Survey Methodology

Heavy Reading’s 2004 Survey of Carrier Attitudes Toward IP/MPLS Backbones and VPNs was created to gauge carrier perceptions of how the migration toward network services based on converged IP/MPLS backbones will take place. The survey was based on a questionnaire created by Heavy Reading analysts in November 2003. After the initial questionnaire was drafted and a number of refinements were made, the questionnaire was posted to a Heavy Reading Website on December 12, 2003.

At that point, Heavy Reading sent email invitations to participate in the survey to service provider candidates culled from various sources, including all users registered as service provider employees with Websites operated by Light Reading Inc., the parent company of Heavy Reading. Invitations included an incentive in the form of a chance for participants to win a $1,000 gift certificate.

The first invitations to participate in the online survey were sent on December 12, 2003. Follow-up invitations were sent on December 18. Responses to the survey were accepted through December 30, 2003.

Heavy Reading received 809 responses from parties interested in participating in the online survey. From this pool of potential respondents, 404 met the baseline qualifications and were allowed to participate. Baseline qualifications included the following:

- The respondent must work for a service provider.
- The respondent must identify his/her employer.
- The respondent must provide his/her name and email address for verification purposes.

After supplying information about themselves and their employers, respondents were asked a series of multiple-choice questions regarding their perceptions of and attitudes toward deployment of VPN technologies and services. Respondents were asked to identify which types of data services their company either offers now or plans to offer from the following list:

- Private circuits
- Frame Relay
- ATM
- Ethernet services
- Layer 3 IP/MPLS VPN services

Respondents were then asked further questions only about the services they identified as being either offered or planned by their company. (For a complete list of questions, see Section V of this report.)

In addition to the multiple-choice questions, all respondents were asked an open-ended question about perceived factors affecting the migration to IP/MPLS backbones. Answers to this question were given on a write-in basis. (See Section IV of this report for further explanation and analysis.)

Tabulating Results

For each multiple-choice survey question regarding perceived benefits and deterrents to deploying IP/MPLS technology, answer choices were assigned numerical values to signify each choice’s degree of importance. In this survey, Heavy Reading used a scale of 0 to 100 for to determine comparative ratings, with 100 representing the maximum importance and 0 representing the minimum. For questions about the importance of specific benefits of deploying IP/MPLS-based services, for instance, the rating scale was applied as follows:
● Essential = 100
● Very Important = 75
● Moderately Important = 50
● Marginally Important = 25
● Not Important at All = 0

For questions about the importance of specific drawbacks of deploying IP/MPLS-based services, the rating scale was applied as follows:

● Deal Breaker = 100
● Big Deterrent = 75
● Moderate Deterrent = 50
● Marginal Deterrent = 25
● No Deterrent at All = 0

Comparative ratings for each question were determined by (1) multiplying the number of responses for each answer choice by the rating scale, (2) adding those subtotals, and (3) dividing the final sum by the total number of responses to the question.

Demographic Breakouts Used in This Report
In analyzing survey results, this report uses the following groupings to represent key segments of the respondent base:

Geographic Region
All responses from the United States and Canada are grouped under the North America label.
All responses from Eastern Europe and Western Europe are grouped under the Europe label.
The Asia/Pacific grouping includes all responses from that region, including Australia, China, and India.

Carrier Type
The term Incumbents refers to all responses from incumbent national telecom operators, long-distance operators, Bell companies, other incumbent local exchange carriers, and rural local exchange carriers.
The term Competitors refers to all responses from competitive local exchange carriers, Internet service providers, cable/MSO operators, international service providers, and wholesale service providers.