakout of spending projections by product type in the four major optical transport categories:

- Multiservice Sonet
- Long-haul DWDM
- Metro/regional WDM
- Packet-optical transport systems (P-OTS)

The report features in-depth optical deployment profiles for three Tier 2 operators, and includes a detailed competitive analysis of product line offerings from 10 major optical transport technology suppliers.

For the full list of technology suppliers analyzed in this report, click here.

The Tier 2/3 operator forecast data presented in this report is derived from Heavy Reading's existing forecasts for the North American optical transport equipment market, including Heavy Reading forecasts for long-haul DWDM, metro/regional WDM, multiservice Sonet, and P-OTS. To these existing forecasts, Heavy Reading applied a series of assumptions to create the Tier 2/3 subsets of each equipment segment. Individual segment forecasts were aggregated to produce the total North American Tier 2/3 optical transport forecast presented in this report.
Forecast assumptions were produced following a series of in-depth, one-on-one interviews with leading North American equipment suppliers, relevant industry groups and standards organizations, and Tier 2/3 network operators. These in-depth interviews were supplemented by a host of secondary sources, including financial reports filed with the U.S. Securities and Exchange Commission (SEC), prior *Heavy Reading* research, press releases, articles published in trade and business publications, and technical papers and presentations from conferences, including *Light Reading*’s own events.

The report provides market-share information for optical transport suppliers in the Tier 2/3 North American market in terms of both total market share and market share by the four major optical transport product categories.

**Excerpt 1: Tier 2/3 Multiservice Sonet Share by Vendor, 2007-1H08**

2007 Total=$346.7M; 1H08 Total=$163.1M
Source: *Heavy Reading*

Market-share data for the full year 2007 and the first half of 2008 were derived from existing *Heavy Reading* optical networking market-share data, which we gather from equipment suppliers on a quarterly basis. To these overall revenue figures, we applied assumptions to produce Tier 2/3 revenue figures for each vendor and for each segment. Assumptions were based primarily on announced and known customer lists for each vendor included.

**Report Scope & Structure**

*Optical Networking for Tier 2/3 Operators in North America* is structured as follows:

**Section I** is an introduction to the report, with complete report key findings.

**Section II** provides a market overview providing *Heavy Reading* optical transport equipment segment definitions and definitions of North American Tier 1, Tier 2, and Tier 3 operators, as well as an outline of the general market structure.

**Section III** provides forecasts for the Tier 2/3 optical transport market in North America, including individual forecasts for long-haul DWDM, metro/regional WDM, multiservice Sonet, and P-OTS.
Section IV details market-share data for 2007 and the first half of 2008 for the Tier 2/3 optical transport market in North America, including shares for total optical transport and individual equipment segments, including long-haul DWDM, metro/regional WDM, and multiservice Sonet.

Section V profile profiles three Tier 2/3 network operators, namely AboveNet, Mid-Atlantic Broadband Cooperative (MBC), and SureWest.

Section VI profiles leading suppliers of optical equipment to Tier 2/3 operators, with an emphasis on equipment suppliers for which Tier 2/3 operators are strategically significant to their growth strategies.

The report is essential reading for a wide range of industry participants, including the following:

- **Telecom service providers:** What level of investment will smaller network operators make in optical transport technology, and how will Tier 2 and Tier 3 optical transport deployments affect the overall market? What kinds of factors are most likely to drive – or stall – the continued development of optical transport systems? Which suppliers and product types are emerging as the leaders in this important technology sector?

- **Telecom equipment manufacturers:** What are the likely demand trends among Tier 2/3 network operators for optical transport? How does your product portfolio match up to expected demand? Which technology suppliers are emerging as the market leaders? Is your company “timing the market” correctly?

- **Component and subsystem suppliers:** What is the most likely demand curve scenario for optical transport products? Which equipment suppliers are likely to emerge as the demand leaders in this sector? Where are the market opportunities for your components and subsystems?

- **Investors:** How will the current economic climate affect the optical networking sector? Which technology providers are likely to emerge as the main suppliers of next-gen optical transport products, and when are they most likely to reap those benefits?

**Optical Networking for Tier 2/3 Operators in North America** is published in PDF format.