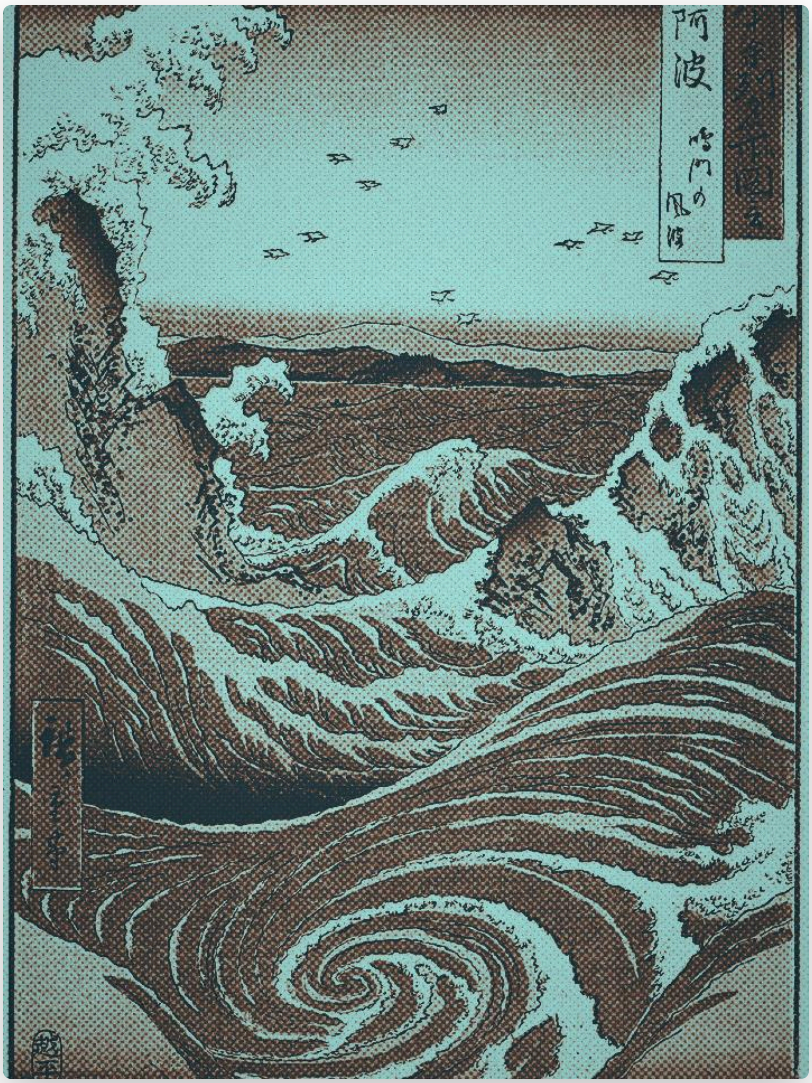
FORM S-1 · REGISTRATION STATEMENT

Cosine Communications Inc

IPO priced 2000-09-25 · $23.00 a share · COSN



From S1 Directory · www.s1directory.com/s1/cosine-communications-inc/ · Source: https://www.sec.gov/Archives/edgar/data/1060824/0000891618-00-002418.txt

AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON APRIL 28, 2000 REGISTRATION NO. 333-

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-1 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

COSINE COMMUNICATIONS, INC. (EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

CALIFORNIA (PRIOR TO REINCORPORATION) DELAWARE (AFTER REINCORPORATION) (STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	3576 (PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE NUMBER)	94-3280301 (I.R.S. EMPLOYER IDENTIFICATION NUMBER)

3200 BRIDGE PARKWAY REDWOOD CITY, CALIFORNIA 94065 (650) 637-4777 (ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES) DEAN E. G. HAMILTON PRESIDENT AND CHIEF EXECUTIVE OFFICER COSINE COMMUNICATIONS, INC. 3200 BRIDGE PARKWAY REDWOOD CITY, CALIFORNIA 94065 (650) 637-4777 (NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE)

COPIES TO:

JOHN A. FORE, ESQ.
IAN J. STOCK, ESQ.
PAUL H. HARTZEL, ESQ.
EDWARD F. VERMEER, ESQ.
WILSON SONSINI GOODRICH & ROSATI
PROFESSIONAL CORPORATION
650 PAGE MILL ROAD
PALO ALTO, CA 94304
(650) 493-9300

JOHN L. SAVVA, ESQ.
ALBERT Y. LIU, ESQ.
JAMES J. VIECELI, III, ESQ.
SULLIVAN & CROMWELL
1888 CENTURY PARK EAST, SUITE 2100
LOS ANGELES, CA 90067
(310) 712-6600

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: AS SOON AS PRACTICABLE AFTER THE EFFECTIVE DATE OF THIS REGISTRATION STATEMENT.

IF ANY OF THE SECURITIES BEING REGISTERED ON THIS FORM ARE TO BE OFFERED ON A DELAYED OR CONTINUOUS BASIS PURSUANT TO RULE 415 UNDER THE SECURITIES ACT OF 1933, CHECK THE FOLLOWING BOX. [ ] IF THIS FORM IS FILED TO REGISTER ADDITIONAL SECURITIES FOR AN OFFERING PURSUANT TO RULE 462(B) UNDER THE SECURITIES ACT, CHECK THE FOLLOWING BOX AND LIST THE SECURITIES ACT REGISTRATION STATEMENT NUMBER OF THE EARLIER EFFECTIVE REGISTRATION STATEMENT FOR THE SAME OFFERING. [ ] _____ IF THIS FORM IS A POST-EFFECTIVE AMENDMENT FILED PURSUANT TO RULE 462(C) UNDER THE SECURITIES ACT, CHECK THE FOLLOWING BOX AND LIST THE SECURITIES ACT REGISTRATION STATEMENT NUMBER OF THE EARLIER EFFECTIVE REGISTRATION STATEMENT FOR THE SAME OFFERING. [ ] _____ IF THIS FORM IS A POST-EFFECTIVE AMENDMENT FILED PURSUANT TO RULE 462(D) UNDER THE SECURITIES ACT, CHECK THE FOLLOWING BOX AND LIST THE SECURITIES ACT REGISTRATION STATEMENT NUMBER OF THE EARLIER EFFECTIVE REGISTRATION STATEMENT FOR THE SAME OFFERING. [ ] _____ IF DELIVERY OF THE PROSPECTUS IS EXPECTED TO BE MADE PURSUANT TO RULE 434, PLEASE CHECK THE FOLLOWING BOX. [ ]

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(1)	AMOUNT OF REGISTRATION FEE
Common Stock ($.0001 par value).....	$120,000,000	$31,680

(1) ESTIMATED SOLELY FOR THE PURPOSE OF DETERMINING THE REGISTRATION FEE PURSUANT TO RULE 457(O) PROMULGATED UNDER THE SECURITIES ACT.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

THE INFORMATION IN THIS PRELIMINARY PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THESE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PRELIMINARY PROSPECTUS IS NOT AN OFFER TO SELL NOR DOES IT SEEK AN OFFER TO BUY THESE SECURITIES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION. DATED APRIL 28, 2000.

SHARES

COSINE COMMUNICATIONS LOGO COMMON STOCK THIS IS AN INITIAL PUBLIC OFFERING OF SHARES OF COMMON STOCK OF COSINE COMMUNICATIONS, INC. ALL OF THE SHARES OF COMMON STOCK ARE BEING SOLD BY COSINE.

PRIOR TO THIS OFFERING, THERE HAS BEEN NO PUBLIC MARKET FOR OUR COMMON STOCK. IT IS CURRENTLY ESTIMATED THAT THE INITIAL PUBLIC OFFERING PRICE WILL BE BETWEEN $ AND $ PER SHARE. APPLICATION HAS BEEN MADE FOR QUOTATION OF THE COMMON STOCK ON THE NASDAQ NATIONAL MARKET UNDER THE SYMBOL "COSN".

SEE "RISK FACTORS" BEGINNING ON PAGE 8 TO READ ABOUT FACTORS YOU SHOULD CONSIDER BEFORE BUYING SHARES OF THE COMMON STOCK.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY OTHER REGULATORY BODY HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	PER SHARE	TOTAL
Initial public offering price	$	$
Underwriting discount	$	$
Proceeds, before expenses, to CoSine	$	$

TO THE EXTENT THE UNDERWRITERS SELL MORE THAN SHARES OF COMMON STOCK, THE UNDERWRITERS HAVE THE OPTION TO PURCHASE UP TO AN ADDITIONAL SHARES FROM COSINE AT THE INITIAL PUBLIC OFFERING PRICE LESS THE UNDERWRITING DISCOUNT.

THE UNDERWRITERS EXPECT TO DELIVER THE SHARES AGAINST PAYMENT IN NEW YORK, NEW YORK ON , 2000.

GOLDMAN, SACHS & CO. CHASE H&Q ROBERTSON STEPHENS J.P. MORGAN & CO.

PROSPECTUS DATED , 2000.

DESCRIPTION OF GRAPHICS

INSIDE COVER / FOLDOUT DIAGRAM:

THIS DIAGRAM SHOWS 2 LEVELS OF 6 EVENLY DISTRIBUTED ICONS THAT EXTEND FROM AND ARE CONNECTED TO A CENTRAL CORE ICON, FOR A TOTAL OF 12 ICONS THAT CONNECT TO THE CORE. AT THE CORE THERE IS A CIRCUIT CLOUD SURROUNDED BY A SECOND LARGER CIRCUIT CLOUD WHICH REPRESENTS A VALUE-ADDED SERVICE DELIVERY LAYER. ALONG THE BORDERS OF THE LARGER CIRCUIT CLOUD THERE ARE PICTURES OF 6 IPSX 9000S THAT ARE CONNECTED BY LINES TO THE CORE CIRCUIT CLOUD. EXTENDING OUT FROM EACH OF THE IPSX 9000S ARE THE OTHER 6 ICONS. STARTING FROM THE UPPER LEFT SIDE OF THE DIAGRAM, THERE IS A CIRCUIT CLOUD LABELED REGIONAL ISP, AND THE SPACE BETWEEN THE REGIONAL ISP AND THE IPSX 9000 IS LABELED WHOLESALE. ON THE UPPER RIGHT SIDE OF THE DIAGRAM, THERE IS A CIRCULAR ICON LABELED SUBSCRIBER SITE, AND THE SPACE BETWEEN THE SUBSCRIBER SITE AND THE IPSX 9000 IS LABELED RETAIL. ON THE RIGHT SIDE OF THE DIAGRAM, THERE IS A CIRCULAR ICON LABELED INTERNET, AND TO THE BOTTOM RIGHT OF THIS ICON THERE IS A CIRCULAR ICON LABELED DATA CENTER

APPLICATION SERVICE PROVIDER. ON THE BOTTOM LEFT SIDE OF THE DIAGRAM, THERE IS A CLUSTER OF 3 SMALLER CIRCULAR ICONS COLLECTIVELY LABELED DSL CABLE MODEM WIRELESS, AND THE SPACE BETWEEN THIS ICON AND THE IPSX 9000 IS LABELED BROADBAND ACCESS. ON THE LEFT SIDE OF THE DIAGRAM, THERE IS ONE LAST ICON LABELED TELECOMMUTERS.

INSIDE LEFT FOLDOUT DIAGRAM:

THIS DIAGRAM SHOWS A PICTURE OF AN IPSX 9000 POSITIONED AT THE CENTER OF THE DIAGRAM, WITH THE WORDS IPSX 9000 ON TOP OF THE ICON AND [BULLETS TO COME]. TO THE LEFT OF THE IPSX 9000, THERE IS A PICTURE OF A COMPUTER MONITOR WITH KEYBOARD, WITH THE WORDS INVISION ON TOP, AND [BULLETS TO COME]. TO THE RIGHT OF THE IPSX 9000, THERE IS ANOTHER PICTURE OF A COMPUTER MONITOR WITH KEYBOARD, WITH THE WORDS INGAGE ON TOP, AND [BULLETS TO COME]. BELOW THE IPSX 9000 THERE ARE 3 SQUARE ICONS EVENLY DISTRIBUTED CONNECTED BY DOTS TO THE IPSX 9000. THE FIRST ICON, ON THE BOTTOM LEFT SIDE OF THE DIAGRAM, IS LABELED CARRIER-CLASS ROUTING. THE SECOND ICON, ON THE BOTTOM CENTER, IS LABELED MASSIVELY PARALLEL COMPUTING. THE THIRD ICON, ON THE BOTTOM RIGHT SIDE OF THE DIAGRAM, IS LABELED HIGH SPEED SWITCHING.

RIGHT FOLDOUT:

THIS DIAGRAM SHOWS A LARGE CIRCULAR ICON POSITIONED AT THE CENTER OF THE DIAGRAM, WITH 9 SMALLER EVENLY DISTRIBUTED CIRCULAR ICONS EXTENDING FROM AND CONNECTED BY LINES TO THE CENTRAL ICON. ON THE BOTTOM RIGHT SIDE OF THE DIAGRAM THERE IS A PHRASE THAT SAYS "MARKET LEADING THIRD PARTY SERVICE APPLICATIONS." THE CENTRAL ICON IS LABELED OPERATING SYSTEM FOR COMPUTING NETWORKING. STARTING AT THE TOP, AND MOVING CLOCKWISE, THE ICONS ARE LABELED PUBLIC KEY INFRASTRUCTURE, ANTI VIRUS, NETWORK ADDRESS TRANSLATION, SERVICE SELECTION SWITCHING, FIREWALL, ENCRYPTION, VIRTUAL ROUTING, TUNNEL TERMINATION AND INTRUSION DETECTION.

INSIDE BACK COVER:

THIS DIAGRAM SHOWS A PICTURE OF THE OUTSIDE OF THE CORPORATE OFFICE BUILDING FOR COSINE. ON THE BOTTOM RIGHT SIDE OF THE DIAGRAM, THERE IS A COSINE LOGO BOX AND SOME TEXT. THE FIRST TWO LINES READ "COSINE COMMUNICATIONS," UNDER WHICH IT SAYS IN A SMALLER FONT SIZE "THE NEXT WAVE IN CARRIER SERVICES." THE NEXT SECTION OF TEXT GIVES THE ADDRESS AND CONTACT INFORMATION FOR COSINE. IT READS "COSINE COMMUNICATIONS, INC., 3200 BRIDGE PARKWAY, REDWOOD CITY, CA 94065 USA, TEL: 650.637.4777 OR 877.4COSINE, FAX: 650.637.2470, E-MAIL: INFO@COSINECOM.COM, WWW.COSINECOM.COM."

[INSIDE COVER ART]

COSINE COMMUNICATIONS, THE COSINE COMMUNICATIONS LOGO, INVISION, INGAGE, IPSX 9000 AND IPNOS ARE TRADEMARKS OF COSINE COMMUNICATIONS, INC. EACH TRADEMARK, TRADE NAME OR SERVICE MARK OF ANY OTHER COMPANY APPEARING IN THIS PROSPECTUS BELONGS TO ITS HOLDER.

Prospectus Summary

The following summary highlights information we present more fully elsewhere in this prospectus. This prospectus contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors described under the heading "Risk Factors" and elsewhere in this prospectus.

Cosine Communications, Inc.

We develop, market and sell the first open architecture communications platform designed to rapidly enable the delivery of market-leading applications and value-added services from within a service provider's network. Our Internet Protocol, or IP service delivery platform combines advanced hardware and software infrastructure products in an open architecture platform. Our platform is designed to allow the delivery of a wide variety of services simultaneously to thousands of subscribers from within the service provider's network. Our platform is designed to address the cost, management, complexity and scalability issues of value-added service delivery by moving the implementation of these services from the customer's premises to the service provider's point of presence. Our platform enables network service providers to provide a variety of value-added services such as virtual private networks, firewall services and secure broadband access. Our platform consists of three key elements: our IPSX 9000 service processing switch and InVision service management system, both of which we are currently shipping, and our InGage customer network management software, which is scheduled to be released for customer trials in the second quarter of 2000.

Our customers are network service providers that offer connectivity and value-added services directly to enterprise subscribers or on a wholesale basis to other service providers. Our IP service delivery platform is designed for a wide range of service providers. They include next-generation IP carriers, competitive local exchange carriers, inter-exchange carriers, regional bell operating companies, international phone companies and internet service providers. To date, we have entered into contracts with Qwest Communications, Nissho Electronics, Internet Initiative Japan, BroadBand Office, American Metrocomm and AduroNet.

Network service providers generally have focused on providing high bandwidth connectivity. As new entrants emerge in the service provider market, competition is making it difficult for service providers to differentiate their service offerings, except through pricing. As a result, service providers are seeking solutions that allow them to deliver value-added services in addition to high speed connectivity and realize incremental revenues. However, the current approaches to delivering value-added IP services are characterized by high operating expenses, management and configuration complexity and sealing difficulty for widespread service provisioning. Additionally, the operating systems found in most of today's network infrastructure products are proprietary and are highly inflexible and have not been designed to support the migration of third-party applications into the network.

In order to quickly offer new applications that customers demand without having to replace installed infrastructure, service providers need an open architecture platform that allows rapid changes in services and the rapid deployment of applications. Since a platform vendor generally cannot maintain core competencies in all service areas, an open platform that enables the use of market-leading services from third-party vendors is required.

Our products are designed to offer the following benefits for service providers and their end customers:

- - the ability for service providers to increase revenue by delivering profitable value-added services, such as extranet, intranet 3 and remote access virtual private network services, to their customers;

- - faster time to market for the delivery of new services by service providers;

- - reduced operating expenses for service providers through automated provisioning, customer self-provisioning, centralized billing capability and fewer on-site service calls;

- - the ability of service providers to attract new subscribers and reduce churn;

- - the ability of subscribers to monitor and control value-added services;

- - carrier-class reliability and scalability;

- - sophisticated software-based network management capabilities for service providers and their customers;

- - a flexible open architecture that can support market-leading third-party applications; and - - support for and interoperability with existing network standards and applications.

Our objective is to become the leading supplier of platforms designed specifically for the delivery of market-leading applications and value-added services from within service provider networks. The key elements of our strategy include:

- - leverage our open architecture to offer additional market-leading third-party service applications;

- - establish our platform as the leading solution in key markets;

- - extend our first mover advantage;

- - work closely with customers to facilitate the development of new services;

- - expand sales, distribution, support and service capabilities;

- - extend technology leadership; and - - pursue strategic alliances and acquisitions.

Our principal executive offices are located at 3200 Bridge Parkway, Redwood City, California 94065 and our telephone number is (650) 637-4777. We do not intend for information contained on our website, www.cosinecom.com, to constitute part of the prospectus. We were incorporated in the State of California in April 1997. We intend to reincorporate in the State of Delaware prior to the completion of this offering.

The Offering

Shares offered.....	shares
Shares to be outstanding after this offering.....	shares
Proposed Nasdaq National Market symbol.....	"COSN"
Use of proceeds.....	For general corporate purposes, including working capital and capital expenditures, and potential acquisitions of complementary products, technologies or businesses.

Except as otherwise indicated, the total number of shares to be outstanding after this offering is based on shares outstanding as of March 31, 2000 and 4,666,668 shares of Series E preferred stock that we expect to issue upon satisfaction of customary closing conditions:

- 8,319,705 shares of common stock issuable upon exercise of stock options outstanding as of March 31, 2000, with a weighted average exercise price of $2.06 per share;

- 8,231,226 shares of common stock reserved for future issuance under our stock option, director option and employee stock purchase plans, including amounts authorized for issuance subsequent to March 31, 2000; and - 1,058,726 shares of common stock issuable upon exercise of warrants outstanding as of March 31, 2000 at a weighted average exercise price of $0.55 per share.

Except as otherwise indicated, information in this prospectus:

- reflects a 4-for-1 stock split of our common stock that was effected as a stock dividend in May 1998;

- reflects the automatic exercise of certain warrants and the conversion of all of our outstanding shares of preferred stock into 67,297,803 shares of common stock upon the closing of this offering;

- assumes our reincorporation in Delaware; and - assumes no exercise of the underwriters' option to purchase additional shares in the offering.

The consolidated financial statements, summary consolidated financial information and selected consolidated financial data included elsewhere in this prospectus do not assume our reincorporation in Delaware and the issuance and conversion of shares of our Series E preferred stock into common stock, since neither has occurred as of March 31, 2000.

Summary Consolidated Financial Information

The following tables present our summary consolidated financial data. The data presented in these tables are from "Selected Consolidated Financial Data" and our historical consolidated financial statements and notes to those financial statements included elsewhere in this prospectus. You should read those sections for a further explanation of the financial data summarized here.

Pro forma basic and diluted net loss per share have been calculated assuming the automatic and assumed exercise of certain warrants and the conversion of all outstanding preferred stock, other than our Series E preferred stock expected to be issued upon satisfaction of customary closing conditions, into common stock.

	PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31, 1997	YEARS ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,	
		1998	1999	1999	2000
				(UNAUDITED)	
	(IN THOUSANDS, EXCEPT PER SHARE DATA)				
CONSOLIDATED STATEMENT OF OPERATIONS DATA:					
Revenue	$ --	$ --	$ --	$ --	$ 3,540
Gross profit	$ --	$ --	$ --	$ --	$ 940

Loss from operations.....	(134)	(9,078)	(38,393)	(6,777)	(39,609)
Net loss.....	(131)	(9,293)	(37,721)	(6,789)	(39,231)

Deemed dividend to Series D preferred stockholders..... -- -- -- -- (2,500) Net loss allocable to common stockholders..... (131) (9,293) (37,721) (6,789) (41,731) Basic and diluted net loss per common share..... $(0.25) $ (4.53) $ (7.80) (1.78) (6.67) Shares used in computing basic and diluted net loss per common share..... 522 2,051 4,837 3,817 6,255 Pro forma basic and diluted net loss per common share (unaudited)..... $ (0.75) $ (0.61) Shares used in computing pro forma basic and diluted net loss per common share (unaudited)..... 50,378 68,295 MARCH 31, 2000 PRO FORMA AS ACTUAL PRO FORMA(1) ADJUSTED(2) (UNAUDITED) (IN THOUSANDS)

CONSOLIDATED BALANCE SHEET DATA:			
Cash, cash equivalents, and short-term investments.....	$ 44,515	$117,646	$ --
Working capital.....	37,699	110,830	
Total assets.....	68,363	141,434	
Long-term obligations, less current portion.....	9,580	9,580	
Redeemable convertible preferred stock.....	104,662	--	
Total stockholders' equity (net capital deficiency).....	(62,175)	115,618	

(1) The pro forma consolidated balance sheet data gives effect to the automatic and assumed exercise of certain warrants and the conversion into common stock upon completion of this offering of our outstanding preferred stock and the Series E preferred stock expected to be issued upon the satisfaction of customary closing conditions. The pro forma consolidated balance sheet data also assumes Series E issuance costs of $150,000.

(2) The pro forma as adjusted balance sheet data gives effect to - the automatic and assumed exercise of certain warrants;

- the conversion into common stock upon completion of this offering of our outstanding preferred stock, including our Series E preferred stock expected to be issued upon satisfaction of customary conditions, assuming Series E issuance costs of $150,000; and - the sale of our common stock in this offering at an assumed initial public offering price of $, after deducting an assumed underwriting discount and estimated offering expenses payable by us.

Risk Factors

You should carefully consider the risks described below before making an investment decision. If any of the following risks actually occurs, our business, financial condition and results of operations could be seriously harmed. In that case, the trading price of our common stock could decline, and you may lose all or part of your investment.

WE HAVE A HISTORY OF LOSSES, EXPECT TO CONTINUE TO INCUR LOSSES AND MAY NEVER ACHIEVE PROFITABILITY.

As of March 31, 2000, we had an accumulated deficit of $86.4 million. We incurred net losses of $37.7 million in our fiscal year ended December 31, 1999, $9.3 million in our fiscal year ended December 31, 1998, and $131,000 in the period from our inception, April 14, 1997, to December 31, 1997. We have

only recently begun to recognize revenues, and we cannot be certain that our revenues will continue to grow or that we will generate sufficient revenues to become profitable. We have incurred significant research and development, sales and marketing and general and administrative expenses in the past and expect to continue to incur significant and increasing levels of expenses for the foreseeable future. As a result, we expect to continue to incur losses and will need to generate increased revenues to achieve profitability. Even if we achieve profitability we may be unable to sustain or increase profitability on a quarterly or annual basis given the novel nature of our products for delivering services to users of Internet Protocol, or IP, networks and the evolving nature of the market for our IP service delivery platform and competing products.

OUR LIMITED OPERATING HISTORY AND THE LIMITED SALES HISTORY OF OUR IP SERVICE DELIVERY PLATFORM MAKES FORECASTING OUR REVENUES AND OPERATING RESULTS DIFFICULT, WHICH MAY IMPAIR OUR ABILITY TO MANAGE OUR BUSINESS AND YOUR ABILITY TO ASSESS OUR PROSPECTS.

We were founded in April 1997, shipped our first test IP service delivery platform product in March 1999, and sold our first IP service delivery platform product in March 2000. As a result, we have limited meaningful historical financial data upon which to forecast our revenues and operating expenses and upon which you may evaluate us and our prospects. If we do not achieve our expected revenues, our operating results will be below our expectations and the expectations of investors and market analysts, which could cause the price of our stock to fall.

OUR FUTURE REVENUES DEPEND ON OUR CUSTOMERS' ABILITY TO GENERATE SALES OF SERVICES DELIVERED USING OUR PRODUCTS AND TO MANAGE DELIVERY OF THESE SERVICES TO THEIR CUSTOMERS.

Although we have generated revenue from sales to network service providers, they have yet to generate revenue from the sale of services delivered using our products. Purchases of our products may decline or be delayed if our customers do not successfully introduce commercial services derived from our IP service delivery platform or if our customers do not generate revenues from these services sufficient to realize an attractive return on their investment in our IP service delivery platform.

Among the factors that may influence the extent to which network service providers successfully sell those services to their customers and manage their delivery are the following:

- - network service providers' success in making their customers recognize the advantages and cost-effectiveness of the services offered using our products;

- - the ability of network service providers to recruit and train sales personnel who are familiar with the services that our products offer and support personnel who master the technical complexity of our products;

- - how well network service providers reorganize their administrative functions and staff to market, sell, invoice, order, support and otherwise provide for the services offered by our products in addition to the data transmission service that they currently offer to their customers; and - - the accuracy of

network service providers' forecasts of market trends and the services and features that our products should offer their customers.

MARKET ACCEPTANCE OF OUR IP SERVICE DELIVERY PLATFORM IS NOT ASSURED AND MAY NOT BE ACHIEVED.

We cannot assure you that the market will accept our IP service delivery platform for the delivery of value-added services to network service providers. If our IP service delivery platform does not achieve market acceptance, or if market acceptance occurs more slowly than we expect, our ability to increase our revenues and achieve profitability could be harmed.

Our products offer a new approach for delivering value-added services to network service providers, which may perceive our products as being more expensive than the technologies and products they currently purchase. Accordingly, the success of our products depends, in part, on our ability to make potential customers recognize the advantages and cost-effectiveness of our products.

In addition, many of our customers and potential customers have long-standing relationships with suppliers of competing technologies and network architectures that have already achieved a degree of market acceptance. If our IP service delivery platform does not achieve sufficient customer acceptance quickly, we may be unable to attract additional users to generate the volume of business necessary for widespread acceptance of our platform.

OUR IP SERVICE DELIVERY PLATFORM CURRENTLY IS OUR ONLY PRODUCT LINE, AND OUR FUTURE REVENUES SUBSTANTIALLY DEPEND ON ITS COMMERCIAL SUCCESS.

To date, our IPSX 9000 and InVision products are the only products that have been shipped to our customers. Our future revenues substantially depend on the commercial success of our IP service delivery platform product line. If our customers and potential customers do not adopt, purchase and successfully deploy our IP service delivery platform in large numbers, our revenue may not grow and our operating results will be seriously harmed.

BECAUSE OUR PRODUCTS ARE TECHNICALLY COMPLEX AND MAY CONTAIN ERRORS OR DEFECTS THAT ARE NOT FOUND UNTIL OUR PRODUCTS ARE FULLY DEPLOYED BY OUR CUSTOMERS, ANY UNDISCOVERED TECHNICAL ERRORS OR DEFECTS IN OUR PRODUCTS COULD SERIOUSLY HARM OUR BUSINESS.

Customers who have purchased our products have not yet fully deployed the IP networks that use our products and may not choose to do so. Our products are more complicated than most networking products, combining our proprietary hardware and software operating system and incorporating third-party application software. Moreover, they are deployed in complex environments at the interfaces among different types of private and public networks. Accordingly, they can be adequately tested only when completely deployed in very large and diverse networks with high amounts of traffic. Our customers or their end users may discover errors or defects in our hardware or software, or the product may not operate as expected, after it has been fully deployed. Errors or other problems that may be identified in full deployment could result in:

- - loss of current customers and loss of or delay in revenues and loss of market share;

- - failure to attract new customers or achieve market acceptance;

- - diversion of development resources;

- - increased service and warranty costs; and - - increased insurance costs.

THE LONG SALES AND IMPLEMENTATION CYCLES FOR OUR PLATFORM, AS WELL AS THE EXPECTATION THAT CUSTOMERS WILL SPORADICALLY PLACE LARGE ORDERS WITH SHORT LEAD TIMES, MAY CAUSE OUR REVENUES AND OPERATING RESULTS TO VARY SIGNIFICANTLY FROM QUARTER TO QUARTER.

Our sales cycle is long and depends on factors outside of our control. In addition, we expect that customers will tend to sporadically place large orders. As a result, our revenues and operating results may vary significantly and unexpectedly from quarter to quarter.

A customer's decision to purchase our IP service delivery platform involves a significant commitment of its resources and a lengthy evaluation, testing and product qualification process involving the customer itself and, if our customer is a network service provider, its end user customers. Throughout the sales cycle, we spend considerable time and expense educating and providing information to prospective network service provider customers and their end users about the uses and features of our platform.

Even after a customer decides to purchase our platform, significant additional time is needed to configure and build the products ordered. We believe that our network service provider customers and their end users will deploy our products slowly and deliberately. Timing of deployment can vary widely and depends on a number of factors outside of our control, including the technical skills of the customer and its end users, the size of the network deployment, the complexity of the network environment and the degree of hardware and software configuration necessary. As a result, our sales cycle is likely to be lengthy.

Network service providers and other customers with significant or complex networks usually expand their networks in large increments on a periodic basis. Accordingly, we may receive purchase orders for significant dollar amounts on an irregular and unpredictable basis.

THE UNPREDICTABILITY AND POTENTIAL FLUCTUATIONS OF OUR QUARTERLY AND ANNUAL REVENUES AND OPERATING RESULTS MAY RESULT IN VOLATILITY IN THE TRADING PRICE OF OUR STOCK PRICE.

Our revenues and operating results are likely to vary significantly from quarter to quarter due to a number of factors, many of which are outside of our control. If our operating results in future quarters are below public market analysts' or investors' expectations, the trading price of our stock likely will fall. Factors that may cause fluctuations in our revenues and operating results include:

- - demand for and timing of sales of our products;

- - the ability of our suppliers to timely produce and deliver components and parts, including sole or limited source components, in the quantity and with the quality desired and at the prices we have budgeted;

- - introduction of new products and product enhancements by our competitors, entry of new competitors into our market, pricing pressures and other competitive factors;

- - our ability to develop, introduce, manufacture and ship new and enhanced products in a timely manner without defects;

- - the mix of hardware, software and services sold and the configuration of products sold;

- - the mix of domestic and international sales;

- - seasonality in the sales of our products due, in part, to customers' budgetary cycles and potentially lower sales in European markets during the summer months;

- - decisions by network service providers and their end users to adopt alternative technologies or reallocate their resources to other architectures;

- - our ability to attain and maintain production volumes and quality levels for our products; and - - growth in the use of the Internet and the demand for Internet-based products.

Our operating expenses are based largely on anticipated revenue trends, and a significant percentage of our expenses are, and will continue to be, fixed in the short term. As a result, a delay in generating or recognizing revenue for the reasons described above, or for any other reason, could cause significant variations in our operating results from quarter to quarter and could result in substantial operating losses.

Due to these and other factors, we believe that quarter-to-quarter comparisons of our operating results will not be meaningful. You should not rely on our results for any quarter as an indication of our future performance.

SALES OF OUR PRODUCTS DEPEND ON CONTINUED DEVELOPMENT AND MARKET ACCEPTANCE OF OUR OPEN ARCHITECTURE.

Our IP service delivery platform uses our open architecture that is designed to facilitate the development of new applications and the adaptation of existing applications by third parties for use in the platform. For our customers to fully realize the benefits of this open architecture, we must continue to develop new technologies, processes and standards and make third-party software providers recognize the advantages of our open architecture, and we must support their software development efforts. If we fail to develop these technologies, processes and standards or third-party software providers do not develop or adapt software applications for our platform, our open architecture may not become widely accepted and sales of our products may decline.

IF NETWORKS PROTECTED BY NETWORK SECURITY SERVICES DELIVERED USING OUR PRODUCTS SUFFER A LOSS OF SECURITY, THE MARKET PERCEPTION OF OUR PRODUCTS COULD BE HARMED AND WE MAY BE SUBJECT TO LAWSUITS RELATED TO LOSSES

SUFFERED BY CUSTOMERS OR THEIR END USERS.

Our success will depend in part on the ability of our products to enable effective network security. Even networks protected by network security services delivered using our IP service delivery platform may be vulnerable to electronic break-ins. If an actual or perceived breach of network security occurs in a customer's or end-user's network that uses our products, the market perception of our products could be harmed, and we could lose current and potential customers. In addition, we may be subject to lawsuits relating to losses suffered by customers or their end-users as a result of a breach of network security. Because the techniques used by computer hackers to access or sabotage networks change frequently and often are not recognized until launched against a target, we and the vendors of software used to implement network security services delivered using our IP service delivery platform may be unable to anticipate and effectively prevent the use of these techniques.

IF WE FAIL TO ENHANCE EXISTING PRODUCTS OR TO DEVELOP AND ACHIEVE MARKET ACCEPTANCE FOR NEW PRODUCTS THAT MEET CUSTOMER REQUIREMENTS, OUR REVENUES MAY SUFFER.

We expect that our customers and potential customers will require product features that our current IP service delivery platform does not have. Accordingly, to succeed we must enhance existing products and develop new products that meet these needs. We may be unable to develop new or enhanced products that meet customer requirements in a timely manner or at all. Our products are technically complex and the development of new and enhanced products is an uncertain, time-consuming and labor intensive process that requires the accurate anticipation of technological and market trends and joint efforts with software suppliers. We may experience design, manufacturing, marketing and other difficulties that could delay or prevent the development, introduction or marketing of new products and enhancements.

In addition, determining which features to offer is an inherently uncertain process and requires us to successfully develop and maintain key customer relationships and to work closely with customers and potential customers to determine which features they need. Moreover, to enhance the features of our products, we rely on software suppliers to develop and license software to operate with our products. If software suppliers are unable or unwilling to develop and license software for use with our products, our ability to offer the features necessary to achieve and maintain market acceptance of our IP service delivery platform will be seriously harmed.

WE RELY UPON A LIMITED NUMBER OF CUSTOMERS, AND ANY DECREASE IN REVENUE FROM THESE CUSTOMERS COULD HARM OUR OPERATING RESULTS.

To date, we have received all of our revenues from two customers and have received additional purchase orders from four other customers. All of these customers, directly or indirectly, hold equity securities in our company. We expect that in the immediate future all of our revenues will continue to depend on sales of our IP service delivery platform products to a limited number of existing and new customers. We do not have long-term contracts with any of our customers, and our customers may

reduce or discontinue purchases of our products at any time. The loss of one or more of our customers or a reduction or delay in purchases of our products by our customers may limit our revenue growth and harm our operating results.

Purchases of our products may decline or be delayed if the business of our customers or potential customers suffers a downturn.

We Must Continue to Increase Our Customer Base in Order to Be Successful.

Our future success will depend on attracting additional customers. Failure to increase our customer base would harm our operating results and financial condition. Factors that may affect our ability to increase our customer base include:

- - the willingness of customers to use our IP service delivery platform;

- - possible new product introductions by our competitors;

- - our ability to develop and introduce new products and product enhancements;

- - performance of our products compared to expectations; and - - our ability to meet customers' delivery requirements.

IF WE FAIL TO MANAGE EXPANSION EFFECTIVELY, OUR MANAGEMENT AND OPERATIONAL RESOURCES WILL BE STRAINED, WHICH COULD HINDER OUR GROWTH.

Our ability to successfully introduce our IP service delivery platform to the market, offer our products and services and implement our business plan in a rapidly evolving market requires an effective planning and management process. We continue to increase the scope of our operations domestically and internationally and have recently hired a substantial number of employees. At December 31, 1999, we had 185 employees, and at March 31, 2000, we had 275 employees. We plan to continue to hire a significant number of employees this year. This growth has placed, and our anticipated future operations will continue to place, a significant strain on our management systems and resources. We expect that we will need to continue to improve our financial and managerial controls and reporting systems and procedures and will need to continue to expand, train and manage our work force worldwide. Furthermore, we expect that we will be required to manage business relationships with an increasing number of customers and other third parties.

In May 1998, we entered into a lease for approximately 48,400 square feet of new office space in Redwood City, California. This lease expires in December 2011. In September 1999, we entered into a lease for an additional approximately 48,400 square feet of new office space in Redwood City, California. This lease expires in December 2011. These leased facilities contain substantially all of our operations. We believe, however, that by the end of 2000, we will need additional space to accommodate our growth. The commercial real estate market in the San Francisco Bay area is volatile and unpredictable in terms of available space, rental fees, occupancy rates and preferred locations. We

cannot be certain that additional space will be available when we require it, or that it will be affordable or in a preferred location. If we fail to lease a substantial amount of new space on reasonable terms, our ability to expand our business may be diminished and our operating results could be harmed.

OUR MARKET IS HIGHLY COMPETITIVE, AND OUR FAILURE TO COMPETE SUCCESSFULLY WOULD LIMIT OUR ABILITY TO INCREASE OUR MARKET SHARE AND HARM OUR BUSINESS.

Competition in the network infrastructure market is intense, and we expect that competition in the market for value-added services in IP networking will also be intense. If we are unable to compete effectively, our ability to increase our revenues and market share will be harmed and our operating results will suffer.

The network infrastructure market has historically been dominated by large companies such as Cisco Systems, Lucent Technologies, Nortel Networks, Alcatel, Ericsson and Siemens. In addition, a number of companies, including Cisco, market products for installation on the premises of network service providers' customers that offer some services that compete with the services delivered using our IP service delivery platform. Also, a number of smaller companies have announced plans for furnishing products for installation on network service providers' networks that enable delivery of some value-added services to network service providers' customers.

Due to the rapidly evolving markets in which we compete, we believe that there is likely to be consolidation in this industry, with one or more of these smaller private companies being acquired by larger companies with greater resources. As a result, we expect to face increased competition in the future from larger companies with significantly more selling and marketing, technical, manufacturing and financial resources than we have.

Some of these larger competitors have pre-existing relationships involving a range of product lines with the network service providers who are the principal potential customers for our IP service delivery platform. In addition, these competitors may be able to offer vendor financing, which we do not currently offer, undercut our prices or otherwise induce network service providers not to use our IP service delivery platform. Moreover, our competitors may foresee market developments more accurately than we do and may develop new technologies that compete with our products or that render our products obsolete.

THE FAILURE OF OUR CONTRACT MANUFACTURERS TO MEET OUR MANUFACTURING NEEDS WOULD SERIOUSLY HARM OUR ABILITY TO TIMELY FILL CUSTOMER ORDERS.

We use three third-party contract manufacturers: Solectron, SMTC Manufacturing and Sonic Manufacturing, all of which provide manufacturing services for numerous other companies. If any of these contract manufacturers terminates its relationship with us or is unable to produce sufficient quantities of our products in a timely manner and at satisfactory quality levels, our ability to fill customer orders on time, our reputation and our operating results will suffer. We do not have long-term supply contracts with our contract manufacturers, and consequently, they are not obligated to supply products to us for any given period, in any specific quantity or at any predetermined price, except as

may be provided in a particular purchase order. Qualifying new contract manufacturers and commencing volume production is expensive and time consuming, and changing contract manufacturers would disrupt our business, potentially causing us to lose revenue and damaging our customer relationships.

WE DEPEND ON SOLE SOURCE AND LIMITED SOURCE SUPPLIERS, AND OUR BUSINESS MAY BE SERIOUSLY HARMED IF OUR SUPPLY FROM ANY SOURCE IS DISRUPTED.

We currently purchase several key components, including field programmable gate arrays, some integrated circuits and memory devices, and power supplies from a single source or limited sources. We purchase each of these components on a purchase order basis and do not have long-term supply contracts for these components. In the event of a disruption in supply, we may be unable to locate an alternate source in a timely 13 manner or at favorable prices. Any interruption or delay in the supply of these components could prevent us from delivering products to our customers in a timely manner and cause us to lose sales to existing and potential customers. In addition, our reliance on third-party suppliers exposes us to potential supplier production difficulties or quality variations.

IF WE FAIL TO PREDICT OUR MANUFACTURING REQUIREMENTS ACCURATELY, WE COULD INCUR ADDITIONAL COSTS OR MANUFACTURING DELAYS.

We use rolling forecasts based on anticipated product orders to determine our manufacturing requirements. In particular, we provide forecasts of our demand to our contract manufacturers up to twelve months prior to scheduled delivery of products to our customers. If we overestimate our manufacturing requirements, our contract manufacturers may have excess or obsolete inventory, which could harm our operating results. If we underestimate our requirements, our contract manufacturers may have an inadequate inventory, which could interrupt manufacturing of our products and result in delays in shipments and revenues. In addition, lead times for some of the materials and components we order are long. Lead times vary significantly and depend on factors such as the specific supplier, contract terms and demand for a component at a given time. We may experience shortages of components from time to time, which could delay the manufacturing of our products.

WE DEPEND ON THIRD-PARTY SOFTWARE AND HARDWARE PROVIDERS WITH WHOM WE HAVE STRATEGIC RELATIONSHIPS, AND OUR BUSINESS WOULD SUFFER IF THESE THIRD PARTIES WERE TO TERMINATE THEIR RELATIONSHIPS WITH US OR COMPETE WITH US IN THE FUTURE.

We have developed strategic relationships with leading software and hardware providers and are engaged in joint research and product development and marketing arrangements with these companies. Our ability to enhance our IP service delivery platform and develop new products significantly depends on maintaining and strengthening our relationships with these companies and on developing new relationships with other leading vendors. If we fail to effectively manage these relationships or develop new ones, shipments of new or enhanced products to our customers could be delayed.

Many of our software and hardware suppliers also have significant development and marketing relationships with our competitors and have significantly greater financial and marketing resources than we do. If they develop and market products in the future in competition with us, or form or strengthen arrangements with our competitors, our ability to deliver our products may be harmed.

WE DEPEND ON OUR KEY PERSONNEL, WITH WHOM WE DO NOT HAVE EMPLOYMENT AGREEMENTS, AND MUST HIRE ADDITIONAL PERSONNEL TO MANAGE OUR BUSINESS EFFECTIVELY IN A RAPIDLY CHANGING MARKET.

The loss of the services of any of our key employees, the inability to attract or retain qualified personnel in the future, or delays in hiring necessary personnel, particularly engineers and sales and support personnel, could delay the development and introduction of, and harm our ability to sell, our products. We recently hired many of our key personnel, including our Chief Operating Officer, our Executive Vice President of Global Services and our Senior Vice President of Engineering, as well as a number of other key managerial, marketing, planning, financial, technical and operations personnel. Our ability to manage our business depends upon how quickly we integrate these new personnel into our management and culture and the continued service of our executive officers and other key engineering, sales and marketing and support personnel. None of our officers or key employees is bound by an employment agreement for any specific term. We also do not have key person life insurance policies covering any of our employees.

We also intend to hire a significant number of engineering, sales, marketing and support personnel in the future, and we believe that our success depends primarily 14 upon our ability to attract and retain these key employees. Competition for these people is intense, especially in the San Francisco Bay area, and we may be unable to hire sufficient qualified personnel.

WE WILL NEED TO SUBSTANTIALLY EXPAND OUR SALES AND CUSTOMER SERVICE OPERATIONS IN ORDER TO INCREASE SALES AND MARKET AWARENESS OF OUR PRODUCTS.

If we are unable to expand our sales force and customer service and support organization, we may be unable to increase market awareness and acceptance of our products. Selling our products and services requires a sophisticated sales effort targeting several key individuals within a prospective customer's organization, and if the prospective customer is a network service provider, within its customers' organizations. This sales effort requires the efforts of specialized sales and sales support engineers. We are in the process of building our sales force and plan to hire additional qualified sales and sales support engineers. Competition for these individuals is intense, and we may be unable to hire the kind and number of sales and sales support engineers that we need. In addition, we believe that our future success, particularly in international markets, depends, in part, upon our ability to establish successful relationships with a number of third parties to distribute our products.

Given the complexity of our products, installation and maintenance of our products requires highly trained customer service and support personnel. We currently have a small customer service and support organization, and will need to increase our staff to support new customers and the expanding

needs of existing customers. Competition for network support engineers and network consultants in our industry is intense due to the limited number of people available with the necessary technical skills and experience.

IF WE BECOME SUBJECT TO UNFAIR HIRING CLAIMS, WE COULD BE PREVENTED FROM HIRING NEEDED PERSONNEL, INCUR LIABILITY FOR DAMAGES AND INCUR SUBSTANTIAL COSTS IN DEFENDING OURSELVES.

Companies in our industry whose employees accept positions with competitors frequently claim that these competitors have engaged in unfair hiring practices or that the employment of these persons would involve the disclosure or use of trade secrets. We have been threatened with such claims in the past and may receive claims of this kind in the future as we seek to hire qualified personnel. These claims could prevent us from hiring personnel or cause us to incur liability for damages. We could also incur substantial costs in defending ourselves or our employees against these claims, regardless of their merits. In addition, defending ourselves from these claims could divert the attention of our management away from our operations.

IF OUR PRODUCTS DO NOT INTEROPERATE WITH OUR CUSTOMERS' OR THEIR END USERS' NETWORKS, INSTALLATIONS OF OUR PRODUCTS MAY BE DELAYED OR CANCELLED, AND WE COULD EXPERIENCE SUBSTANTIAL PRODUCT RETURNS, WHICH COULD SERIOUSLY HARM OUR BUSINESS.

We expect that our network service provider customers and their end users generally will require that our products be designed to interface with their existing networks, each of which may have different specifications and use multiple protocol standards. If our products do not interoperate with our customers' or their end users' networks, installations of our products could be delayed, orders for our products could be cancelled or our products could be returned and our reputation could suffer.

Our customers' and their end users' networks contain multiple generations of products that have been added over time as those networks have grown and evolved. Our products must interoperate with all of the products within those networks as well as future products in order to meet our customers' and their end users' requirements. Our customers may require product enhancements to suit their particular needs, and we may have to modify our products to overcome any software incompatibilities with existing software used in our customers' and their end users' networks. If we have to redesign our products to make them compatible with a customer's network, our sales cycle and research and development expense may increase, and profit margins on our products may be reduced.

IF WE DO NOT RESPOND RAPIDLY TO TECHNOLOGICAL CHANGES, OR IF STANDARDS THAT ARE ADOPTED DIFFER FROM THOSE THAT WE USE, OUR PRODUCTS COULD BECOME OBSOLETE.

The market for our IP service delivery platform and other service delivery products is likely to be characterized by rapid technological change, frequent new product introductions and changes in customer and end user requirements. We may be unable to respond quickly or effectively to these developments. We may experience design, manufacturing, marketing and other difficulties that could

delay or prevent our development, introduction or marketing of new products and enhancements. The introduction of new products by competitors, market acceptance of products based on new or alternative technologies or the emergence of new industry standards, could render our existing or future products obsolete.

In developing our products, we have made, and will continue to make, assumptions about the standards that may be adopted by our customers, end users and our competitors. If our assumptions are wrong or if standards adopted by our customers or competitors, most of which are considerably larger and have a greater market presence than we do, are different from those which we have chosen, our new products may fail to achieve market acceptance. In order to introduce products incorporating new technologies and new industry standards, we must be able to access the latest technologies of our customers, their end users, our suppliers and other network vendors. Any failure to anticipate changing technological standards and access new technologies could impair the competitiveness of our products.

WE RELY ON OUR INTELLECTUAL PROPERTY RIGHTS TO MAINTAIN OUR COMPETITIVE ADVANTAGE AND, EVEN IF WE DEVOTE SIGNIFICANT RESOURCES TO PROTECTING OR CONFIRMING THESE RIGHTS AGAINST THIRD PARTIES, WE MAY BE UNABLE TO DO SO.

We rely on a combination of copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We also enter into confidentiality or license agreements with our employees, consultants and third parties with whom we have strategic relationships, and control access to and distribution of our software, documentation and other proprietary information. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our products is difficult, and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. For more information concerning our intellectual property rights, see "Business -- Intellectual Property".

IF WE BECOME INVOLVED IN AN INTELLECTUAL PROPERTY DISPUTE, WE COULD BE SUBJECT TO SIGNIFICANT LIABILITY, THE TIME AND ATTENTION OF OUR MANAGEMENT COULD BE DIVERTED AND WE COULD BE PREVENTED FROM SELLING OUR PRODUCTS.

In recent years, there has been significant litigation in the United States involving patents and other intellectual property rights. Although we have never been involved in any intellectual property litigation, we may become a party to litigation in the future to protect our intellectual property or as a result of our alleged infringement of others' intellectual property. These claims and any resulting lawsuit could subject us to significant liability for damages and invalidate our proprietary rights. These lawsuits, regardless of their merits, likely would be time-consuming and expensive to resolve and would divert management time and attention. Any potential intellectual property litigation alleging our infringement of a third-party's 16 intellectual property also could force us to do one or more of the following:

- - stop selling, incorporating or using our products or services that use the challenged intellectual property;

- - obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all; or - - redesign those products or services that use such technology.

If we are forced to take any of these actions, we may be unable to manufacture and sell our products, which would reduce our revenues.

We may in the future initiate claims or litigation against third parties for infringement of our proprietary rights to protect these rights or to determine the scope and validity of our proprietary rights or the proprietary rights of competitors. These claims could result in costly litigation and divert the attention of our technical and management personnel.

Necessary Licenses of Third-party Technology May Be Terminated, Unavailable or Expensive.

We license from third-party suppliers several key software applications incorporated in our IP service delivery platform, such as firewall detection software from Network Associates and database software from Oracle. From time to time we may be required to license technology from other third-party suppliers to enable us to develop new products or product enhancements. Our existing third-party licenses may not remain available to us on commercially reasonable terms, or at all, and we may not be able to obtain new third-party licenses on commercially reasonable terms, or at all. The inability to renew or obtain any third-party license required to continue to sell existing products or develop new products and product enhancements could require us to obtain substitute technology of lower quality or performance standards or at greater cost, either of which could seriously impair our ability to achieve and maintain market acceptance of our products and harm our operating results.

WE FACE RISKS ASSOCIATED WITH OUR INTERNATIONAL OPERATIONS THAT COULD HARM OUR FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

We intend to substantially expand our international operations and enter new international markets. This expansion will require significant management attention and financial resources to successfully translate our product manuals into other languages and to develop appropriate international sales and support channels. Additionally, we intend to rely on a limited number of international distributors to increase sales and to manage customer service. We have limited experience in marketing and distributing our products internationally and may be unable to develop international market demand for our products directly or through distribution arrangements.

In addition, our international operations may be affected by other factors, including:

- - the impact of recessions in economies outside the United States;

- - increased difficulty in collecting accounts receivable and longer collection periods;

- - certification requirements and unexpected changes in them or in other regulatory requirements;

- - difficulties inherent in developing versions of our products that comply with local standards;

- - difficulties and costs of staffing and managing foreign operations;

- - reduced protection for intellectual property rights in some countries;

- - potential consequences of foreign currency fluctuations;

- - potentially adverse tax consequences; and - - political and economic instability.

SOME OF OUR PRODUCTS MAY BE SUBJECT TO U.S. GOVERNMENT EXPORT RESTRICTIONS AND REGULATIONS, WHICH COULD REDUCE OUR ABILITY TO SELL THOSE PRODUCTS IN SOME FOREIGN MARKETS.

Some of our products are subject to the U.S. Export Administration Regulations, governed by the U.S. Department of Commerce. Network security products, technology and associated technical assistance, particularly products and technology incorporating encryption, may be subject to U.S. export restrictions or import or equivalent restrictions under the laws of various foreign countries. Recent changes to U.S. laws enable us to export more of these products without restrictions. However, some products still may not be exported without prior approval from the U.S. government. The list of products and end users for which export approval is required, and related regulatory policies, are subject to revision by the U.S. government at any time. The cost of compliance with U.S. and international export laws, as well as changes in existing laws, could reduce our ability to sell some of our products in some foreign markets, and could harm our international revenues.

OUR SUCCESS DEPENDS ON THE CONTINUED USE AND EXPANSION OF PACKET DATA NETWORKS SUCH AS THE INTERNET.

Our future success depends on the continued growth of privately held and publicly accessed packet data networks, such as the Internet, as widely-used media for commerce and communication. If use of those networks for communications and commerce does not continue to increase, the growth in the market for network service providers and for the value-added services that our IP service delivery platform offers, may not continue, which could seriously harm our business, results of operations and financial condition.

WE MAY NEED ADDITIONAL CAPITAL, WHICH MAY NOT BE AVAILABLE, AND OUR ABILITY TO GROW MAY BE LIMITED AS A RESULT.

We believe that the net proceeds of this offering, together with our existing cash balances, will be sufficient to meet our capital requirements at least through the next twelve months. However, we may be required or may choose to seek additional funding prior to that time.

The development and marketing of new products and the expansion of our manufacturing facilities and associated support personnel and our sales and marketing organizations will require a significant commitment of resources. In addition, if the market for our products develops at a slower pace than anticipated, or if we fail to establish significant market share and achieve a meaningful level of revenue, we may require additional financing earlier or in greater amounts than anticipated. In addition, cash used for acquisitions or other unanticipated uses may increase our capital requirements. In the event that we are required to raise additional funds, we may not be able to do so on favorable terms, or at all.

Future debt financing may limit our financial or operating flexibility. Further, if we issue new equity securities, stockholders may experience additional dilution or the new equity securities may have rights, preferences or privileges senior to those of existing holders of common stock. If we cannot raise funds on acceptable terms, we may not be unable to develop or enhance our products, take advantage of future opportunities or respond to competitive pressures or unanticipated requirements.

Any Acquisitions We Make Could Adversely Affect Us.

We may make investments in, or acquisitions of complementary companies, products or technologies. In the event of any future investments or acquisitions, we could:

- - issue stock that would dilute our current stockholders' percentage ownership, incur debt or assume liabilities; or - - incur large and immediate write-offs or amortization expenses related to goodwill and other intangible assets.

These purchases also involve numerous risks, including:

- - problems integrating the purchased operations, technologies or products with our own, including diversion of management's attention from our core business;

- - adverse effects on existing business relationships with suppliers and customers and other unanticipated costs;

- - difficulties associated with entering markets in which we have no or limited prior experience; and - - potential loss of key employees, particularly those of the purchased organizations.

PRIOR TO THIS OFFERING, THERE HAS BEEN NO MARKET FOR OUR COMMON STOCK, AND A PUBLIC MARKET FOR OUR SECURITIES MAY NOT DEVELOP OR BE SUSTAINED.

Prior to this offering, you could not buy or sell our common stock publicly. An active public market for our common stock may not develop or be sustained after this offering, and the market price might fall below the initial public offering price. The initial public offering price may bear no relationship to the price at which the common stock will trade upon completion of this offering. The initial public offering price will be determined based on negotiations between us and the representatives of the underwriters, based on factors that may not be indicative of future market performance.

INSIDERS WILL CONTINUE TO HAVE SUBSTANTIAL CONTROL OVER US AFTER THIS OFFERING AND COULD DELAY OR PREVENT A CHANGE IN OUR CORPORATE CONTROL.

Upon completion of this offering, our executive officers, directors and principal stockholders who hold 5% or more of the outstanding common stock and their affiliates will beneficially own, in the aggregate, approximately % of our outstanding common stock. As a result, these stockholders will be able to exercise significant control over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, which could delay or prevent an outside party from acquiring or merging with us. For a fuller discussion of the equity ownership of these stockholders, see "Principal Stockholders".

WE EXPECT TO EXPERIENCE VOLATILITY IN OUR SHARE PRICE, WHICH COULD NEGATIVELY AFFECT YOUR INVESTMENT, AND YOU MAY NOT BE ABLE TO RESELL YOUR SHARES AT OR ABOVE THE INITIAL PUBLIC OFFERING PRICE.

The market price of our common stock after this offering may vary from the initial public offering price. If you purchase shares of common stock, you may be unable to resell those shares at or above the initial public offering price. The market price of our common stock may fluctuate significantly in response to a number of factors, some of which are beyond our control, including:

- - quarterly variations in operating results;

- - changes in financial estimates or recommendations by securities analysts;

- - changes in market valuations of other data communications equipment companies;

- - announcements by us or our competitors of new products or of significant technological innovations, contracts, acquisitions, strategic partnerships or joint ventures;

- - any loss of a major customer;

- - departures of key personnel;

- - any deviations in net revenues or in losses from levels expected by securities analysts; and - - future sales of common stock.

In addition, the stock markets in general, and the Nasdaq National Market and technology companies in particular, have experienced extreme volatility that has often been unrelated or disproportionate to the operating performance of particular companies. These market fluctuations may cause our stock price to fall regardless of our performance.

THERE MAY BE SALES OF A SUBSTANTIAL AMOUNT OF OUR COMMON STOCK AFTER THIS OFFERING THAT COULD CAUSE OUR STOCK PRICE TO FALL.

Our current stockholders hold a substantial number of shares, which they will be able to sell in the public market in the near future. Sales of a substantial number of shares of our common stock after this offering could cause our stock price to fall. In addition, the sale of these shares could impair our ability to raise capital through the sale of additional stock. You should read "Shares Eligible for Future Sale" for a fuller discussion of the shares that may be sold in the public market in the future.

Investors Will Experience Immediate and Substantial Dilution.

The initial public offering price of our common stock is expected to be substantially higher than the net tangible book value per share of our outstanding common stock immediately after the offering. Accordingly, if you purchase our common stock in this offering, you will incur immediate dilution of

approximately $ in the net tangible book value per share of our common stock from the price you pay for our common stock. This calculation assumes that you purchased our common stock for $ per share. For additional information on this calculation, see "Dilution".

PROVISIONS OF OUR CHARTER DOCUMENTS AND DELAWARE LAW MAY HAVE ANTI-TAKEOVER EFFECTS THAT COULD PREVENT A CHANGE IN CONTROL.

Provisions of our certificate of incorporation and bylaws may discourage, delay or prevent a merger or acquisition that a stockholder may consider favorable. These provisions include:

- - authorizing our board of directors to issue preferred stock without stockholder approval;

- - providing for a classified board of directors with staggered, three-year terms;

- - prohibiting cumulative voting in the election of directors;

- - requiring super-majority voting to effect significant amendments to our certificate of incorporation and bylaws or to remove directors without cause;

- - restricting the ability of stockholders to call special meetings;

- - prohibiting stockholder actions by written consent; and - - establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

Provisions of Delaware law also may discourage, delay or prevent someone from acquiring or merging with us, which could cause the market price of our common stock to decline. For a fuller discussion of these provisions, see "Description of Capital Stock -- Delaware Anti-Takeover Law and Certain Provisions of Our Certificate of Incorporation and Bylaws".

Note Regarding Forward Looking Statements

You should not rely on forward looking statements in this prospectus. This prospectus contains forward-looking statements that involve risks and uncertainties. We use words such as "anticipate," "believe," "plan," "expect," "future," "intend" and similar expressions to identify forward-looking statements. Our actual results could differ materially from the results contemplated by these forward-looking statements due to a number of factors, including those discussed in "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this prospectus. You should not rely on these forward-looking statements, which apply only as of the date of this prospectus.

Use of Proceeds

The net proceeds from the sale of the shares of common stock offered by us are estimated to be $, or $ if the underwriters exercise in full their option to purchase additional shares in the offering. These estimates are calculated based on an assumed initial public

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offering price of $     per share and after deducting an assumed underwriting
discount and estimated offering expenses payable by us.
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The principal purposes of this offering are to:

- - increase our working capital;

- - create a public market for our common stock;

- - facilitate our future access to public equity markets; and - - provide us with increased visibility and credibility.

We presently have no specific plans for the use of the net proceeds of this offering. We intend to use the net proceeds primarily for general corporate purposes, including working capital, expansion of our sales and marketing organization and capital expenditures. In addition, we may, when and if the opportunity arises, use a portion of the net proceeds to acquire complementary products, technologies or businesses. However, we currently have no commitments or agreements and are not involved in any negotiations with respect to any such transactions. Pending use of the net proceeds of this offering, we intend to invest the net proceeds in interest-bearing, investment-grade securities.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently expect to retain future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Our lease lines and bank lines of credit prohibit the payment of dividends without prior approval.

Capitalization

The following table sets forth:

- - our actual capitalization as of March 31, 2000;

- - our pro forma capitalization as of March 31, 2000 reflecting the automatic and assumed exercise of certain warrants and the automatic conversion into common stock upon the closing of this offering of our outstanding preferred stock and the Series E preferred stock expected to be issued upon satisfaction of customary closing conditions; and

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- - our pro forma as adjusted capitalization as of March 31, 2000 to give effect
  to the sale of        shares of common stock at an assumed initial public
  offering price of        per share after deducting an assumed underwriting
  discount and estimated offering expenses payable by us.
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You should read the information set forth below together with our consolidated financial statements and the notes to those statements included elsewhere in this prospectus.

MARCH 31, 2000 PRO FORMA ACTUAL PRO FORMA AS ADJUSTED (IN THOUSANDS, EXCEPT SHARE DATA)

Long-term debt, net of current portion	$ 9,580	$ 9,580	$
Redeemable convertible preferred stock, 61,582,326 shares authorized, 55,131,135 shares issued and outstanding (actual); no shares issued or outstanding (pro forma and pro forma as adjusted)	104,662	--	
Stockholders' equity:			
Preferred stock, $0.0001 par value, 2,150,000 shares authorized, 1,875,000 shares issued and outstanding (actual); no shares issued and outstanding (pro forma and pro forma as adjusted)	3,756	--	--
Common stock, $0.0001 par value, 200,000,000 shares authorized (subject to stockholder approval), 17,824,826 shares issued and outstanding (actual); 87,704,801 shares issued and outstanding (pro forma); issued and outstanding (pro forma as adjusted)	88,408	269,957	
Notes receivable from stockholders	(8,373)	(8,373)	
Accumulated other comprehensive income	(28)	(28)	
Deferred compensation	(59,562)	(59,562)	
Deficit accumulated during the development stage	(86,376)	(86,376)	
Total stockholders' equity (net capital deficiency)	(62,175)	115,618	
Total capitalization	$ 52,067	$125,198	$

The total number of outstanding shares of our common stock is as of March 31, 2000 and excludes:

- - 8,319,705 shares issuable upon exercise of outstanding stock options as of March 31, 2000, with a weighted average exercise price of $2.06 per share;

- - 8,231,226 shares reserved for issuance under our stock option, director option and employee stock purchase plans, including amounts authorized for issuance subsequent to March 31, 2000; and - - 1,058,726 shares of common stock issuable upon exercise of warrants outstanding as of March 31, 2000 at a weighted average exercise price of $0.55 per share, excluding shares associated with warrants that are subject to automatic exercise.

Dilution

If you invest in our common stock, your interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma net tangible book value per share of our common stock after this offering. We calculate net tangible book value per share by dividing the net tangible book value, or total assets less intangible assets and total liabilities, by the number of outstanding shares of common stock.

Our pro forma net tangible book value based on shares outstanding at March 31, 2000, after giving effect to the automatic and assumed exercise of certain warrants for and automatic conversion of our outstanding preferred stock and the shares of Series E preferred stock expected to be issued upon the satisfaction of customary closing conditions, 69,879,975 shares of common stock upon the closing of this offering, was $, or $ per share of common stock.

After giving effect to the sale of the shares of common stock at an assumed initial public offering price of $ per share less an assumed underwriting discount and estimated offering expenses payable by us, our pro forma net tangible book value at March 31, 2000 would be $, or $ per share. This represents an immediate increase in pro

```
forma net tangible book value of $     per share to existing stockholders and an
immediate dilution in pro forma net tangible book value of $     per share to
new investors, or approximately      % of the assumed initial public offering
price of $
per share.
      The following table illustrates this per share dilution:
```

Assumed initial public offering price per share..... $ Pro forma net tangible book value per share at March 31, 2000..... $ Increase per share attributable to new investors..... Pro forma net tangible book value per share after this offering..... Dilution per share to new investors..... $ The following table shows on a pro forma basis at March 31, 2000, after giving effect to the automatic and assumed exercise of certain warrants and automatic conversion of all shares of our outstanding preferred stock and the shares of Series E preferred stock expected to be issued upon satisfaction of customary closing conditions, into 69,879,975 shares of common stock upon the closing of this offering, the number of shares of common stock purchased from us, the total consideration paid to us and the average price per share paid by existing stockholders and by new investors purchasing common stock in this offering, before deducting an assumed underwriting discount and estimated offering expenses payable by us, at an assumed initial public offering price of $ per share:

	SHARES PURCHASED		TOTAL CONSIDERATION		
	NUMBER	PERCENT	AMOUNT	PERCENT	AVERAGE PRICE PER SHARE
Existing stockholders.....		%	$	%	$
New investors.....					
Total.....		100%	$	100%	

The foregoing discussion and table are based on the number of outstanding shares of our common stock after this offering and excludes:

- 8,319,705 shares issuable upon exercise of outstanding stock options as of March 31, 2000, with a weighted average exercise price of $2.06 per share;

- 8,231,226 shares, reserved for future issuance under our stock option, director option and employee stock purchase plans, including amounts authorized for issuance subsequent to March 31, 2000; and - 1,058,726 shares of common stock issuable upon exercise of warrants outstanding as of March 31, 2000, other than warrants that are automatically exercised upon completion of this offering, at a weighted average exercise price of $0.55 per share.

To the extent any of these options or warrants are exercised, there will be further dilution to investors. See "Capitalization," "Management -- Stock Plans," "Description of Capital Stock" and note 8 of notes to consolidated financial statements.

Selected Consolidated Financial Data

The selected consolidated financial data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the notes to those statements included elsewhere in this

prospectus. The consolidated statement of operations data set forth below for the period from inception to December 31, 1997, and for the fiscal years ended December 31, 1998 and 1999, and the consolidated balance sheet data as of December 31, 1998 and 1999 have been derived from our audited consolidated financial statements included elsewhere in this prospectus, which have been audited by Ernst & Young LLP, Independent Auditors. The consolidated balance sheet data at December 31, 1997 is derived from the audited consolidated financial statements that are not included in this prospectus. The consolidated statement of operations data for the three-month periods ended March 31, 1999 and 2000, and the consolidated balance sheet data as of March 31, 1999 and 2000, are unaudited and have been prepared on the same basis as the audited consolidated financial statements appearing elsewhere in this prospectus. In the opinion of management, all necessary adjustments consisting only of normal recurring adjustments have been included to present fairly the unaudited consolidated quarterly results when read in conjunction with the audited consolidated financial statements and the notes thereto appearing elsewhere in this prospectus. The historical results are not necessarily indicative of results to be expected for any future period. See "Management's Discussion and Analysis of Financial Condition and Results of Operations".

	PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31,	YEARS ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,	
	1997	1998	1999	1999	2000
				(UNAUDITED)	
	(IN THOUSANDS, EXCEPT SHARES AND PER SHARE DATA)				
CONSOLIDATED STATEMENT OF OPERATIONS DATA:					
Revenues	$ --	$ --	$ --	$ --	$ 3,540
Cost of goods sold	--	--	--	--	2,600
Gross profit	--	--	--	--	940
Operating expenses:					
Research and development	87	7,366	27,336	5,494	15,700
Sales and marketing	--	606	6,077	500	21,679
General and administrative	47	1,106	4,980	783	3,170
Total operating expenses	134	9,078	38,393	6,777	40,549
Loss from operations	(134)	(9,078)	(38,393)	(6,777)	(39,609)
Interest income (expense), net	3	(212)	651	(12)	378
Other income (expense)	--	(3)	21	--	--
Net loss	$ (131)	$(9,293)	(37,721)	(6,789)	(39,231)
Deemed dividend to Series D preferred stockholders	--	--	--	--	(2,500)
Net loss allocable to common stockholders	$ (131)	$(9,293)	$(37,721)	$(6,789)	$(41,731)
Basic and diluted net loss per common share	$(0.25)	$ (4.53)	$ (7.80)	$ (1.78)	$ (6.67)
Shares used in computing basic and diluted net loss per common share(1)	522	2,051	4,837	3,817	6,255
Pro forma basic and diluted net loss per common share (unaudited)			$ (0.75)		$ (0.61)
Shares used in computing pro forma basic and diluted net loss per common share (unaudited)(1)			50,378		68,295

(1) See note 1 of notes to consolidated financial statements for an explanation of the determination of the shares used to compute basic and diluted net loss per share and basic and diluted pro forma net loss per share.

	DECEMBER 31,			MARCH 31,	
	1997	1998	1999	1999	2000
				(UNAUDITED)	
			(IN THOUSANDS)		
CONSOLIDATED BALANCE SHEET DATA:					
Cash, cash equivalents, and short-term investments	$1,301	$ 6,580	$ 54,586	$ 22,552	$ 44,515
Working capital	1,238	2,900	49,584	18,522	37,699
Total assets	1,443	11,099	66,070	28,106	68,363
Long-term obligations, less current portion	--	2,710	7,907	3,728	9,580
Redeemable convertible preferred stock	--	9,823	89,388	31,773	104,662
Total stockholders' equity (net capital deficiency)	1,370	(6,038)	(38,374)	(12,588)	(62,175)

Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read in conjunction with "Selected Consolidated Financial Data" and our consolidated financial statements and notes thereto included elsewhere in this prospectus. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of a number of factors, including, but are not limited to, those discussed under "Risk Factors" and elsewhere in this prospectus.

Overview

From our inception on April 14, 1997 through March 31, 2000, our operating activities were primarily devoted to increasing our research and development capabilities, designing our hardware, developing our software and testing our products. In March 2000, after extensive field testing of our IP service delivery platform, we began shipping to our first customers. We currently market our products through our direct sales force to service providers in Asia, North America and Europe. We provide customer service and support for our products.

To date, substantially all of our revenues have been derived from sales of the IPSX 9000 and related software applications. Substantially all of our revenues have been generated from two customers. We expect that the majority of our future revenues in the near term will continue to come from sales of the IPSX 9000 and related software applications to a small number of customers. We expect to receive a substantial portion of our revenues from these initial customers until we can sufficiently penetrate additional accounts.

Because the market for our IP service delivery platform is new and evolving, the volume and timing of orders are difficult to predict. A customer's decision to purchase our platform typically involves a lengthy evaluation and product qualification process that takes several months and may include:

- - technical evaluation;

- - network planning;

- - integration into the customer's and its end-users' networks; and - - customer trials.

Even after customers decide to purchase our platform, they tend to deploy it slowly and deliberately. Long sales and implementation cycles for our platform, as well as the expectation that customers will tend to sporadically place large orders with short lead times, may cause our revenues and operating results to vary significantly and unexpectedly from quarter to quarter.

We recognize revenue for hardware sales and software license fees at the time of shipment, unless we have future obligations for installation or have to obtain customer acceptance, in which case we defer recognizing revenue until the product is installed or accepted. Revenue from service obligations is deferred and recognized on a straight-line basis over the contractual period. Amounts billed in excess of revenue recognized are included as deferred revenue in the accompanying balance sheets. At March 31, 2000, a total of $1.0 million of revenue was deferred. It is currently expected that this deferred revenue will be recognized in 2000 and 2001. We provide a reserve for warranty returns based on our experience with the customer evaluation process. Historically, selling prices in the Internet infrastructure equipment market have been relatively stable. However, as competitors launch new products, our prices may decline.

Cost of goods sold includes all costs associated with the production of our products, including the cost of outsourced manufacturing, software royalties, warranties, related manufacturing overhead costs, as well as costs associated with our service offerings, including personnel engaged in providing maintenance, product installation and consulting to our customers. We have outsourced the majority of our manufacturing, repair and supply chain management operations. Accordingly, a significant portion of our cost of goods sold consists of payments to Solectron, Surface Mount Technology Centre, or SMTC, and Sonic Manufacturing, our contract manufacturers. We conduct manufacturing engineering, final assembly, configuration testing and documentation control at our facility in Redwood City, California.

Research and development expenses consist primarily of salaries and related personnel costs, fees paid to contractors and outside service providers, laboratory equipment and prototype costs related to the design, development and testing of our products. We have also incurred stock-based research and development expenses arising from the issuance of stock options to purchase common stock to members of our technical advisory boards. We expense our research and development costs as they are incurred. Several components of our research and development effort require significant expenditures, the timing of which can cause significant quarterly variability in our expenses. The number of prototypes required to build and test a complex product such as the IP service delivery platform is large and this building and testing process occurs over a short period of time. We are devoting

substantial resources to the continued development of new products and the enhancement of existing products. We believe that our research and development is critical to our strategic product development objectives and that to take advantage of our leading technology and meet the changing requirements of our customers, we will need to fund several development projects simultaneously. As a result, we expect that research and development expenses, excluding stock-based compensation, will increase in absolute dollars in the future.

Sales and marketing expenses consist primarily of salaries and related expenses for personnel engaged in marketing, sales and customer evaluations, as well as the amortization cost of customer evaluation units and other costs associated with promotional and other marketing expenses, including stock-based sales and marketing expenses arising from the issuance to our customers of warrants to purchase preferred and common stock. The complexity of our IP service delivery platform and the networks in which it is installed and integrated require highly trained systems engineers and service and support personnel. We expect to hire additional systems engineers and to expand our customer support organization in order to organize and administer the increasing number of customer evaluations and trials. We expect that sales and marketing expenses, excluding stock-based compensation, will increase substantially in absolute dollars as we hire additional sales and marketing personnel, initiate additional marketing programs to support the IP service delivery platform, establish additional and expand existing direct sales offices in the United States and abroad, and engage in more customer evaluations and trials.

General and administrative expenses consist primarily of salaries and related expenses for executive, business development, finance and accounting and human resources personnel as well as other corporate expenses, including stock-based compensation. We expect general and administrative expenses, excluding stock-based compensation, to increase in absolute dollars as we add personnel and incur additional costs related to the growth of our business and our operation as a public company.

In connection with the grant of certain stock options to employees, we accrued deferred compensation of $34.0 million during 1999 and $36.8 million during the three months ended March 31, 2000, representing the difference between the deemed value of the common stock for accounting purposes and the exercise price of these options at the date of grant. Deferred compensation is presented as a reduction of stockholders' equity and is amortized over the vesting period of the applicable options. We amortized $3.6 million of deferred compensation during the year ended December 31, 1999 and $7.6 million of deferred compensation during the three months ended March 31, 2000. This compensation expense relates to stock options awarded to individuals in all operating 28 expense categories. Based on options granted as of March 31, 2000, we expect to amortize additional deferred compensation of $29.7 million during the remainder of 2000 using the accelerated method. See note 8 of our notes to consolidated financial statements.

As of December 31, 1999, we had $25.6 million of federal net operating loss carryforwards and $28.9 million of state net operating loss carryforwards for tax reporting purposes available to offset future taxable income. These net operating loss carryforwards expire at various dates beginning 2005 to the extent that they are not utilized. We have not recognized any benefit from the future use of net

operating loss carryforwards for these periods, or for any other periods, since inception. We are not currently recognizing the potential tax benefits of our net operating loss carryforwards because we do not have sufficient evidence that we will generate adequate profits to use them.

Results of Operations

Three Months Ended March 31, 2000 and 1999

Revenues

The quarter ended March 31, 2000 was our first quarter of revenue. Revenue for the quarter was $3.5 million, with sales to Qwest Communications and AduroNet accounting for substantially all of that amount.

Cost of Goods Sold

Cost of goods sold for the quarter ended March 31, 2000 was $2.6 million. Cost of goods sold was high in relation to sales because it included start-up expenses, as well as high overhead costs relative to low manufacturing volumes.

Research and Development Expenses

Research and development expenses were $15.7 million in the three months ended March 31, 2000, an increase of $10.2 million over the comparable quarter in 1999. Approximately $4.1 million of the increase was due to amortization of stock-based compensation related to stock options issued to employees and consultants. Other drivers of the increase include the hiring of additional research and development personnel, expenses related to prototype development, information technology infrastructure costs and equipment depreciation.

Sales and Marketing Expenses

Sales and marketing expenses were $21.7 million in the three months ended March 31, 2000, an increase of $21.2 million over the comparable quarter in 1999. The increase was primarily due to $16.2 million of non-cash expenses associated with warrants granted to customers in connection with valuable technical and market services. Approximately $1.8 million of the increase was due to amortization of stock-based compensation related to stock options issued to employees and consultants. The increase also reflects hiring of additional sales and marketing personnel and related expenses.

General and Administrative Expenses

General and administrative expenses were $3.2 million in the three months ended March 31, 2000, an increase of $2.4 million over the comparable quarter in 1999. The increase was primarily due to $1.8 million of amortization related to stock-based compensation in connection with stock options issued to employees and consultants. The increase was also due to the hiring of additional general and administrative personnel and related expenses.

Interest and Other Income

Interest and other income consists primarily of income from our cash investments. Interest and other income totaled $694,000 in the three months ended March 31, 2000, an increase of $604,000 over the comparable quarter in 1999. The increase was due to larger cash balances available for investing resulting from the proceeds from the sales of preferred stock.

Interest Expense

Interest expense is incurred as a result of our financing obligations. Interest expense totaled $316,000 in the three months ended March 31, 2000, an increase of $214,000 over the comparable quarter in 1999. The increase was due to an increase in equipment loans.

Deemed Dividend

In March 2000, we sold 625,000 shares of Series D redeemable convertible preferred stock at $8.00 per share for which we received proceeds of approximately $5.0 million. At the date of issuance, we believed that the per share price of $8.00 represented the fair value of the preferred stock. Subsequent to the commencement of our initial public offering process, we reevaluated the fair value of our common stock as of March 2000. Accordingly, the increase in fair value has resulted in a beneficial conversion feature of $2.5 million, that has been recorded as a deemed dividend to preferred stockholders in 2000. We recorded the deemed dividend at the date of issuance by offsetting charges and credits to stockholders' equity. The preferred stock dividend increases the net loss allocable to common stockholders in the calculation of basic and diluted net loss per common share for the three months ended March 31, 2000.

Years Ended December 31, 1999 and 1998

Research and Development Expenses

Research and development expenses were $27.3 million in 1999, an increase of $20.0 million compared to 1998. The increase was primarily due to the hiring of additional research and development personnel, and secondarily to expenses related to prototype development. The increase was also due to $2.2 million of amortization related to stock-based compensation in connection with stock options issued to employees and consultants, as well as increases in information technology infrastructure costs and equipment depreciation.

Sales and Marketing Expenses

Sales and marketing expenses were $6.1 million in 1999, an increase of $5.5 million compared to 1998. The increase was primarily due to the hiring of additional sales and marketing personnel and related expenses. The increase was also due to $1.4 million of amortization of deferred compensation related to stock options issued to employees and consultants. The increase also reflected higher expenses related to travel, marketing programs and public relations events.

General and Administrative Expenses

General and administrative expenses were $5.0 million in 1999, an increase of $3.9 million compared to 1998. The increase was primarily due to the hiring of additional general and administrative personnel and related expenses, and secondarily to outside service costs. The increase was also due to $0.7 million of amortization related to stock-based compensation in connection with stock options issued to employees and consultants.

Interest and Other Income

Interest and other income primarily represents income on our cash investments. Interest and other income totaled $1.3 million in 1999, an increase of $1.2 million compared to 1998. The increase was due primarily to the larger cash balances from the proceeds of the issuance of preferred stock.

Interest Expense

Interest expense includes expenses related to our financing obligations. Interest expense totaled $599,000 in 1999, an increase of $332,000 compared to 1998. The increase was due to an increase in equipment loans.

Liquidity and Capital Resources

Since inception, we have financed our operations primarily through private sales of $94.1 million of convertible preferred stock as well as through equipment and working capital loans.

At March 31, 2000, cash, cash equivalents and short-term investments totaled $44.5 million. The decrease from December 31, 1999 was due to cash used in operations and the purchase of equipment. Cash, cash equivalents and short-term investments totaled $54.6 million at December 31, 1999, compared to $6.6 million at December 31, 1998. Most of the increase was due to the receipt of $79.2 million from the sales of preferred stock in March, September and October 1999.

We used $11.4 million in cash for operations in the three months ended March 31, 2000 compared to $5.5 million in the three months ended March 31, 1999. The increase in the quarter ended March 31, 2000 over the comparable quarter in 1999 was due primarily to the increase in our net loss from $6.8 million in the three months ended 1999 to $39.2 million in the three months ended 2000, offset in part by $24.2 million in non-cash expense associated with the issuance of warrants and options and amortization of deferred stock compensation. We used $30.8 million in cash for operations in 1999, an increase of $25.5 million from the $5.3 million used in 1998. The increase was primarily due to an increase in our net loss from $9.3 million in 1998 to $37.7 million in 1999.

In the three months ended March 31, 2000, we generated $3.5 million in cash from investing activities, an increase of $4.5 million from the $1.0 million used in the three months ended March 31, 1999. The increase in the quarter ended March 31, 2000 over the comparable quarter in 1999 was due to proceeds of $13.5 million from the sale and maturity of short term investments, offset, in part, by $5.6 million of capital equipment purchases and $4.4 million used to purchase short-term investments. We used $41.3 million in cash for investing activities in 1999, an increase of $38.3 million from the $3.0 million used in 1998. The increase was due to the investment of $34.5 million in short-term securities and the purchase of $6.8 million of capital equipment, most of which was financed through equipment loans.

We generated $85.6 million in cash from financing activities in 1999, an increase of $72.0 million from the $13.6 million generated in 1998. The increase in cash generated from financing activities in 1999 over 1998 was due primarily to proceeds from the issuance of convertible preferred stock. In addition, we have used equipment loans to partially finance capital equipment purchases. We generated $6.9 million in cash from financing activities in the three months ended March 31, 2000, a decrease of $15.6 million compared to $22.5 million generated for the three months ended March 31, 1999 as we generated less in proceeds from preferred stock. We had $10.7 million of loans outstanding at March 31, 2000.

We expect to devote substantial capital resources to continue our research and development efforts, to hire and expand sales, customer service and support and marketing organizations, to increase our marketing programs and to expand our general corporate support activities. We believe that the net proceeds from this offering, together with our existing cash balances, equipment loans and the net proceeds from the sale of Series E preferred stock, will be sufficient to meet our operating and capital

requirements for at least the next 12 months. However, there can be no assurance that we will not require additional financing within this time frame or that such additional funding, if needed, will be available on terms acceptable to us or at all. Our capital requirements during this period and for the long term will depend on numerous factors, including market acceptance of our products, the resources we devote to developing, marketing, selling and supporting our products, and the timing and extent of establishing international operations. Our capital commitments totaled approximately $1.0 million at December 31, 1999 and approximately $3.3 million at March 31, 2000.

Recent Accounting Pronouncements

In March 1998, the American Institute of Certified Public Accountants or AICPA issued Statement of Position No. 98-1, Accounting for the Costs of Computer Software Developed or Obtained for Internal Use. SOP No. 98-1 requires entities to capitalize certain costs related to internal-use software once certain criteria have been met. We expect that the adoption of SOP No. 98-1 will not have a material impact on our financial position or results of operations. We adopted SOP No. 98-1 effective January 1, 1999.

In June 1998, the Financial Accounting Standards Board issued FAS No. 133, Accounting for Derivative Instruments and Hedging Activities. FAS No. 133 establishes accounting methods for derivative financial instruments and hedging activities related to those instruments, as well as other hedging activities. Because we do not currently hold any derivative instruments and do not engage in hedging activities, we expect that the adoption of FAS No. 133 will not have a material impact on our financial position or results of operations. We adopted FAS No. 133 effective January 1, 1999.

In December 1999, the Securities and Exchange Commission ("SEC") issued SEC Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" ("SAB 101"). SAB 101 summarizes certain of the SEC's views in applying generally accepted accounting principles to revenue recognition in financial statements. We believe our revenue recognition policy is in compliance with SAB 101 as of March 31, 2000.

Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Sensitivity

Our exposure to market risks from changes in interest rates relates primarily to corporate debt securities. We place our investments with high credit quality issuers and, by policy, limit the amount of the credit exposure to any one issuer.

Our general policy is to limit the risk of principal loss and ensure the safety of invested funds by limiting market and credit risk. All highly liquid investments with a maturity of less than three months at the date of purchase are considered to be cash equivalents, and all investments with maturities of three months or greater are classified as available-for-sale and considered to be short-term investments.

The following table presents the amounts of our cash equivalents and short-term investments that are subject to market risk by range of expected maturity and weighted average interest rates as of December 31, 1999. This table does not include money market funds because those funds are not subject to market risk.

	MATURING IN 3 MONTHS	MATURING BETWEEN 3 MONTHS AND 1 YEAR	TOTAL
Included in cash and cash equivalents and short-term investments	$34,497	--	$34,497
Weighted average interest rate	6.0%	--%	6.0%

Exchange Rate Sensitivity

We operate primarily in the United States. All of our sales to date have been made in U.S. dollars; however, a small portion of our operational expenses have not been denominated in U.S. dollars. To date, the effect of changes in foreign currency exchange rates on operating expenses have not been material. In the future, we intend to transact business in various foreign currencies and, accordingly, will be subject to exposure from adverse movements in foreign currency exchange rates. We intend to assess the need to use financial instruments to hedge currency exposures on an ongoing basis.

We do not use derivative financial instruments for speculative trading purposes.

Business

Overview

We develop, market and sell the first open architecture communications platform designed to rapidly enable the delivery of market-leading applications and value-added services from within a service provider's network. Our IP service delivery platform is designed to allow service providers to offer highly differentiated, scalable managed value-added services, such as virtual private networks, without the level of financial and human resources associated with traditional deployment of these services. Our IP service delivery platform consists of three key elements: our IPSX 9000 service processing switch and our InVision service management system, both of which we are currently shipping, and our InGage customer network management software, which is scheduled to be released for customer trials in the second quarter of 2000. Our initial customers are Qwest Communications, Nissho Electronics, Internet Initiative Japan, BroadBand Office, American Metrocomm and AduroNet.

Industry Background

Wide area data networks, including the Internet, have rapidly evolved to become critical for the communication needs of many businesses and consumers. The explosive growth in the number of users and applications has created an enormous need for communications bandwidth. As a result, numerous service providers have emerged to offer high speed connectivity services to businesses and consumers. These service providers are building high-capacity networks using the latest broadband access, switching and routing products from both traditional and next-generation communications equipment vendors.

As new entrants in the service provider market emerge, the delivery of high speed connectivity is becoming intensely competitive. This competition is making it difficult for service providers to differentiate their service offerings, except through pricing. The result has been a rapid commoditization of bandwidth, which has created an environment that makes it increasingly difficult for service providers to achieve and maintain profitability.

As businesses have become more dependent on the Internet and other wide area data networks, they are increasingly seeking other communication services in addition to high speed connectivity. To enable these services, a secure and reliable networking environment is required. The Internet, however, suffers from an inherent lack of security and dependability, which businesses have struggled to overcome by deploying technologies such as firewalls, virus scanning, intrusion detection and encryption using dedicated customer premises equipment, or CPE. Businesses are also deploying additional dedicated CPE as more services are needed. This equipment is costly to deploy and maintain and requires large numbers of sophisticated and expensive networking personnel to manage. Most businesses do not have the capability to effectively implement these new technologies and have increasingly sought to outsource these activities.

Network service providers have started to provide management of customer premises equipment to address this demand and achieve three important business objectives:

- - attract subscribers through differentiated value-added services that can be layered on top of high-speed connectivity services;

- - increase revenue and profits from business subscribers who are demanding additional services; and - - reduce subscriber churn, since customers are forced to consider the total cost of replacing multiple services and to evaluate the risk of transitioning business critical services to a new service provider.

While network service providers have started to offer value-added services through the CPE-based approach to achieve these three objectives, the CPE-based approach is subject to a number of limitations.

The Problems of a Cpe-based Approach

The following diagram illustrates a typical CPE-based model for a single corporate customer in which equipment is installed at various customer premises and interlinked by dedicated encrypted connections:

Multivendor Cpe Diagram

The CPE-based model creates the following challenges that constrain the delivery of value-added services for both service providers and their customers.

HIGH COST TO INSTALL AND MANAGE. Installing and managing equipment located at dispersed customer sites results in high costs for both service providers and their customers. Each new customer site or service requires new CPE, or the modification of existing CPE, as well as on-site service calls. As a result, a CPE-based approach is costly and time consuming and often leads to delays in establishing service. This approach also requires that both service providers and their subscribers incur significant maintenance and monitoring expenses for all of the dedicated CPE and for the sophisticated technology personnel needed to manage these highly complex networks.

DIFFICULT TO SCALE. A CPE-based service delivery model is difficult to scale because on-site installation is required to deploy each new site or service. In addition, implementation challenges increase geometrically as new services and devices are added, since each new network site must be connected to all existing network sites.

LIMITED NETWORK SERVICES. In a CPE-based model, a subscriber's data is typically encrypted before entering the service provider's network. This environment limits the service provider to simple packet forwarding because value-added services must be implemented prior to encryption.

DIFFICULT TO INTEGRATE. CPE-based service provisioning often involves the integration of multiple network devices from a variety of vendors. Integrating and ensuring compatibility among these network devices is a significant challenge to using them in an efficient, combined manner.

LACK OF CARRIER-CLASS RELIABILITY. Customer premises equipment is not typically designed to deliver carrier-class reliability. Consequently, service providers may have difficulty offering consistent quality of service across all of these disparate network devices and implementing and supporting agreed levels of service.

The Need for a New Network-based Service Delivery Model

The problems with CPE-based service delivery models have created a significant need for service providers to offer network-based services that operate on infrastructure located within the service providers' networks. Delivering value-added services in this manner requires the creation of a new and more intelligent network, through which value-added services can be delivered quickly and cost-effectively to thousands of customer sites from within a service provider's network, without the need

for equipment to be deployed or managed on customers' premises. Furthermore, we believe that this network must also be based on an open architecture to enable the use of market-leading applications from third-party vendors.

Existing infrastructure has been used in network-based approaches in attempts to build intelligent networks. However, we believe that traditional approaches and existing infrastructure cannot effectively be used to implement this network because they face a number of challenges, which have constrained their commercial viability:

Limitations of Existing Network-based Approaches

FARMS OF CUSTOMER PREMISES EQUIPMENT. While reducing the installation and management costs resulting from broad geographic dispersion of customer premises equipment, aggregating this equipment in the service providers' facilities does not address the remaining problems associated with CPE-based approaches. In addition, this approach introduces costs associated with requiring large numbers of devices to be located in the already constrained space of the service providers' facilities.

CARRIER SWITCHES AND ROUTERS. Switches and routers currently used by service providers are specifically designed to forward packets through data networks. However, they lack the flexibility and general purpose computing capacity necessary to directly provide a wide range of value-added services, making them poorly suited for deployment of these services.

LARGE GENERAL-PURPOSE SERVERS. Large general-purpose servers, commonly deployed in computer data centers, do not have carrier-routing capabilities or network access interfaces and are not optimized for data forwarding performance. Further, these servers do not have the network management and operational systems required to meet stringent service provider standards. Even when these servers are loosely coupled with large routers to address the lack of carrier- routing capabilities and network access interfaces, the combined system is costly and inefficient and does not provide a secure environment.

Need for an Open Architecture

Most of today's network devices are designed around proprietary architectures and use operating systems that are highly inflexible and have not been designed to support the migration of third-party applications into the network. Since network equipment vendors generally cannot maintain core competencies in all application technologies, we believe service providers need a device that employs an open architecture, facilitating the development of new applications and the adaptation of existing applications by third parties for use on that device. Such a device is needed to allow service providers to rapidly change services and deploy new applications without having to replace installed infrastructure.

We believe there is substantial demand for next-generation systems that enable the cost-effective delivery of network-based value-added services from an open platform in a scalable and reliable manner.

The Cosine Communications Solution

We develop, market and sell the first open architecture communications platform designed to rapidly enable the delivery of market-leading applications and value-added services from within a service provider's network. Our IP service delivery platform combines advanced hardware and software in an open architecture platform that is designed to allow service providers to build intelligent data networks.

Intelligent data networks enabled by our products are designed to deliver applications from within a network much like voice networks are designed to deliver services, such as voice messaging and conferencing, without the need for specialized customer premises equipment. Each IPSX 9000 can deliver applications to thousands of subscribers simultaneously. The following diagram illustrates an intelligent data network enabled by our products for a single organization with multiple sites.

[Graphic]

Our IP service delivery platform consists of three key elements: our IPSX 9000 service processing switch and InVision service management system, both of which we are currently shipping, and our InGage customer network management software, which is scheduled to be released for customer trials in the second quarter of 2000.

We believe our products will offer the following benefits for service providers and their customers:

- - the ability for service providers to increase revenue by delivering profitable value-added services, such as extranet, intranet and remote access virtual private network services, to their customers;

- - faster time to market for the delivery of new services by service providers;

- - reduced operating expenses for service providers through automated provisioning, customer self-provisioning, centralized billing capability and fewer on-site service calls;

- - the ability of service providers to attract new customers and reduce customer churn;

- - the ability for subscribers to monitor and control value-added services;

- - carrier-class reliability and scalability;

- - sophisticated software-based network management capabilities for service providers and their customers;

- - a flexible open architecture that can support market-leading third-party applications; and - - support for and interoperability with existing network standards and applications.

Our IP service delivery platform is designed to achieve carrier-class reliability and manageability and to scale efficiently as a service provider's network and service offerings grow. Our platform is designed to enable network service providers to offer their subscribers value-added services, such as virtual private networks, firewall services and secure broadband access without the need for CPE.

Our IP service delivery platform is designed for a wide range of service providers. They include next-generation IP carriers, competitive local exchange carriers, inter-exchange carriers, regional bell operating companies, international phone companies and Internet service providers.

Strategy

Our objective is to be the leading supplier of a platform designed specifically for the delivery of market-leading applications and value-added services from within service provider networks. The following are the key elements of our strategy:

- - LEVERAGE OUR OPEN ARCHITECTURE TO OFFER ADDITIONAL MARKET-LEADING THIRD-PARTY SERVICE APPLICATIONS. The open architecture approach of the IPSX 9000 enables us to offer service providers value-added services using market-leading, third-party software technologies. We currently offer several such technologies from a number of market-leading software providers. Our goal is to continue developing relationships with additional third-party software providers to expand our portfolio of services.

- - ESTABLISH OUR PLATFORM AS THE LEADING SOLUTION IN KEY MARKETS. Our initial focus has been to achieve commercial deployments with key classes of service providers to demonstrate and validate distinct applications of our platform. We believe that early success with these customers will better enable us to market our products to other service providers within these different classes as these service providers continue to build their networks and replace outdated equipment.

- - EXTEND OUR FIRST MOVER ADVANTAGE. We have built the first open architecture IP service delivery platform designed specifically for the delivery of market- leading applications and value-added services from within a service provider network. Our goals are to secure rapid deployment of our products into service providers' networks and to establish our products as the primary service delivery platform, thereby creating a significant barrier to entry for potential competitors.

- - WORK CLOSELY WITH CUSTOMERS TO FACILITATE NEW SERVICES. In developing our IP service delivery platform, we have worked closely with our current customers to develop features to meet their complex and distinct needs. We believe that our close relationships and open communications with these customers have been essential to our platform being designed and deployed into their networks. We plan to continue to work closely with our current and potential customers to develop product enhancements, future products and value-added services that specifically meet their evolving needs.

- - EXPAND SALES, DISTRIBUTION, SUPPORT AND SERVICE CAPABILITIES. We plan to aggressively expand our sales and distribution capabilities in the United States and internationally. Additionally, we have built a team of support and service professionals to assist our customers with the rapid design and deployment and efficient operation of our platform within their networks.

- - EXTEND TECHNOLOGY LEADERSHIP. We have established technology leadership with our modular and scalable hardware and software architecture. We believe that we can use this modular architecture to rapidly develop future products and enhancements. We intend to extend our technology leadership through continued significant investment in research and development.

- - PURSUE STRATEGIC ALLIANCES AND ACQUISITIONS. We intend to expand our products and services through selected acquisitions and alliances. These may include acquisitions of complementary products, technologies and businesses that enhance our technology leadership and product breadth. We also believe that allying with companies providing complementary products or services for intelligent data networks will assist us in bringing greater value to our customers and extending our lead over potential competitors.

Products and Technology

Ip Service Delivery Platform

Our IP service delivery platform consists of three key products: our IPSX 9000 service processing switch, our InVision service management system and our InGage customer network management software. In January 2000, we released our IPSX 9000 service processing switch and InVision service management system for general availability. We anticipate releasing our InGage customer network management software for customer trials in the second quarter of 2000 and for general availability in the third quarter of 2000.

Our products are priced separately and can be sold in various configurations and combinations depending on the size of the service provider and the specific service offerings the service provider would like to offer its customers. The list price for our IP service delivery platform ranges from $73,000 to several million dollars, depending on the hardware and software configuration.

Ipsx 9000 Service Processing Switch.

Our IPSX 9000 service processing switch combines the functionality of high- 37 performance networking hardware, massively parallel distributed computing hardware and sophisticated operating system software. It is designed to be deployed in a service provider's point of presence and is the vehicle from which value-added services are delivered.

Our platform is based on a massively parallel computing architecture, which allows distributed computing to occur simultaneously within a multi-processor system. This approach aggregates the computing power of multiple processors to deliver the performance of a more powerful computing system. Individual processors, located on processing engines, or PEs, are connected to other processing engines through a communications fabric, as illustrated below.

[Graphic]

Our massively parallel approach, which is designed to be scaleable, allows additional processing resources to be added as they are needed. Our architecture enables applications to be distributed among available processing resources. These processing resources are located within processing engines on printed circuit board assemblies, which we refer to as blades. Our architecture allows applications to be distributed among processing engines on individual blades and between blades within our IPSX 9000 system.

IPSX HARDWARE ARCHITECTURE. The IPSX hardware architecture involves two key design elements, our chassis design and blade design, that create a modular and flexible platform. Our IPSX 9000 is shown below.

Graphic

IPSX Chassis design. Our chassis design provides a total of 26 slots for system blades, 13 in the front and 13 in the rear. All of the blades are connected to a printed circuit board assembly located in the middle of the chassis, which we refer to as the mid-plane, using our fault tolerant dual ring fabric. Any blade can be placed into any available slot within the chassis at any time. The IPSX chassis currently supports the following four types of system blades:

- - access blades -- interfaces to subscriber networks;

- - trunk blades -- interfaces to the carrier backbone;

- - processing blades -- multiple processing engines for value-added service applications; and - - control blades -- processing for shelf management and administrative functions.

In addition to the capabilities described above, access, trunk and control blades can support multiple processing engines for the delivery of value-added services.

This ring fabric eliminates the need for dedicated switch fabric slots and allows each blade to have access to all of the bandwidth of the ring. Our ring fabric architecture is illustrated below.

[Graphic]

Our proprietary fault tolerant ring technology implements a self-healing capability, which can protect the system against failure of a single blade or ring, and allows a blade to be inserted and removed while the system is operating. This ring architecture is highlighted in the following diagram:

Graphic

Blade design. Each IPSX 9000 blade is built around a similar architecture as shown in the following diagram:

Graphic

Each blade is individually configurable and supports up to four processing engines. Each processing engine consists of a general purpose processor, memory or specialized hardware designed for encryption or other specific applications, and our proprietary queuing packet inter-processor controller, or QPIC, designed to facilitate inter-processor collaboration. We currently use three types of processing engines, one designed for high performance general purpose computing, another for encryption and public key related authentication and another for external interfaces. The processing engines and applications on each blade can interact with the processing engines and applications on every other blade. In addition, each blade contains a proprietary crossbar switch fabric that allows the processing engines on a given blade to communicate with each other without using the inter-blade ring fabric capacity. Our hardware is also designed to take advantage of improvements in processing and computing technology.

We currently offer the following blades for the IPSX 9000:

ACCESS BLADES 2 Port DS-3 Channelized 2 Port DS-3 UnChannelized 3 Port E3 Channelized 2 Port E3 UnChannelized 1 Port OC-3c/STM-1 ATM 1 Port Fast Ethernet TRUNK BLADES 2 Port DS-3 UnChannelized 2 Port E3 UnChannelized 1 Port OC-3c/STM-1 ATM 1 Port OC-3c/STM-1 POS 1 Port Fast Ethernet PROCESSOR BLADES 4 Processor Service Blade CONTROL BLADES Control Blade with Fast Ethernet IPNOS SOFTWARE. Our platform is designed to provide a real-time, object-oriented, fault-tolerant, distributed computing IP network operating system, or IPNOS. IPNOS combines the capabilities of real-time operating system software typically found in networking infrastructure products with the capabilities of large scale general-purpose computing operating system software typically found in large scale general-purpose computers and traditional servers. IPNOS is a distributed operating system designed to allow applications to easily take advantage of our massively parallel processing capabilities. The following diagram illustrates our secure IPNOS application service environment.

IPNOS Foundation graph IPNOS is designed to support high-performance routing and packet forwarding. It also provides an application programming interface, or API, which is designed to allow applications to be ported from traditional general-purpose operating systems, such as UNIX or Windows. Finally, IPNOS provides a framework for secure system communications.

INVISION SERVICE MANAGEMENT SYSTEM. Our InVision service management system is a scalable network management software product that is designed to allow service providers to manage our IPSX 9000 platforms and the services being offered to their customers. It is designed to be deployed in the service provider's network operations center and provides a broad range of sophisticated management services for each value-added application. It also enables service providers to develop service provisioning templates and includes a provisioning tool to facilitate the process of delivering new services. InVision also provides a powerful scripting language to allow service providers to easily customize and automate various functions without re-programming the underlying software. InVision is designed for scalability to meet the needs of the largest service provider networks, and conforms to telecom industry network management standards.

The InVision system runs on the Sun Solaris and Microsoft Windows NT operating systems and uses both a distributed Oracle database and CORBA distributed object technology to ensure scalability for both its servers and GUI client stations. All distributed components can communicate using a secure IP network and CORBA APIs. These APIs can be made available to our customers, providing them with a mechanism to control InVision from other systems in their networks. InVision uses SNMP to communicate with the IPSX 9000. InVision also is designed to interoperate with network management systems from Hewlett Packard, Concord Systems, Veritas, and Micromuse.

INGAGE CUSTOMER NETWORK MANAGEMENT. InGage, which is scheduled for customer trial at the end of the second quarter of 2000 and general availability in the third quarter 2000, will be a scalable network management software product designed to allow subscribers to securely manage their value-added services through a Web-enabled interface. We expect InGage to enable a subscriber to remotely manage services without affecting the services of any other subscriber and monitor the usage of value-added services. We are designing InGage to permit the addition of tools from our third-party software vendors, allowing us to incorporate existing sophisticated trending and analysis tools already on the market. We also expect InGage to provide subscribers with the ability to provision certain service capabilities directly without contacting the service provider.

InGage will be comprised of CORBA server components that act as clients of the larger InVision system. All traffic between the Web client and the InGage servers will be secured using SSL-based strong encryption and authentication technology. InGage will be designed to run on standards-based Web browser environments.

Ipsx Service Applications

A service provider can deliver a variety of value-added service applications running on our platform based on individual subscriber needs. Our IP service delivery platform is designed to enable each service to be available independently and privately for each enterprise subscriber.

Although we license many of our service applications from leading application software vendors, we have also developed several of our own enterprise subscriber service applications. We plan to continue to add new services developed internally as well as add new services developed by third parties. The table below sets forth value-added service applications currently available for use on our IP service delivery platform.

THIRD-PARTY-DEVELOPED APPLICATION CATEGORY COSINE-DEVELOPED (LICENSOR)

Access Protocol	Cisco HDLC	Frame Relay (Harris and
	Ethernet VLAN -- 802.1Q	Jeffries)
	Packet-Over-SONET	ATM (Trillium)
		PPP (RouterWare)
Virtual Routing	Static Routes	RIP V1/V2 (Epilog)
		OSPF (Epilog)
		BGP-4 (Epilog)
Security	Network Address Translation	Proxy Firewall (Network
	Packet Filter	Associates)
	Encryption	IPSec (SSH)
Broadband and Dial Aggregation	PPTP	
	PPPoATM	
Emulation	FRoIPSec	
	Virtual FR Switch	

Service Offering Examples

Our IP Services Delivery Platform is designed to enable a wide variety of advanced services for our customers and their subscribers. A few examples of potential applications are summarized below:

Enterprise Virtual Private Network Service

[Diagram]

Our platform is designed to enable service providers with IP backbone networks to offer their enterprise subscribers virtual private network, or VPN, services without the need for costly customer premises equipment. Using traditional point-to-point connections, including leased lines, Frame Relay or asynchronous transfer mode, or ATM, enterprise subscribers can access our IP service delivery platform located at their service provider's closest point of presence, or PoP. Each connection terminates on a single private routing service application within our IPSX 9000 called a virtual router. Each virtual router acts as a private aggregation point for these connections and can provide secure routing services between all of a customer's sites within a virtual network.

Service providers can deploy our platform at the edge of their networks to reduce the distance that must be traversed using costly leased line, Frame Relay or ATM connections from each enterprise subscriber to the nearest PoP. Once the traffic reaches the virtual router service, our platform can provide sophisticated encryption and authentication services using the IP security protocol, or IPSec, service. The traffic can then be securely transmitted less expensively over public IP networks or the Internet.

Wholesale Vpn Service

[Cosine Graphic]

A wholesale ISP, which provides wholesale services to regional ISPs, can use our IP service delivery platform to offer these regional ISPs value-added services for resale to their subscribers. Currently, ISPs using CPE-based encryption cannot easily offer network-based, value-added services because traffic is encrypted on the customer's premises before being sent to the network. Once encrypted by the customer, the service provider cannot interpret the contents of the packet and, as a result, cannot layer on any services.

By directing CPE-based encrypted traffic from a customer site to a virtual router within the wholesale ISP, the regional ISP can offer a wide range of value-added services from the wholesale ISP's network in a cost-effective scalable manner.

Secure Broadband Services

[Cosine Graphic]

Broadband local access carriers deploying digital subscriber line, cable modem or broadband wireless data services control consumer and business access to the Internet and other wide area data networks. These carriers are very often in the position of providing wholesale broadband access to their service provider customers. Wholesale broadband connectivity, however, is becoming a commodity, and these data carriers are seeking ways to lower costs associated with providing this connectivity and to increase revenues through value-added services. Our platform is designed to enable broadband data carriers to provide traffic aggregation and ISP service selection switching more efficiently than existing solutions. Additionally, our platform lowers the cost of operation for carriers by allowing them to transport the aggregated traffic over less expensive IP networks instead of using point-to-point, Frame Relay or ATM connections to reach their wholesale customers.

In addition to cost savings, our platform gives data carriers and their service provider customers several new revenue-generating opportunities. Using our platform, a data carrier can provide its service provider customers with broadband ports already enabled with value-added services. Service providers

can buy these services wholesale, along with the broadband subscriber access port, from the data carrier and resell them to their end-subscribers as premium value- added services.

Legacy and Ip Interworking Service

[Diagram]

Many traditional domestic and international carriers have invested heavily in existing Frame Relay and ATM network infrastructures. We believe that these networks and the enterprises using them will continue to grow. Large enterprise customers using these networks generally cannot afford to quickly migrate their entire organization to a new IP-based network. Our platform is designed to enable traditional service providers to use their existing Frame Relay or ATM networks to emulate IP networks and offer network-based services. We believe that this will enable service providers to pursue revenue opportunities using their significant existing investments in equipment. In addition, we believe that this will benefit these service providers' subscribers by facilitating the introduction of new services at lower costs than would otherwise be available.

Frame Relay Emulation Services Over Ip

[Diagram]

We believe that next generation IP service providers will sometimes need to offer services, such as Frame Relay over IP, in addition to their next-generation services. These service providers are likely to continue to have customers that need to use traditional services in order to transport many legacy protocols, such as Novell's IPX. Although we believe that these services will not grow as quickly as next generation services, Frame Relay connections are likely to continue to grow with the volume of traffic from large enterprises. Our IPSX 9000 is designed to emulate the capabilities of a Frame Relay service without requiring an IP-based carrier to invest in any additional equipment. We believe that our platform will allow next generation service providers to create virtual Frame Relay networks, significantly improving the flexibility of their IP-based networks.

Customers

As of April 28, 2000, we have received orders for our products and services from Qwest Communications, Nissho Electronics, Internet Initiative Japan, BroadBand Office, American Metrocomm and AduroNet.

Sales and Marketing

We sell our products primarily through our global direct sales organization, which we intend to complement with resellers that target specific countries and international partners. As of March 31, 2000 we had 37 people in our sales and marketing organization.

Direct Sales

Our North American direct sales organization is divided into western, central, and eastern regions and concentrates on network service providers offering IP-based services. Territory sales managers cover specified geographies, and account managers focus on large individual customers. Both types of sales managers work with our global sales and support organization systems engineers to provide customers with network design and buildout proposals. Sales and account managers are directed by regional vice presidents in the western, central and eastern regions who report directly to the vice president of worldwide sales.

As part of our direct selling model, we use our field sales, engineering, and executive personnel to establish multiple contacts within a potential customer's business organization. We believe that maintaining ongoing customer relationships with key individuals in a customer's engineering, operations, marketing and executive departments will be important to our success.

International Sales and Resellers

We believe that to effectively market our products in other countries, we need to use local sales organizations that understand the business and network environment in their countries. We expect that the international sales organizations and resellers that we are selecting will enhance our ability to sell our products in complex international environments and provide high quality support for our foreign customers.

Global Services and Support

Global services and support play a key role in ensuring our customers' success in using the IP services delivery platform. The goal of our service organization is to enable service providers to generate sustainable new revenues in a short period of time. We seek to achieve this goal by providing a comprehensive set of service offerings ranging from professional services targeted at network architecture, design, and deployment to product support. Our support offerings include hardware and software warranty services, access to our global technical assistance center, on-site network engineers, and Web-based technical information and assistance.

Our professional services include consulting offerings designed to support service providers from initial planning through implementation and ongoing operation. Our network engineers and consultants are skilled in network design and architecture, virtual private network technologies, IP

security, IP routing protocols and network performance and availability.

As of March 31, 2000, we had 24 employees in customer service and support, with the majority located at our Redwood City, California corporate headquarters.

Research and Development

We have assembled a team of skilled engineers with extensive experience in high-end computing, network system design communications protocols, Internet security protocols, Internet firewalls, managed network services, operating system design and network management software. These individuals have come from leading data networking, computer systems, computer security and telecommunications companies. In addition to building complex hardware and software systems, our engineering team has experience in designing highly scalable Internet software, high performance computing platforms, and highly integrated application specific integrated circuits with advanced packaging technologies. We currently license software from leading network software application companies for integration into our IP service delivery platform and plan to continue to do so in the future.

Our research and development group is organized into teams that work on multiple generations of products. We seek to offer our customers new products as they are needed, as well as enhancements to existing products.

We plan to enhance our core technology and develop additional applications for our IP service delivery platform. For example, we are using our first generation system design and managed network services to develop additional network interfaces and services. We continue to expand the functionality of our IPNOS software, our InVision service management software and our InGage customer network management software to improve performance, scalability and ease of use.

Our research and development efforts are driven by the availability of new technology, market demand and customer feedback. We have invested significant time and resources in creating a structured process for undertaking all product development projects. This process involves all functional groups and all levels within our company. Following an assessment of market demand, our research and development team develops a set of functional product specifications based on inputs from the product management, sales, and service organizations. This process is designed to provide a framework for defining and addressing the steps, tasks, and activities required to bring product concepts and development projects to market.

In connection with our research and development efforts, we work closely with technical, marketing and other departments of our customers to determine the features and functionality they want from our products. This feedback is a factor we consider in defining and prioritizing our research and development projects. To further the development of additional applications for our IP service delivery platform, we intend to continue working with research and development teams of market leading application vendors.

As of March 31, 2000, we had 144 employees in our research and development group.

Our research and development expenses totaled $27.3 million in 1999, $7.4 million in 1998, and $87,000 for the period from inception to December 31, 1997.

Manufacturing

We outsource manufacturing to three ISO-certified contract manufacturers: Solectron, SMTC Manufacturing and Sonic Manufacturing. These suppliers procure material and assemble and test all printed circuit boards and chassis assemblies used in our products. These printed circuit boards and chassis assemblies are delivered to our Redwood City, California facilities, where we perform the final testing, packaging and shipping. Each of our manufacturers produce our products within 30 miles of our Redwood City facilities. All manufacturing is done on a purchase order basis. We are working with Solectron to have it provide additional manufacturing services through system integration, test and direct shipment to our customers by the end of 2000. Our use of outsourced manufacturing minimizes the space and inventory investment needed for manufacturing operations and enables us to:

- - adjust manufacturing volumes quickly to meet changes in customer demand;

- - focus on production planning and key commodity management; and - - take advantage of the purchasing power of our contract manufacturers.

As of March 31, 2000 we had 25 employees in our manufacturing operations group.

Competition

The networking equipment business is extremely competitive, with numerous vendors offering products that enhance the functionality of a service provider's network. With our IP service delivery platform, we have created a technology that enables a broad suite of services to be deployed from a service provider's network with the capacity to add new services in the future. These services include both site-to-site and secure dial virtual private networks, extranets, managed firewalls and other services. Consequently, our capabilities place us in direct competition with a variety of vendors who can offer specific products addressing each of these customer needs.

In specific service areas, our competitors include Alcatel, Cisco, Lucent, Nortel, Siemens and Spring Tide who market and sell certain products offering virtual private network capabilities and/or firewall solutions. These vendors and other new entrants are aggressively developing new infrastructure solutions for use within a service provider's network, as it evolves to become the point in the network where service differentiation occurs. We also compete with traditional enterprise equipment because our IP service delivery platform eliminates the need for these products. These vendors include, among others, Check Point and Axent for firewalls and VPNet and Red Creek for virtual private network encryption devices.

To compete effectively, we must continue to do the following:

- - expand the service offerings that can be delivered from our IP service delivery platform;

- - enhance the functionality of our service management system;

- - deliver scalable processing capabilities;

- - provide carrier-class network reliability;

- - market our products effectively to potential customers; and - - offer responsive global service and support.

Intellectual Property

We have developed significant trade secret knowledge with respect to the architecture and operation of our IP service delivery platform. Our IPNOS software, InVision service management system and InGage customer network management system were developed internally and are protected by United States and foreign copyright laws. Our IP service delivery platform system architecture and hardware were developed internally, and we own all rights to the core interfaces and protocols between subsystems.

Although we rely on copyright, trade secret and trademark law to protect our intellectual property, we believe that the technological and creative skills of our personnel, new product developments and frequent product enhancements are essential to maintain our technology leadership.

We currently license software from leading network software application companies for integration into our IP service delivery platform. These licenses are terminable after a specified period or upon certain events. If one or more of these licenses is terminated, we may need to locate and incorporate alternative software providing comparable services to the customer.

Our success will depend upon our ability to obtain necessary intellectual property rights and protect our intellectual rights. We cannot be certain that we will be able to obtain the necessary intellectual property rights or that other parties will not contest our intellectual property rights.

Legal Proceedings

We are not subject to any material legal proceedings.

Employees

As of March 31, 2000, we had 275 full-time employees, 144 of whom were engaged in research and development, 37 in sales and marketing, 24 in customer support, 45 in general corporate, finance and administration, and 25 in manufacturing. None of our employees is represented by a labor union. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

Our future performance depends substantially upon the continued service of our key technical, sales and senior management personnel, none of whom is bound by an employment agreement requiring service for any specified period of time. The loss of the services of one or more of our key employees could have a material adverse effect on our business, financial condition and results of operations. Our future success also depends on our continuing ability to attract, train and retain highly qualified technical, sales and managerial personnel. Competition for such personnel is intense, and there can be no assurance that we can retain our key personnel in the future.

Facilities

We lease approximately 96,800 square feet at our corporate headquarters located in Redwood City, California under leases which expire in December 2011. Although we believe that our existing facilities are adequate to meet our current requirements, we expect that by the end of 2000 we will need additional space to accommodate our growth. The commercial real estate market in the San Francisco Bay Area is volatile and unpredictable in terms of available space, rental fees, occupancy rates and preferred locations. We cannot be certain that additional space will be available when we require it, or that it will be affordable or in a preferred location. See "Risk Factors -- If we fail to manage expansion effectively, our business, our management and operational resources will be strained, which could hinder our growth."

Management

Executive Officers and Directors

The following table sets forth information regarding our executive officers and directors as of April 24, 2000.

Name Age Position

Dean E. G. Hamilton....	37	President, Chief Executive Officer and Director
Steve Goggiano.....	47	Executive Vice President and Chief Operating Officer
Bill Ferone.....	55	Executive Vice President, Global Services and Support
Lianghwa Jou.....	39	Executive Vice President and Chief Technology Officer
Michael Nielsen.....	38	Senior Vice President of Engineering
Curtis Dudnick.....	50	Vice President of Finance, Secretary, and Chief Financial Officer (acting)
Larry Jackson.....	37	Vice President of Worldwide Sales
Vinton G. Cerf.....	56	Director
Donald Green(1).....	68	Director
Glenn Hartman(2).....	42	Director
R. David Spreng(1)(2).....	38	Director

(1) Member of Audit Committee (2) Member of Compensation Committee Dean E. G. Hamilton has served as President, Chief Executive Officer and has been a director of CoSine since founding CoSine in April 1997. From August 1996 to November 1997, Mr. Hamilton was the general manager of the Carrier Signaling Infrastructure Business Unit at Ascend Communications, Inc., a telecommunications company. From April 1995 to August 1996, Mr. Hamilton was co-founder, Chief Executive Officer, and President of Subspace Communications, a telecommunications company, which was acquired by Ascend.

Steve Goggiano has served as Chief Operating Officer since joining CoSine in December 1999. Prior to joining CoSine, Mr. Goggiano held various positions at SGI, formerly known as Silicon Graphics, Inc., a provider of computing systems and software, from 1989 to 1999. These positions included Senior Vice President/General Manager of SGI's Server and Supercomputer division, and Senior Vice President of WorldWide Manufacturing and Customer Service. Mr. Goggiano holds a B.S. in Business from San Jose State University.

Bill Ferone has served as the Executive Vice President of Global Services and Support since joining CoSine in July 1999. Prior to joining CoSine, Mr. Ferone was Senior Vice President of Service at Nortel Networks from April 1998 to July 1999. He served as Vice President and later as Senior Vice President of Customer Service at Amdahl Corporation, a wholly-owned subsidiary of Fujitsu Limited that is a provider of integrated computing services, from January 1991 to April 1998. Mr. Ferone holds a B.S. in Business from the University of Cincinnati.

Lianghwa Jou is a co-founder of CoSine and has served as Chief Technology Officer since November 1999 and served as the Vice President of Engineering from November 1997 through October 1999. Mr. Jou worked as a Director of Engineering at Ascend Communications from July 1996 to September 1997. From March 1995 through June 1996, Mr. Jou was the Vice President of Engineering and a co-founder of Subspace Communications. He holds a B.S.E.E. from National Chiao Tung University and an M.S. in Computer Science from Indiana University.

Michael Nielsen has served as Senior Vice President of Engineering since joining CoSine in October 1999. From July 1992 to September 1999, Mr. Nielsen held various positions at SGI, formerly known as Silicon Graphics, Inc., most recently as Vice President of Engineering for the Workstation Division. Mr. Nielsen holds a B.S., an M.S. and a Ph.D. in Electrical Engineering from Stanford University.

Curtis Dudnick has served as acting Chief Financial Officer and Secretary of CoSine since June 1998 and as Vice President of Finance since August 1999. From May 1995 to August 1999, Mr. Dudnick was a partner in David Powell, Inc., a national consulting firm, through which he acted as chief financial officer for a number of privately held technology companies. Mr. Dudnick holds a B.S. in Accounting and an MBA from the University of Utah.

Larry Jackson has served as Vice President of Sales since joining CoSine in June 1998. From January 1997 to March 1998, Mr. Jackson served as Vice President of Sales for Europe, the Middle East and Africa, and prior to that as Vice President of Sales for Japan and the Pacific Rim, at Ascend Communications. Mr. Jackson holds a B.S. in Computer Science from the University of California, Santa Barbara.

Vinton G. Cerf has served as a director of CoSine since April 2000. Dr. Cerf has served as the Senior Vice President for Internet Architecture and Technology for MCI WorldCom Corporation, a telecommunications company, since September 1998. From January 1996 to September 1998, Dr. Cerf was the Senior Vice President for Internet Architecture and Engineering at MCI Communications Corporation, a telecommunications company. Dr. Cerf was Senior Vice President for Data Architecture at MCI Telecommunications Corporation, a telecommunications company, from February 1994 to December 1995. Dr. Cerf is also a director of Avanex Corporation, a supplier of fiber optic-based products, and Nuance Communications, Inc., a speech recognition software company. Dr. Cerf holds a B.S. in Mathematics from Stanford University and M.S. and Ph.D. degrees in Computer Science from the University of California, Los Angeles.

Donald Green has served as a director of CoSine since June 1999. Mr. Green was a co-founder of Advanced Fibre Communications, Inc., a provider of multi-service access solutions for the telecommunications industry, and has served as its Chairman of the Board since May 1999, and served as Chief Executive Officer from May 1992 to May 1999. Mr. Green is also a director of TCSI Corporation, a software company. Mr. Green holds a higher national certificate in electrical engineering from Willingsdon Technical College.

Glenn Hartman has served as a director of CoSine since its inception in April 1997. Mr. Hartman has served as the Managing General Partner of Falcon Capital, LLC, a private equity investment company, since September 1995. Mr. Hartman was the co-founder of Apex Data Inc., a manufacturer of telecommunication computer peripheral products, and served as its chief executive officer from June 1992 until September 1995. Mr. Hartman is also a director of Digital Courier Technologies, Inc., a provider of payment processing services to merchants and financial institutions, and two private organizations. Mr. Hartman holds a B.A. in Economics from the University of California at Los Angeles.

R. David Spreng has served as a director of CoSine since December 1998. Mr. Spreng has served as the Managing General Partner of Crescendo Venture Management, LLC since September 1998. Mr. Spreng served as President of IAI Ventures, Inc. from March 1996 to September 1998 and served in various capacities at Investment Advisers, Inc. since 1989. Mr. Spreng is also a director of Allied Riser Communications Corporation, a broadband communications services provider, and Tut Systems, Inc., a developer of multi-service broadband access systems. Mr. Spreng holds a B.S. in Finance and Accounting from the University of Minnesota.

We intend to appoint Craig B. Collins as Chief Financial Officer upon his joining our company.

Board of Directors

Our Board of Directors currently consists of five 5 authorized members. Upon completion of this offering, our certificate of 52 incorporation will provide for a classified board of directors consisting of three classes of directors, each serving staggered 3-year terms. As a result, a portion of our board of directors will be elected each year. To implement the classified structure, prior to the consummation of

the offering, one of the nominees to the board will be elected to a one-year term, two will be elected to 2-year terms and two will be elected to three-year terms. Thereafter, directors will be elected for 3-year terms. Class I directors will have terms of office expiring at the 2001 annual meeting of stockholders; Class II directors will have terms of office expiring at the 2002 annual meeting of stockholders; and Class III directors will have terms of office expiring at the 2003 annual meeting of stockholders. This classification of the board of directors may delay or prevent a change in control of our company or in our management. See "Description of Capital Stock -- Delaware Anti-Takeover Law and Certain Provisions of Our Certificate of Incorporation and Bylaws."

Executive officers are appointed by the board of directors on an annual basis and serve until their successors have been elected and qualified. There are no family relationships among any of our directors, officers, or key employees.

Board Committees

We established an audit committee and a compensation committee in January 1999. The audit committee consists of Messrs. Green and Spreng. The audit committee reviews our internal accounting procedures, consults with and reviews the services provided by our independent accountants and makes recommendations to the board of directors regarding the selection of independent accountants.

The compensation committee consists of Messrs. Hartman, Green and Spreng. The compensation committee reviews and recommends to the board of directors the salaries, incentive compensation and benefits of our officers and employees, including stock compensation and loans, and administers our stock plans and employee benefit plans.

Mr. Green purchased Series D preferred stock from us on September 17, 1999. Please see "Certain Transactions" for a discussion of our Series D preferred stock financing.

Compensation Committee Interlocks and Insider Participation

None of the members of the compensation committee is currently, or has ever been at any time since our formation, one of our officers or employees or an officer or employee of any of our subsidiaries. No member of the compensation committee serves as a member of the board of directors or compensation committee of any entity that has one or more of our executive officers serving as a member of our board of directors or compensation committee.

Director Compensation

We do not currently compensate our directors in cash for their service as members of the board of directors, although they are reimbursed for certain expenses in connection with attendance at board and committee meetings. Under our 1997 Stock Plan, non-employee directors are eligible to receive

stock option grants at the discretion of the board of directors or another administrator of the plan. See "-- Stock Plans."

Technical Advisory Boards

We have technical advisory boards for both our U.S. operations and our international operations. These boards advise us on the performance of our current and future services and products in relation to client needs. In addition, these boards advise us on engineering issues related to our products. Our U.S. board is comprised of seven members, and our international board is comprised of two members.

Limitations on Directors' and Officer's Liability and Indemnification

Our certificate of incorporation limits the liability of directors to the maximum extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except liability for:

- - any breach of their duty of loyalty to the corporation or its stockholders; acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

- - unlawful payments of dividends or unlawful stock repurchases or redemptions; or - - any transaction from which the director derived an improper personal benefit.

Such limitation of liability does not apply to liabilities arising under the federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our certificate of incorporation and bylaws provide that we will indemnify our directors, officers, employees and other agents to the fullest extent permitted by law. We believe that indemnification under our bylaws covers at least negligence and gross negligence on the part of indemnified parties. Our bylaws also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in such capacity, regardless of whether the bylaws would permit indemnification.

We intend to enter into agreements to indemnify our directors and officers, in addition to the indemnification provided for in our bylaws. These agreements, among other things, provide for indemnification of our directors and officers for certain expenses including attorneys' fees, judgments, fines and settlement amounts incurred by any such person in any action or proceeding, including any action by us or on our behalf, arising out of such person's services as one of our directors or officers, any of our subsidiaries or any other company or enterprise to which the person provides services at our request. These agreements also provide for the payment by us of taxes imposed on such person resulting from payments under the agreement. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and officers.

At present, there is no pending litigation or proceeding involving any of our directors, officers or employees in which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

Executive Compensation

SUMMARY COMPENSATION TABLE. The following table sets forth the compensation earned for services rendered for us in all capacities for the fiscal year ended December 31, 1999 by our Chief Executive Officer and our three next most highly compensated executive officers, who we refer to as the named executive officers, who earned more than $100,000 in salary and bonus during the fiscal year ended December 31, 1999:

Summary Compensation Table

	ANNUAL COMPENSATION		LONG-TERM COMPENSATION AWARDS
NAME AND PRINCIPAL POSITIONS	SALARY	BONUS	SECURITIES UNDERLYING OPTIONS
Dean E. G. Hamilton..... President, Chief Executive Officer and Director	$169,231	$--	400,000
Curtis Dudnick..... Chief Financial Officer (acting), Vice President of Finance and Secretary	$216,931(1)	--	210,000
Larry Jackson..... Vice President of Sales	$149,999	--	66,678
Lianghwa Jou..... Chief Technology Officer	$138,078	--	250,000

(1) Includes $165,505 paid to Mr. Dudnick by David Powell, Inc. during the period he was our acting chief financial officer. See "Certain Transactions -- Other Compensation Transactions".

OPTION GRANTS IN LAST FISCAL YEAR. The following table sets forth information with respect to stock options granted to each of the named executive officers during the fiscal year ended December 31, 1999. All of these options were granted under our 1997 Stock Plan and have a term of ten years, subject to earlier termination in the event the optionees' services to us cease. See "-- 1997 Stock Plan" for a description of the material terms of these options.

In accordance with the rules of the SEC, also shown below is the potential realizable value over the term of the option the period from the grant date to the expiration date based on assumed rates of stock appreciation of 5% and 10%, compounded annually. These amounts are based on assumed rates of appreciation in accordance with the rules of the SEC and do not represent our estimate of our future stock price. Actual gains, if any, on stock option exercises will be dependent on the future performance of the common stock.

Option Grants in Last Fiscal Year

		PERCENT OF TOTAL				POTENTIAL REALIZABLE VALUE	
	NUMBER OF	OPTIONS				AT ASSUMED ANNUAL RATES	
	SECURITIES	GRANTED TO		FAIR		OF STOCK APPRECIATION FOR	
	UNDERLYING	EMPLOYEES	EXERCISE	VALUE ON			
	OPTIONS	DURING	PRICE	THE DATE OF	EXPIRATION	OPTION TERM(3)	
NAME	GRANTED	PERIOD(1)	$/SHARE(2)	GRANT(2)	DATE	0%	5% 10%
Dean E. G. Hamilton...	400,000	3.17%	$0.2250	$0.36	3/16/09	$ 54,000	$144,562 $283,493
Curtis Dudnick.....	200,000	1.59	0.545	2.03	8/23/09	297,000	552,333 944,042
	10,000	0.08	1.00	4.03	10/19/09	30,300	55,645 94,526
Larry Jackson.....	64,678	0.51	0.15	0.36	3/10/09	13,582	28,226 50,690
	2,000	0.02	1.00	4.03	10/19/09	6,060	11,129 18,905
Lianghwa Jou.....	250,000	1.98	0.15	0.31	2/13/09	40,000	88,740 163,512

(1) Based on an aggregate of 12,604,225 options we granted during the fiscal year ended December 31, 1999 to our employees and consultants, including the Named Executive Officers.

(2) Options were granted at an exercise price which we believed represented the fair value of our common stock, as determined in good faith by our board of directors.

Subsequent to the commencement of our initial public offering process, we reevaluated the fair value of our common stock options as of March 2000.

(3) The potential realizable value is calculated based on the term of the option at its time of grant (ten years). It is calculated assuming that the fair value of the common stock on the date of grant appreciates at the indicated annual rate compounded annually for the entire term of the option and that the option is exercised and sold on the last day of its term for the appreciated stock price.

AGGREGATE OPTION EXERCISES AND OPTION VALUES. The following table sets forth information with respect to the named executive officers concerning option exercises for the fiscal year ended December 31, 1999, and exercisable and unexercisable options held as of December 31, 1999:

Option Exercises in Last Fiscal Year and Fiscal Year-end Option Values

			NUMBER OF SECURITIES UNDERLYING UNEXERCISED		VALUE OF UNEXERCISED	
			OPTIONS AT		IN-THE-MONEY	
					OPTIONS AT	

NAME	SHARES ACQUIRED ON EXERCISE #	VALUE REALIZED $(1)	DECEMBER 31, 1999(#) EXERCISABLE	DECEMBER 31, 1999(#) UNEXERCISABLE	DECEMBER 31, 1999 $(2) EXERCISABLE	DECEMBER 31, 1999 $(2) UNEXERCISABLE
Dean E. G. Hamilton.....	--	$ --	400,000(3)	--		
Curtis Dudnick.....	52,500	40,013	197,500(4)	--		
Larry Jackson.....	645,400	2,712,188	--	--	--	--
Lianghwa Jou.....	--	--	250,000(5)	--		

(1) Based on the fair market value of our stock on the date of the exercise, as determined by the Board of Directors, minus the exercise price, multiplied by the number of shares issued upon exercise of the option.

(2) Based on an assumed initial offering price of $ per share minus the actual exercise price of the option, multiplied by the number of shares underlying the option.

(3) Of such options, 75,000 were vested at December 31, 1999.

(4) Of such options, 69,166 were vested at December 31, 1999.

(5) Of such options, 52,083 were vested at December 31, 1999.

Stock Plans

1997 Stock Plan

Our 1997 stock plan was adopted by our board of directors and by our stockholders on October 28, 1997. At March 31, 2000, the maximum number of shares that may be issued under the 1997 stock plan was 21,620,000 shares of our common stock. In April 2000, we increased the maximum number of options that can be issued under the 1997 stock plan by 6,000,000. As of March 31, 2000, options to purchase 8,319,705 shares of our common stock were outstanding under the 1997 stock plan, with a weighted average exercise price of approximately $2.06 per share. We expect that upon the adoption of the 2000 stock plan that no further options will be granted under the 1997 stock plan. However, its provisions will still govern outstanding options issued under the 1997 stock plan. Our 1997 stock plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, as amended, referred to as the Code, to our employees, and for the grant of nonstatutory stock options to our employees, directors and consultants.

Our 1997 stock plan provides that in the event of our merger with or into another corporation or a sale of substantially all of our assets, the successor corporation will assume or substitute each option or stock purchase right. If the outstanding options or stock purchase rights are not assumed or substituted, the administrator will provide notice to the optionee that he or she has the right to exercise

the option or stock purchase right as to all of the shares subject to the option or stock purchase right, including shares which would not otherwise be exercisable, for a period of 15 days from the date of the notice. The option or stock purchase right will terminate upon the expiration of the 15-day period.

2000 Stock Plan

We intend to submit the 2000 stock plan to our board of directors and stockholders for approval in May 2000. We expect the 2000 option plan to have the terms described below.

Our 2000 stock plan provides for the grant of incentive stock options, within the meaning of Section 422 Code, to our employees, and for the grant of nonstatutory stock options and stock purchase rights to our employees, directors and consultants.

As of , 2000, a total of shares of our common stock were reserved for issuance pursuant to the 2000 stock plan, of which no options were issued and outstanding as of that date. In addition, any shares of common stock that were reserved but unissued under our 1997 stock plan and any shares that are subsequently returned to the 1997 stock plan as a result of termination of options or our repurchase of shares previously issued under that plan are reserved for issuance under the 2000 stock plan. In addition, our 2000 stock plan provides for annual increases in the number of shares available for issuance on the first day of each fiscal year, beginning with our fiscal year 2001, equal to the lesser of shares, % of the outstanding shares of common stock on the first day of our fiscal year or an amount determined by our board of directors.

Our board of directors or a committee of our board administers the 2000 stock plan. If the options are intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, a committee of two or more "outside directors" within the meaning of Section 162(m) of the Code will administer the 2000 stock plan. The administrator has the power to determine the terms of the options or stock purchase rights granted, including the exercise price, the number of shares subject to each option or stock purchase right, the exercisability of the options and the form of consideration payable upon exercise.

The administrator determines the exercise price of options granted under the 2000 Stock Plan, but with respect to nonstatutory stock options intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code and all incentive stock options, the exercise price must at least be equal to the fair market value of our common stock on the date of grant. The term of an incentive stock option may not exceed ten years and the administrator determines the term of all other options.

No optionee may be granted an option to purchase more than shares in any fiscal year. In connection with his or her initial service, an optionee may be granted an additional option to purchase up to shares.

After termination of one of our employees, directors or consultants, he or she may exercise his or her option for the period of time stated in the option agreement. In the absence of a period of time in the option agreement, the option will remain exercisable for 12 months if termination is due to death or

disability. In all other cases, the option will generally remain exercisable for 3 months. However, an option may never be exercised later than the expiration of its term.

The administrator determines the exercise price of stock purchase rights granted under our 2000 stock plan. Unless the administrator determines otherwise, a restricted stock purchase agreement will grant us a repurchase option that we may exercise upon the voluntary or involuntary termination of the purchaser's service with us for any reason including death or disability. The purchase price for shares we repurchase will generally be the original price paid by the purchaser and may be paid by cancellation of any indebtedness of the purchaser to us. The administrator determines the rate at which our repurchase option will lapse.

Our 2000 stock plan generally doesn't allow for the transfer of options or stock purchase rights and only the optionee may exercise an option and stock purchase right during his or her lifetime.

Our 2000 stock plan provides that in the event of our merger with or into another corporation or a sale of substantially all of our assets, the successor corporation will assume or substitute each option or stock purchase right. If the outstanding options or stock purchase rights are not assumed or substituted, the administrator will provide notice to the optionee that he or she has the right to exercise the option or stock purchase right as to all of the shares subject to the option or stock purchase right, including shares which would not otherwise be exercisable, for a period of 15 days from the date of the notice. The option or stock purchase right will terminate upon the expiration of the 15-day period.

Our 2000 stock plan will automatically terminate in 2010, unless we terminate it sooner. In addition, our board of directors has the authority to amend, suspend or terminate the 2000 stock plan provided it does not adversely affect any option previously granted under it.

2000 Employee Stock Purchase Plan

We expect to submit the 2000 employee stock purchase plan to our board of directors and stockholders for their approval in May 2000. We expect that the 2000 employee stock purchase plan to have the terms described below.

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      A total of           shares of common stock have been reserved for
issuance under our 2000 employee stock purchase plan, plus annual increases
equal to the lesser of (i)           shares, (ii)      % of the outstanding
shares on such date, or (iii) an amount determined by our board of directors.
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Our 2000 employee stock purchase plan contains consecutive six month offering and purchase periods. The offering periods generally start on the first trading day on or after and of each year, except for the first such offering period which commences on the first trading day on or after the effective date of this offering and ends on the last trading day on or before .

Employees are eligible to participate if they are employed by us or any participating subsidiary for at least 20 hours per week and more than five months in any calendar year. However, any employee who (i) immediately after grant owns stock possessing 5% or more of the total combined voting power or value of all classes of our capital stock, or (ii) whose rights to purchase stock under all of our employee

stock purchase plans accrues at a rate which exceeds $25,000 worth of stock for each calendar year may not be granted an option to purchase stock under this plan. The employee stock purchase plan permits participants to purchase common stock through payroll deductions of up to % of the participant's "compensation." Compensation is defined as the participant's base gross earnings and commissions but is exclusive of payments for overtime, shift premium payments, incentive compensation, incentive payments, bonuses and other compensation. The maximum number of shares a participant may purchase during a single purchase period is shares.

Amounts deducted and accumulated by the participant are used to purchase shares of common stock at the end of each purchase period. The price of stock purchased under the employee stock purchase plan is 85% of the lower of the fair market value of the common stock (i) at the beginning of the offering period or (ii) at the end of the purchase period. Participants may end their participation at any time during an offering period, and they will be paid their payroll deductions to date. Participation ends automatically upon termination of employment with us.

Rights granted under the employee stock purchase plan are not transferable by a participant other than by will, the laws of descent and distribution or as otherwise provided under the plan. The employee stock purchase plan provides that, in the event of our merger with or into another corporation or a sale of substantially all our assets, each outstanding option may be assumed or substituted for by the successor corporation. If the successor corporation refuses to assume or substitute for the outstanding options, the offering period then in progress will be shortened and a new exercise date will be set. The employee stock purchase plan will terminate automatically in 2010, unless terminated earlier. The board of directors has the authority to amend or terminate the purchase plan, except that no such action may adversely affect any outstanding rights to purchase stock under the purchase plan. The board of directors has the exclusive authority to interpret and apply the provisions of the purchase plan.

Director Option Plan

We expect to submit the director option plan to our board of directors and stockholders for approval in May 2000. We expect the director option plan to have the terms described below.

The total number of shares available for issuance under the director option plan is shares of our common stock. No awards will be made under the director option plan until completion of this offering. The purpose of the director option plan is to attract and retain the best available non-employee directors, to provide them additional incentives and, therefore, to promote the success of our business.

The director option plan establishes an automatic grant of shares of common stock to each non-employee director on the effective date of the director option plan. Under this program, each non-employee director first elected to our board of directors following completion of this offering will automatically be granted an option to acquire shares of our common stock. The director option plan also provides that upon the date of each annual stockholders' meeting, each non-employee director

who has been a member of our board of directors for at least six months prior to the date of the stockholders' meeting will receive automatic annual grants of options to acquire shares of our common stock.

Each automatic grant will have an exercise price per share equal to the fair market value of our common stock at the date of grant and will have a term of ten years. Each initial option shall vest and become exercisable in equal increments over the year period immediately following the date of grant. Of the shares subject to an automatic grant, of the shares shall vest and become exercisable one year following the date of grant.

In the event of our merger with or into another corporation or a sale of substantially all of our assets, the successor corporation will assume or substitute each option. If such assumption or substitution occurs, the options will continue to be exercisable according to the same terms as before the merger or sale of assets. Following such assumption or substitution, if a non-employee director is terminated other than by voluntary resignation, the option will become fully exercisable and generally will remain exercisable for a period of 3 months. If the outstanding options are not assumed or substituted for, our board of directors will notify each non-employee director that he or she has the right to exercise the option as to all shares subject to the option for a period of 30 days following the date of the notice. The option will terminate upon the expiration of the 30-day period.

Options granted under the director option plan must be exercised within 3 months of the end of the non-employee director's tenure as a member of our Board of Directors, or within 12 months after a non-employee director's termination by death or disability, provided that the option does not terminate by its terms earlier.

Unless terminated sooner, our director option plan terminates automatically in 2010. Our board of directors has the authority to amend, suspend or terminate the plan, subject to stockholder approval of some amendments and provided no amendment, suspension or termination may affect awards to non-employee directors previously granted under the plan, unless agreed to by the affected non-employee director.

401(k) PLAN

In July 1998, we adopted a 401(k) plan covering our employees who are age 21 as of the effective date of the 401(k) plan, and/or 60 have at least 1,000 hours of service credited as of their anniversary hire date with us and for every plan year thereafter. The 401(k) plan excludes nonresident alien employees. Our 401(k) plan is intended to qualify under Section 401(k) of the United States tax code, so that contributions to the 401(k) plan by employees or by us and the investment earnings thereon are not taxable to the employees until withdrawn. If our 401(k) plan qualifies under Section 401(k) of the United States tax code, our contributions will be deductible by us when made. Our employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit of $10,500 in 2000 and to have those funds contributed to the 401(k) plan. The 401(k) plan permits us, but does not require us, to make additional matching contributions on behalf of all participants. To date, we have not made any contributions to the 401(k) plan.

Change of Control Arrangements

Some options awarded under our 1997 stock plan provide that the options will become fully exercisable and fully vested if, anytime within 24 months following a change of control, the optionee's employment is terminated other than for cause or a constructive termination of the optionee's employment occurs. Events constituting a constructive termination include, among other things, a significant reduction in the optionee's duties, position or responsibilities without the optionee's prior written consent. Options containing these change of control provisions were granted to, among others, each of our named executive officers.

Certain Transactions

Since our inception in April 1997, there has not been nor is there currently proposed any transaction or series of similar transactions to which we were or are to be a party in which the amount involved exceeds $60,000 and in which any director, executive officer, holder of more than 5% of our common stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest other than (1) compensation agreements and other arrangements, that are described where required in "Management," and (2) the transactions described below.

Transactions with Directors, Executive Officers and 5% Stockholders

COMMON STOCK. The following table summarizes the private placement transactions in which we sold common stock to our directors, executive officers, 5% stockholders and persons and entities affiliated with them.

Shares of Purchaser Date of Purchase Common Stock

Dean E. G. Hamilton (executive officer, director and 5% stockholder)	September 1, 1997	4,000,000
	February 9, 2000	300,000
Lianghwa Jou (executive officer)	January 15, 1998	1,833,332
Chow & Hamilton	July 27, 1999	16,514(1)
	September 1, 1999	2,000(1)

(1) Issued in exchange for legal services rendered. Mr. Hamilton's brother, Duane Hamilton, is a partner at Chow & Hamilton.

SERIES A PREFERRED STOCK. In November 1997 and April 1998, we sold 1,875,000 shares of our Series A Preferred Stock at a price of $1.60 per share. Each share of our Series A Preferred Stock is convertible into four shares of our common stock pursuant to a conversion price adjustment resulting from our stock dividend declared in May 1998.

SERIES B PREFERRED STOCK. In December 1998, we sold 12,884,205 shares of our Series B Preferred Stock for $0.738 per share, and in May, October and November issued warrants to acquire 694,444 shares of our Series B Preferred Stock. The purchasers of the Series B Preferred Stock included, among others:

PURCHASER	DATE OF PURCHASE OR ISSUE	SHARES OF SERIES B PREFERRED STOCK	WARRANTS TO PURCHASE SERIES B PREFERRED STOCK
Communications Ventures Affiliates Fund II, L.P.	December 4, 1998	113,105	--
Communications Ventures III CEO and Entrepreneurs' Fund, L.P.	December 4, 1998	106,465	--
Communications Ventures II, L.P.	December 4, 1998	1,379,339	--
Communications Ventures III, L.P.	December 4, 1998	2,129,306	--
Crescendo World Fund, LLC	December 4, 1998	648,386	--
Crescendo III, L.P.	December 4, 1998	3,048,780	--
Eagle Ventures WF, LLC	December 4, 1998	31,050	--
Worldview Technology International I, L.P.	December 4, 1998	357,834	--
Worldview Strategic Partners I, L.P.	December 4, 1998	79,081	--
Worldview Technology Partners I, L.P.	December 4, 1998	918,099	--
Falcon Capital, LLC	December 4, 1998	681,367	
Crescendo World Fund, LLC	November 1, 1998	--	48,491
Eagle Ventures WF, LLC	November 1, 1998	--	2,322
Communications Ventures II, L.P.	November 1, 1998	--	46,962
Communications Ventures Affiliates Fund II, L.P.	November 1, 1998	--	3,851
Falcon Capital, LLC	November 1, 1998	--	101,627

Communications Ventures Affiliates Fund II, L.P., Communications Ventures III CEO and Entrepreneurs' Fund, L.P., Communications Ventures II, L.P. and Communications Ventures III, L.P. are affiliated entities and together are considered a holder of more than 5% of our common stock.

Crescendo World Fund, LLC, Crescendo III, L.P., Crescendo III Executive Fund, L.P., Crescendo III, GbR and Eagle Ventures WF, LLC are affiliated entities and together are considered a holder of more than 5% of our common stock. R. David Spreng, one of our directors, is a managing member of Crescendo's related entities. See "Principal Stockholders".

Worldview Technology International I, L.P., Worldview Strategic Partners I, L.P. and Worldview Technology Partners I, L.P. are affiliated entities and together are considered a holder of more than 5% of our common stock.

Glenn Hartman, one of our directors, is a manager of Falcon Capital, LLC.

SERIES C PREFERRED STOCK. In March 1999, we sold 24,503,677 shares of our Series C Preferred Stock at $0.897 per share. The purchasers of the Series C Preferred Stock included, among others:

PURCHASER	DATE OF PURCHASE	SHARES OF SERIES C PREFERRED STOCK

Communications Ventures Affiliates Fund II, L.P.	March 2, 1999	69,078
Communications Ventures III CEO and Entrepreneurs' Fund, L.P.	March 2, 1999	65,106
Communications Ventures II, L.P.	March 2, 1999	842,410
Communications Ventures III, L.P.	March 2, 1999	1,302,127
Crescendo World Fund, LLC	March 2, 1999	638,328
Crescendo III, L.P.	March 2, 1999	2,954,292
Eagle Ventures WF, LLC	March 2, 1999	30,569
Kleiner Perkins Caufield & Byers VIII, L.P.	March 2, 1999	5,239,866
KPCB Information Sciences Zaibatsu Fund II, L.P.	March 2, 1999	142,140
KPCB VIII Founders Fund, L.P.	March 2, 1999	303,612
Norwest Ventures Partners VII, LP	March 2, 1999	5,016,722
Worldview Technology International I, L.P.	March 8, 1999	1,324,922
Worldview Strategic Partners I, L.P.	March 8, 1999	292,786
Worldview Technology Partners I, L.P.	March 8, 1999	3,399,114

SERIES D PREFERRED STOCK. In September and October 1999, we sold 17,118,253 shares of our Series D Preferred Stock at $3.505 per share. In March, 2000 we sold 625,000 shares of our Series D Preferred Stock at $8.00 per share. The purchasers of the Series D Preferred Stock included, among others:

PURCHASER	DATE OF PURCHASE	SHARES OF SERIES D PREFERRED STOCK
Donald Green (director)	September 17, 1999	142,653
Communications Ventures Affiliates Fund II, L.P.	September 17, 1999	26,994
Communications Ventures III CEO and Entrepreneurs' Fund, L.P.	September 17, 1999	25,442
Communications Ventures II, L.P.	September 17, 1999	329,197
Communications Ventures III, L.P.	September 17, 1999	508,845
Crescendo World Fund, LLC	September 17, 1999	190,663
Crescendo III, L.P.	September 17, 1999	847,359
Crescendo III Executive Fund, L.P.	September 17, 1999	25,187
Crescendo III, GbR	September 17, 1999	17,444
Eagle Ventures WF, LLC	September 17, 1999	9,130
KPCB Holdings, Inc	September 17, 1999	842,845
Norwest Ventures Partners VII, LP	September 17, 1999	743,686
Worldview Technology International I, L.P.	September 17, 1999	188,360
Worldview Strategic Partners I, L.P.	September 17, 1999	41,628
Worldview Technology Partners I, L.P.	September 17, 1999	483,279

Stock Option Grants to Certain Directors

In July 1999, we granted Donald Green an option to purchase 160,476 shares of our common stock at an exercise price of $0.545 per share.

Indebtedness of Management

In connection with the exercise of stock options, Dean E.G. Hamilton executed a full recourse promissory note payable to us in the original principal amount of $925,628 and a 64 promissory note payable to us in the original principal amount of $274,372. Interest accrues on the unpaid principal of each note at a rate of 6.77% per annum. Principal and interest of each note is due and payable on

February 3, 2010, or if earlier and at our option, when Mr. Hamilton ceases to be our employee, director or consultant. The note is secured by a pledge of our common stock obtained by Mr. Hamilton upon the exercise of these options.

In connection with the exercise of stock options, Michael Nielsen executed a promissory note payable to us in the original principal amount of $500,000. Interest accrues on the unpaid principal at a rate of 6.77% per annum. Principal and interest are due and payable on December 21, 2009, or if earlier and at our option, when Mr. Nielsen ceases to be our employee, director or consultant. The note is secured by a pledge of our common stock received by Mr. Nielsen upon the exercise of those options.

In connection with the exercise of stock options, Steve Goggiano executed a promissory note payable to us in the original principal amount of $600,000. Interest accrues on the unpaid principal at a rate of 6.77% per annum. Principal and interest are due and payable on December 8, 2009, or if earlier and at our option, when Mr. Goggiano ceases to be our employee, director or consultant. The note is secured by a pledge of our common stock received by Mr. Goggiano upon exercise of those options.

Equity Investment by Customers and Their Affiliates

On March 2, 1999, the Anschutz Family Investment Co. LLC and A.C.E. Investment Partnership acquired an aggregate of 1,114,826 shares of our Series C preferred stock. On September 17, 1999, the Anschutz Family Investment Co. LLC and A.C.E. Investment Partnership acquired an aggregate of 184,014 shares of our series D preferred stock. On April 26, 2000, the Anschutz Family Investment Co. LLC agreed to acquire an aggregate of 80,000 shares of our Series E preferred stock under a purchase agreement, subject to satisfaction of customary closing conditions. The Anschutz Family Investment Co. LLC and A.C.E. Investment Partnership are affiliates of Qwest Communications Corporation.

Our initial customers, each of which represents a different type of network service provider, have cooperated with us in the marketing, development and refinement of our product, culminating in the receipt by us of initial purchase orders. In connection with their marketing, development and refinement activities, we:

- - issued warrants to purchase up to 1,875,403 shares of our Series C preferred stock at an average exercise price of $0.91 a share to U.S. Telesource, Inc., an affiliate of Qwest;

- - issued a warrant to purchase up to 200,000 shares of our common stock at an exercise price of $4.00 per share to AduroNet; and - - agreed to issue warrants to purchase up to 468,849 shares of our common stock at an exercise price of $3.73 per share to BroadBand Offices.

In addition, in connection with their assistance with specific marketing activities of ours, we agreed to issue a warrant to purchase up to 75,000 shares of our common stock at an exercise price of $15.00 per share to American Metrocomm contingent on it obtaining financing in order to purchase our products.

In addition, officers of Qwest and a Qwest affiliate participated in our Series D preferred stock financing. Nissho Electronics, Internet Initiative Japan and officers of AduroNet and of several potential customers participated in our Series E preferred stock financing.

Indemnification Agreements

We intend to enter into indemnification agreements with each of our directors and officers. Such indemnification agreements will require us to indemnify our directors and officers to the fullest extent permitted by Delaware law. See "-- Limitation of Liability and Indemnification".

Principal Stockholders

The following table sets forth information regarding the beneficial ownership of our common stock as of April 28, 2000, and as adjusted to reflect the sale of common stock offered by this prospectus, by:

- - each of the individuals listed on the "Summary Compensation Table" above;

- - each of our directors;

- - each person or group of affiliated persons who is known to us to own beneficially 5% or more of our common stock; and - - all current directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock subject to options held by that person that are currently exercisable or exercisable within 60 days of April 28, 2000, are deemed issued and outstanding. These shares, however, are not deemed outstanding for purposes of computing percentage ownership of each other stockholder.

Except as indicated in the footnotes to this table and subject to applicable community property laws, each stockholder named in the table has sole voting and investment power with respect to the shares shown as beneficially owned by them. This table also includes shares owned by a spouse as community property.

Percentage of ownership is based on 88,375,442 shares of common stock outstanding on April 28, 2000 and shares of common stock outstanding after completion of this offering. The percentage of common stock outstanding as of April 28, 2000 is calculated in accordance with the rules of the Securities and Exchange Commission and assumes, for purposes of this calculation, the automatic exercise of certain warrants and that all outstanding preferred stock and the 4,666,668 shares of Series E preferred stock expected to be issued upon the satisfaction of customary closing conditions have been converted into common stock. This table assumes no exercise of the underwriters' option to purchase additional shares in this offering. Unless otherwise indicated, the address of each of the individuals named below is: c/o CoSine Communications, Inc., 3200 Bridge Parkway, Redwood City, California 94065

		PERCENT	
	NUMBER OF SHARES	BENEFICIALLY OWNED	
	BENEFICIALLY	BEFORE	AFTER
NAME AND ADDRESS OF BENEFICIAL OWNER	OWNED	OFFERING	OFFERING

Entities affiliated with Crescendo(1)..... 8,692,001 9.84% 800 LaSalle Avenue Suite 2250 Minneapolis, MN 55402 Entities affiliated with Worldview(2)..... 7,085,003 8.02% 45 Tasso Street Suite 120 Palo Alto, CA 94301 Entities affiliated with Communications Ventures(3)..... 6,948,227 7.86% 505 Hamilton Avenue Suite 305 Palo Alto, CA 94301 Entities affiliated with KPCB Holdings, Inc..... 6,528,463 7.39% 2750 Sand Hill Road Menlo Park, CA 94025

NAME AND ADDRESS OF BENEFICIAL OWNER	NUMBER OF SHARES BENEFICIALLY OWNED	PERCENT BENEFICIALLY OWNED	
		BEFORE OFFERING	AFTER OFFERING
Norwest Ventures Partners VII, LP..... 245 Lytton Street Suite 250 Palo Alto, CA 94301	5,760,408	6.52%	
Falcon Capital, LLC..... 3905 State Street Suite 7148 Santa Barbara, CA 93105	4,970,494(4)	5.62%	
Dean E. G. Hamilton.....	4,700,000(5)	5.32%	
Curtis Dudnick.....	250,000(6)	*	*
Larry Jackson.....	645,400	*	*
Lianghwa Jou.....	2,083,332(7)	2.36%	
Glenn Hartman.....	1,829,869(8)	2.07%	*
Donald Green.....	303,129(9)	*	*
R. David Spreng.....	8,692,001(1)	9.84%	
Vinton G. Cerf.....	--	*	*
All directors and executive officers as a group (11 persons).....	19,271,856(1,7,8,9)	21.43%	

* Less than 1% of the outstanding shares of common stock.

(1) Includes 1,477,377 shares held by Crescendo World Fund, LLC, 6,850,431 shares held by Crescendo III, L.P., 25,187 shares held by Crescendo III Executive Fund, L.P., 17,444 shares held by Crescendo III, GbR, 70,749 shares held by Eagle Ventures WF, LLC, a warrant to purchase 48,491 shares held by Crescendo World Fund, LLC and a warrant to purchase 2,322 shares held by Eagle Ventures WF, LLC. Includes 200,000 shares of Series E preferred stock that Crescendo entities have agreed to purchase under a stock purchase agreement dated as of April 27, 2000 subject to the satisfaction of customary closing conditions. The sole general partner of Crescendo World Fund, LLC is Crescendo Ventures World Fund, LLC. The sole general partner of Crescendo III, L.P., Crescendo III Executive Fund, L.P., and Eagle Ventures WF, LLC is Crescendo Ventures III, LLC. The general partners of Crescendo III, GbR are Crescendo Ventures III, LLC and Verbier Ventures, LLC. R. David Spreng, one of our directors, is a managing member of each of Crescendo Ventures World Fund, LLC, Crescendo Ventures III, LLC and Verbier Ventures, LLC. Mr. Spreng and each of the other managing members disclaim beneficial ownership of the shares held by Crescendo World Fund, LLC, Crescendo III, L.P., Crescendo III Executive Fund, L.P., Crescendo III, GbR and Eagle Ventures WF, LLC, except to the extent of their pecuniary interest therein.

(2) Includes 1,871,016 shares held by Worldview Technology International I, L.P., 413,495 shares held by Worldview Strategic Partners I, L.P. and 4,800,492 shares held by Worldview Technology Partners I, L.P.

(3) Includes 209,177 shares held by Communications Ventures Affiliates Fund II, L.P., 197,013 shares held by Communications Ventures III CEO and Entrepreneurs' Fund, L.P., 2,550,946 shares held by Communications Ventures II, L.P., 3,940,278 shares held by Communications Ventures III, L.P., a warrant to purchase 46,962 shares held by Communications Ventures II, L.P. and a warrant to purchase 3,851 shares held by Communications Ventures Affiliates Fund II, L.P. The sole general partner of Communications Ventures Affiliates Fund II, L.P. and Communications Ventures II, L.P. is ComVen II, L.L.C. The sole general partner of Communications Ventures III CEO & Entrepreneurs' Fund, L.P. and Communications Ventures III, L.P. is ComVen III, L.L.C.

(4) Of the 4,970,494 shares, Falcon Capital held of record 4,868,867 shares and has the right to acquire 101,627 shares upon the exercise of warrants within 60 days after April 28, 2000.

(5) Of the 4,700,000 shares, Mr. Hamilton held of record 4,300,000 shares and has the right to acquire 400,000 shares upon the exercise of stock options within 60 days after April 28, 2000.

(6) Of the 250,000 shares, Mr. Dudnick held of record 182,500 shares and has the right to acquire 67,500 shares upon the exercise of stock options within 60 days after April 28, 2000.

(7) Of the 2,083,332 shares, Mr. Jou held of record 1,883,332 shares and has the right to acquire 250,000 shares upon the exercise of stock options within 60 days after April 28, 2000.

(8) Includes shares held by Falcon Capital, LLC and 101,627 shares issuable upon exercise of a warrant held by Falcon Capital, LLC that was exercisable within 60 days after April 28, 2000. Mr. Hartman, a manager of Falcon Capital, LLC, disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein.

(9) Of the 303,129 shares, Mr. Green has the right to acquire 160,476 shares upon the exercise of stock options within 60 days after April 28, 2000. The remaining 142,653 shares are held by Green Venture Capital Limited Partnership II as to which Mr. Green disclaims beneficial ownership, except to the extent of his pecuniary interest therein.

(10) Of the 19,071,858 shares, 8,311,232 shares were held of record by our executive officers and 1,392,976 shares were issuable upon the exercise of stock options by our executive officers and directors within 60 days after April 28, 2000.

Description of Capital Stock

General

Upon the closing of this offering, we will be authorized to issue 300,000,000 shares of common stock, $0.0001 par value, and 1,000,000 shares of undesignated preferred stock, $0.0001 par value. The following description of our capital stock does not purport to be complete and is subject to and qualified in its entirety by our certificate of incorporation and bylaws, which are included as exhibits to this registration statement of which this prospectus forms a part, and by the applicable provisions of Delaware law.

Common Stock

As of April 28, 2000, there were 88,375,442 shares of common stock outstanding which were held of record by approximately 400 stockholders, assuming the automatic exercise of certain warrants, and the automatic conversion of all outstanding shares of preferred stock and the 4,666,668 shares of Series E preferred stock expected to be issued upon the satisfaction of customary closing conditions into common stock.

The holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the board of directors out of funds legally available for that purpose. See "Dividend Policy." In the event of our liquidation, dissolution or the winding up of our affairs, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of the holders of preferred stock, if any, then outstanding. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock to be issued upon the closing of this offering will be fully paid and nonassessable.

Preferred Stock

The board of directors has the authority, without action by the stockholders, to designate and issue preferred stock in one or more series and to designate the rights, preferences and privileges of each series, any or all of which may be greater than the rights of the common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of the common stock until the board of directors determines the specific rights of the holders of such preferred stock. However, the effects might include, among other things, restricting dividends on the common stock, diluting the voting power of the common stock, impairing the liquidation rights of the

common stock and delaying or preventing a change of our control without further action by the stockholders. There are shares outstanding. No shares of preferred stock will be outstanding upon the completion of this offering.

Warrants

At March 31, 2000, there were warrants outstanding to purchase a total of 280,567 shares of common stock, 159,105 shares of Series A preferred stock, 694,444 shares of Series B preferred stock, 1,875,403 shares of Series C preferred stock and 154,064 shares of Series D preferred stock. Unless earlier exercised, warrants to purchase 243,067 shares of common stock, 1,190 shares of Series A preferred stock, 1,875,403 shares of Series C preferred stock and 154,064 shares of Series D preferred stock will be exercised automatically in connection with this offering. Each of the shares of Series A preferred stock issuable upon exercise of the warrants is convertible into four shares of our common stock. Warrants exercisable for 304,878 shares of Series B preferred stock will expire immediately prior to the closing of this offering unless earlier exercised. The remaining warrants will remain outstanding after the completion of this offering and will become exercisable for an aggregate of 1,058,726 shares of common stock.

Registration Rights

The holders of 73,339,467 shares of common stock, as converted, and warrants to purchase 2,896,629 shares of common stock, as converted or their permitted transferees are entitled to certain rights with respect to registration of such shares under the Securities Act at any time after 180 days following the closing of this offering. Under the terms of the agreement between us and the holders of such registrable securities, by written request of certain of such holders holding at least 50% of the outstanding registrable securities then held by them, such holders may require on two occasions that we, at our expense, file a registration statement under the Securities Act, with respect to such registrable securities. In addition, holders of at least 20% of the registrable securities then outstanding may, at our expense, request that we register their shares for public resale on Form S-3 or similar short-form registration, provided that we are eligible to use Form S-3 or similar short-form registration, that at least 180 days has elapsed since the most recent registration of our common stock and that the value of the securities to be registered is at least $1,000,000. Furthermore, in the event we elect to register any of our securities after this offering for purposes of effecting any public offering for cash, the holders of registrable securities generally are entitled, at our expense, to include their shares of common stock in the registration, subject to the right of the underwriter to reduce the number of shares proposed to be registered in view of market conditions.

DELAWARE ANTI-TAKEOVER LAW AND CERTAIN PROVISIONS OF OUR CERTIFICATE OF INCORPORATION AND BYLAWS Certain provisions of Delaware law and our Certificate of Incorporation and Bylaws could make it more difficult to acquire us by means of a tender offer, a proxy contest or otherwise and to remove incumbent officers and directors. These provisions, summarized

below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of us to first negotiate with us. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging such proposals because, among other things, negotiation of such proposals could result in an improvement of their terms.

We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the date the person became an interested stockholder, unless with certain exceptions the "business combination" or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns or within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's voting stock. The existence of this provision would be expected to have an anti- takeover effect with respect to transactions not approved in advance by the board of directors, including discouraging takeover attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Our certificate of incorporation and bylaws require that, upon the closing of the offering, any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of the stockholders and may not be effected by a consent in writing. In addition, our certificate of incorporation does not provide for cumulative voting. Our bylaws permit special meetings of our stockholders to be called only by the board of directors, 70 specified officers or holders of 50% or more of our outstanding shares and require stockholders to provide advance notice of nominations for election to the board of directors and proposals they intend to submit for approval at stockholder meetings. Our certificate of incorporation and bylaws also provide that, beginning upon the closing of the offering, our board of directors will be divided into three classes, with each class serving staggered three-year terms and that certain amendments by the stockholders of the certificate of incorporation and of the bylaws, as well as removal of directors without cause, require the approval of holders of at least 66 2/3% of the voting power of all outstanding stock. In addition, our certificate of incorporation allows our board of directors to issue preferred stock without stockholder approval. These provisions may have the effect of deferring hostile takeovers of us or delaying changes in our control or management.

Transfer Agent and Registrar

The transfer agent and registrar for the common stock is .

Shares Eligible for Future Sale

Immediately prior to this offering, there was no public market for our common stock. Future sales of substantial amounts of common stock in the public market could adversely affect the market price of the common stock.

Upon completion of this offering, we will have outstanding shares of common stock, assuming the issuance of shares of common stock offered hereby, no exercise of the underwriters' option to purchase additional shares and no exercise of options or warrants after April 28, 2000. Of these shares, the shares sold in the offering will be freely tradable without restriction or further registration under the Securities Act; provided, however, that if shares are purchased by "affiliates" as that term is defined in Rule 144 under the Securities Act, their sales of shares would be subject to certain limitations and restrictions that are described below.

The remaining shares of common stock held by existing stockholders that are to be outstanding upon completion of this offering will be "restricted securities" as that term is defined under Rule 144. Restricted securities may be sold in the public market only if they are registered or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which are summarized below. In addition, certain of these outstanding shares are subject to our contractual right to repurchase the shares in the event the holder of such shares ceases to be one of our employees, directors or consultants.

All of our executive officers, directors and substantially all of our stockholders, who collectively hold an aggregate of of these restricted securities, will be subject, on the effective date of the offering, to lock-up agreements pursuant to which they have agreed not to offer, sell or otherwise dispose of any of their shares for a period of 180 days after the date of this prospectus. Goldman, Sachs & Co. may, in its sole discretion, at any time without notice, release all or any portion of the shares subject to the lock-up agreements. We also have entered into an agreement with the underwriters that we will not offer, sell or otherwise dispose of common stock for a period of 180 days from the date of this prospectus.

Taking into account the lock-up agreements and assuming Goldman, Sachs & Co. does not release stockholders from these agreements, the following shares will be eligible for sale in the public market at the following times:

APPROXIMATE SHARES ELIGIBLE RELEVANT DATES FOR FUTURE SALE COMMENT On effective date..... Shares sold in the offering; shares saleable under Rule 144(k) that are not subject to lock-up. 90 days after effective date..... Shares saleable under Rules 144 and 701 that are not subject to the lock-up. 2 days after September 30, 2000 quarterly results are released(1)..... 15% of shares subject to lock-up released(2); shares saleable under Rules 144 and 701. 30 days after September 30, 2000 quarterly results are released(1)..... Additional 25% of shares subject to lock-up released(2); shares saleable under Rules 144 and 701. 180 days after effective date..... All shares subject to lock-up released; shares saleable under Rules 144 and 701 (1) Assumes quarterly results are released on October 25, 2000.

(2) Automatic partial release of shares subject to lock-up is subject to the last reported trading price of the shares for at least 20 of the 30 trading days preceding the relevant date being at least twice the initial public offering price per share.

In addition, as of April 28, 2000, there were outstanding options to purchase 18,962,229 shares of common stock and outstanding warrants to purchase 280,567 shares of common stock. As soon as practicable after the completion of the offering, we intend to file one or more registration statements on Form S-8 under the Securities Act to register all of the shares of common stock issued or reserved for future issuance under our 1997 stock plan, 2000 stock plan, employee stock purchase plan, and director option plan. Although such registration statement will become effective automatically upon filing, and sales of shares pursuant to such registration statement are subject to the lock-up restrictions and repurchase rights described above.

In addition, following this offering, the holders of 73,339,467 shares of outstanding common stock, as converted, and warrants to purchase 2,896,629 shares of common stock, as converted, will, under some circumstances, have the right to require us to register their shares for future sale.

Rule 144

In general, under Rule 144 as currently in effect, beginning 90 days after the date of this prospectus, a person, including an affiliate, who has beneficially owned shares of our common stock for at least one year is entitled to sell, within any three-month period, a number of shares that does not exceed the greater of - - 1% of the number of shares of common stock then outstanding, which will equal approximately shares immediately after this offering; or - - the average weekly trading volume of the common stock on the Nasdaq National Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Sales under Rule 144 are also subject to certain other requirements regarding the manner of sale, notice filing and the availability of current public information about us.

RULE 144(k)

Under Rule 144(k), a person who is not deemed to have been one of our affiliates at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, including the holding period of any prior owner other than an affiliate, is entitled to sell such shares without complying with the manner of sale, notice filing, volume limitation provisions of Rule 144 and without current public information about us being available. Therefore, unless otherwise restricted, "144(k) shares" may be sold immediately upon the effective date of this offering.

Rule 701

In general, under Rule 701, any of our employees, directors, officers, consultants or advisors who purchases shares from us in connection with a compensatory stock purchase or option plan or other written agreement before the effective date of this offering is entitled to resell such shares 90 days after the effective date of this offering in reliance on Rule 144, which permits non- affiliates to sell such shares without having to comply with the public-information, holding-period, volume limitation or notice provisions of Rule 144 and permits affiliates to sell such shares without having to comply with the holding-period provisions of Rule 144. Therefore, unless otherwise restricted, "701 shares" may be sold 90 days after the effective date of this offering.

Underwriting

CoSine and the underwriters for the offering named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares indicated in the following table. Goldman, Sachs & Co., Chase Securities Inc., FleetBoston Robertson Stephens Inc. and J.P. Morgan Securities Inc. are the representatives of the underwriters.

Number of Underwriters Shares

Goldman, Sachs & Co..... Chase Securities Inc..... FleetBoston Robertson Stephens Inc..... J.P. Morgan Securities Inc.....
Total.....

If the underwriters sell more shares than the total number set forth in the table above, the underwriters have an option to buy up to an additional shares from CoSine to cover such sales. They may exercise that option for 30 days. If any shares are purchased under this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters by CoSine. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

Paid by Cosine No Exercise Full Exercise

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Per Share.....   $            $
Total.........   $            $
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Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to $ per share from the initial public offering price. Any such securities

dealers may resell any shares purchased from the underwriters to certain other brokers or dealers at a discount of up to $ per share from the initial public offering price. If all the shares are not sold at the initial offering price, the representatives may change the offering price and the other selling terms.

Prior to the offering, there has been no public market for our common stock. The initial public offering price will be negotiated among CoSine and the representatives. Among the factors to be considered in determining the initial public offering price of the shares, in addition to prevailing market conditions, will be CoSine's historical performance, estimates of the business potential and earnings prospects of CoSine, an assessment of CoSine's management and the consideration of the above factors in relation to market valuation of companies in related businesses.

CoSine and its executive officers, directors and substantially all of its stockholders have agreed with the underwriters not to dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of Goldman, Sachs & Co. and except as described in "Shares Eligible for Future Sale." This agreement does not apply to any existing employee benefit plans. See "Shares Eligible for Future Sale" for a discussion of certain transfer restrictions.

At the request of CoSine, the underwriters have reserved at the initial public offering price up to percent of the shares of common stock offered in this offering for sale to directors, officers, employees, business associates and related persons of CoSine. The number of shares of common stock available for sale to the general public will be reduced to the extent these individuals purchase such reserved shares. Any reserved shares which are not so purchased will be offered by the underwriters to the general public on the same basis as the other shares offered by this prospectus.

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. Stabilizing transactions consist of certain bids or purchases made for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.

The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

These activities by the underwriters may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. These transactions may be effected on the Nasdaq National Market, in the over-the-counter market or otherwise.

The underwriters do not expect sales to discretionary accounts to exceed five percent of the total number of shares offered.

The common stock will be quoted on the Nasdaq National Market under the symbol "COSN".

As of the date of this prospectus, entities affiliated with Goldman, Sachs & Co. beneficially own an aggregate of 798,859 shares of CoSine's Series D preferred stock, which were purchased for $3.505 per share, and 66,667 shares of CoSine's Series E preferred stock, which were purchased for $15.00 per share. As of the date of this prospectus, entities affiliated with Chase Securities Inc. beneficially own an aggregate of 159,772 shares of Cosine's Series D preferred stock, which were purchased for $3.505 per share, and 9,333 shares of CoSine's Series E preferred stock, which were purchased for $15.00 per share. Additionally, Access Technology Partners, L.P., a fund of outside investors that is managed by an affiliate of Chase Securities Inc., owns 639,087 shares of Series D preferred stock, which were purchased for $3.505 per share, and 37,333 shares of Series E preferred stock, which were purchased for $15.00 per share. As of the date of this prospectus, entities affiliated with Chase Securities Inc. also hold a warrant that is immediately exercisable to purchase 148,929 shares of CoSine's Series D preferred stock for $3.505 per share.

CoSine estimates that its share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $.

CoSine has agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

Validity of Common Stock

The validity of the common stock offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California, and for the underwriters by Sullivan & Cromwell, Los Angeles, California. As of the date of this prospectus, WS Investment Company 99A, an investment partnership composed of certain current and former members of and persons associated with Wilson Sonsini Goodrich & Rosati, Professional Corporation, in addition to a number of current individual members of and persons associated with Wilson Sonsini Goodrich & Rosati, Professional Corporation, beneficially own an aggregate of 111,485 shares of our common stock.

Experts

Ernst & Young LLP, independent auditors, have audited our consolidated financial statements as of December 31, 1998 and 1999, for the years ended December 31, 1998 and 1999, and for the periods from inception (April 14, 1997) to December 31, 1997 and 1999. The information under the caption "Selected Consolidated Financial Data" at December 31, 1997, 1998 and 1999, for the period from inception (April 14, 1997) to December 31, 1997 and for the years ended December 31, 1998 and 1999, included in this prospectus and elsewhere in the registration statement, have been derived from

consolidated financial statements audited by Ernst & Young LLP. We have included our consolidated financial statements in this prospectus and elsewhere in the registration statement, in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

Where You May Find Additional Information

We filed with the Securities and Exchange Commission a registration statement on Form S-1 under the Securities Act for the shares of common stock in this offering. This prospectus does not contain all of the information in the registration statement and the exhibits and schedule that were filed with the registration statement. For further information with respect to our company and our common stock, we refer you to the registration statement and the exhibits and schedule that were filed with the registration statement. Statements contained in this prospectus about the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and we refer you to the full text of the contract or other document filed as an exhibit to the registration statement.

A copy of the registration statement and the exhibits and schedule that we filed with the registration statement may be inspected without charge at the public reference room maintained by the Securities and Exchange Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, and copies of all or any part of the registration statement may be obtained from the SEC upon payment of the prescribed fee. You may call the Securities Exchange Commission at 1-800-SEC-0330 for further information on the operation of the public reference room. The Securities and Exchange Commission maintains a web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Securities and Exchange Commission. The address of the site is http://www.sec.gov.

Upon completion of this offering, we will become subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, and, in accordance with the requirements of the Securities Exchange Act of 1934, will file periodic reports, proxy statements and other information with the Securities and Exchange Commission. These periodic reports, proxy statements and other information will be available for inspection and copying at the regional offices, public reference facilities and web site of the Securities and Exchange Commission referred to above.

Index to Consolidated Financial Statements

Page

Report of Ernst & Young LLP, Independent Auditors..... F-2
Consolidated Balance Sheets..... F-3
Consolidated Statements of Operations..... F-4
Consolidated Statement of Redeemable Convertible Preferred
Stock and Stockholders' Equity (Net Capital Deficiency)... F-5

Consolidated Statements of Cash Flows..... F-8
Notes to Consolidated Financial Statements..... F-10

Report of Ernst & Young Llp, Independent Auditors

The Board of Directors and Stockholders CoSine Communications, Inc.

We have audited the accompanying consolidated balance sheets of CoSine Communications, Inc. (a development stage company) as of December 31, 1998 and 1999, and the related consolidated statements of operations, redeemable convertible preferred stock and stockholders' equity (net capital deficiency), and cash flows for the years ended December 31, 1998 and 1999 and for the periods from inception (April 14, 1997) to December 31, 1997 and 1999. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of CoSine Communications, Inc. (a development stage company) at December 31, 1998 and 1999, and the consolidated results of its operations and its cash flows for the years ended December 31, 1998 and 1999, and for the periods from inception (April 14, 1997) to December 31, 1997 and 1999, in conformity with accounting principles generally accepted in the United States.

/s/ Ernst & Young LLP Palo Alto, California March 2, 2000

Cosine Communications, Inc. (A Development Stage Company)

Consolidated Balance Sheets (In Thousands, Except Shares)

	DECEMBER 31,		PRO FORMA ASSETS AND STOCKHOLDERS' EQUITY AT
		MARCH 31,	MARCH

31,

	1998	1999	2000	2000 (UNAUDITED)
ASSETS Current assets: Cash and cash equivalents	$ 6,580	$ 20,089	$ 19,079	22,360
Short-term investments	--	34,497	25,436	25,436
Accounts receivable: Trade	--	--	5,016	5,016
Other	--	--	1,536	1,536
Inventory	670	327	1,279	1,279
Prepaid expenses and other current assets	254	1,820	1,649	1,649
Total current assets	7,504	56,733	53,995	57,276
Property and equipment, net	2,767	7,631	12,191	12,191
Other assets	828	1,706	2,177	2,177
	$11,099	$ 66,070	$ 68,363	$ 71,644
LIABILITIES AND STOCKHOLDERS' EQUITY (NET CAPITAL DEFICIENCY) Current liabilities: Accounts payable	$ 2,840	$ 2,505	$ 5,740	
Accrued liabilities	730	1,468	4,379	
Accrued compensation	121	812	1,902	
Note payable	201	--	223	
Deferred revenue	--	30	1,018	
Current portion of equipment and working capital loans	712	2,274	2,626	
Current portion of obligations under capital lease	--	--	408	
Other current liabilities	--	60	--	
Total current liabilities	4,604	7,149	16,296	
Long-term portion of equipment and working capital loans	1,948	6,037	6,525	
Long-term portion of obligations under capital lease	--	--	1,128	
Accrued rent	762	1,648	1,740	
Other long-term liabilities	--	222	187	
Commitments Redeemable preferred stock: Series B convertible preferred stock: 13,578,649 shares authorized, 12,884,205 shares issued and outstanding at December 31, 1998 and 1999, and March 31, 2000; 12,884,205 on an as-if converted basis; no shares issued and outstanding -- pro forma; aggregate liquidation preference of $9,509 at December 31, 1999 and March 31, 2000	9,823	9,823	9,823	--
Series C convertible preferred stock: 27,503,677 shares authorized, 24,503,677 shares issued and outstanding at December 31, 1999, and March 31, 2000; none at December 31, 1998; 24,503,677 on an as-if converted basis; no shares issued and outstanding -- pro forma; aggregate liquidation preference of $21,980 at December 31, 1999 and March 31, 2000	--	22,342	32,642	--
Series D convertible preferred stock: 20,500,000 shares authorized, 17,118,253 and 17,743,253 shares issued and outstanding shares at December 31, 1999, and March 31, 2000 respectively; none at December 31, 1998; 17,118,253 on an as-if converted basis; no shares issued and outstanding -- pro forma; aggregate liquidation preference of $59,999 and $62,190 at December 31, 1999 and March 31, 2000, respectively	--	57,223	62,197	--
Stockholders' equity (net capital deficiency): Series A convertible preferred stock: 2,150,000 shares authorized, 1,875,000 shares issued and outstanding at December 31, 1998 and 1999 and March 31, 2000; 7,500,000 on an as-if-converted basis; no shares issued and outstanding -- pro forma; aggregate liquidation preference of $3,000 at December 31, 1998 and 1999 and March 31, 2000	3,360	3,756	3,756	--
Common stock, no par value, 200,000,000 shares authorized (subject to stockholders' approval), 6,666,664, 10,764,151 and 17,824,826 shares issued and outstanding at December 31, 1998 and 1999, and March 31, 2000 respectively; 83,035,133 outstanding -- pro forma	106	36,293	88,408	200,107
Notes receivable from stockholders	(80)	(903)	(8,373)	(8,373)
Accumulated other comprehensive income	--	11	(28)	(28)
Deferred compensation	--	(30,386)	(59,562)	

(59,562) Deficit accumulated during the development stage..... (9,424) (47,145) (86,376) (86,376) Total stockholders' equity (net capital deficiency)... (6,038) (38,374) (62,175) 45,768 $11,099 $ 66,070 $ 68,363 $ 71,644 See accompanying notes. F-3

Cosine Communications, Inc. (A Development Stage Company)

Consolidated Statements of Operations (In Thousands, Except Per Share Data)

	PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31,	YEARS ENDED DECEMBER 31,		PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31,	THREE MONTHS ENDED MARCH 31,
	1997	1998	1999	1999	2000
					(UNAUDITED)
Revenue	$ --	$ --	$ --	$ --	$ 3,540
Cost of goods sold(1)	--	--	--	--	2,600
Gross profit	--	--	--	--	940
Operating expenses:					
Research and development(1)	87	7,366	27,336	34,789	5,494 15,700
Sales and marketing(1)	--	606	6,077	6,683	500 21,679
General and administrative(1)	47	1,106	4,980	6,133	783 3,170
Total operating expenses	134	9,078	38,393	47,605	6,777 40,549
Loss from operations	(134)	(9,078)	(38,393)	(47,605)	(6,777) (39,609)
Other income (expenses):					
Interest income	3	55	1,250	1,308	90 694
Interest expense	--	(267)	(599)	(866)	(102) (316)
Other	--	(3)	21	18	-- --
Net loss	(131)	(9,293)	(37,721)	(47,145)	(6,789) (39,231)
Deemed dividend to Series D preferred stockholders	--	--	--	--	-- 2,500
Net loss allocable to common					

stockholders.....	$ (131)	$(9,293)	$(37,721)	$(47,145)	$(6,789)	$(41,731)
Basic and diluted net loss per common share.....	$(0.25)	$ (4.53)	$ (7.80)		$ (1.78)	$ (6.67)
Shares used in computing basic and diluted net loss per common share.....	522	2,051	4,837		3,817	6,255
Pro forma basic and diluted net loss per common share (unaudited).....			$ (0.75)			$ (0.61)
Shares used in computing pro forma basic and diluted net loss per common share (unaudited).....			50,378			68,295
(1) Non cash charges related to equity issuances included above:						
Cost of goods sold.....	$ --	$ --	$ --	$ --	$ --	$ 216
Research and development.....	--	--	2,186	2,186	--	4,104
Sales and marketing.....	--	--	1,462	1,462	--	18,049
General and administrative...	--	--	733	733	--	1,811
Total.....	$ --	$ --	$ 4,381	$ 4,381	$ --	$ 24,180

See accompanying notes.

Cosine Communications, Inc. (A Development Stage Company)

CONSOLIDATED STATEMENT OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (NET CAPITAL DEFICIENCY) (IN THOUSANDS, EXCEPT SHARES AND PER SHARE DATA)

	REDEEMABLE CONVERTIBLE PREFERRED STOCK	CONVERTIBLE PREFERRED STOCK	COMMON STOCK	NOTES RECEIVABLE FROM STOCKHOLDERS	ACCUMULATED OTHER COMPREHENSIVE INCOME	DEFERRED COMPENSATION
Issuance of 4,000,000 shares of common stock to founder in September 1997 at $0.00025 per share for cash.....	$ --	$ --	$ 1	$ --	$--	$ --
Issuance of 1,562,500 shares of Series A preferred stock in November 1997 to investors at $1.60 per share for cash and promissory notes.....	--	2,500	--	(1,000)	--	--
Net loss.....	--	--	--	--	--	--
Balance at December 31, 1997.....	--	2,500	1	(1,000)	--	--
Issuance of 2,666,664 shares of common stock to founders in January 1998 and February 1998 at $0.0375 per share for cash and notes.....	--	--	100	(80)	--	--
Issuance of 312,500 shares of Series A preferred stock to investors in April 1998 at $1.60 per share, net of issuance costs of $11.....	--	489	--	--	--	--
Issuance of 12,884,205 shares of Series B preferred stock to investors in December 1998 at $0.738 per share, net of issuance costs of $37.....	9,471	--	--	--	--	--
Issuance of warrants to						

purchase 43,067 shares of common stock in connection with services.... -- -- 5 -- -- -- Issuance of warrants to purchase 159,105 shares of Series A preferred stock in connection with lease of building..... -- 371 -- -- -- -- Issuance of warrants to purchase 694,444 shares of Series B preferred stock in connection with loan financing..... 352 -- -- -- -- -- Repayment of notes receivable from stockholders..... -- -- -- 1,000 -- -- Net loss and comprehensive loss..... -- -- -- -- -- -- Balance at December 31, 1998 (carried forward)..... $ 9,823 $3,360 $ 106 $ (80) $-- $ --

DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	TOTAL STOCKHOLDERS' EQUITY (NET CAPITAL DEFICIENCY)

Issuance of 4,000,000 shares of common stock to founder in September 1997 at $0.00025 per share for cash..... $ -- $ 1 Issuance of 1,562,500 shares of Series A preferred stock in November 1997 to investors at $1.60 per share for cash and promissory notes..... -- 1,500 Net loss..... (131) (131) Balance at December 31, 1997..... (131) 1,370 Issuance of 2,666,664 shares of common stock to founders in January 1998 and February 1998 at $0.0375 per share for cash and notes..... -- 20 Issuance of 312,500 shares of Series A preferred stock to investors in April 1998 at $1.60 per share, net of issuance costs of $11..... -- 489 Issuance of 12,884,205 shares of Series B preferred stock to investors in December 1998 at $0.738 per share, net of issuance costs of $37..... -- -- Issuance of warrants to purchase 43,067 shares of common stock in connection with services.... -- 5 Issuance of warrants to purchase 159,105 shares of Series A preferred stock in connection with lease of building..... -- 371 Issuance of warrants to purchase 694,444 shares of Series B preferred stock in connection with loan financing..... -- -- Repayment of notes receivable from stockholders..... -- 1,000 Net loss and comprehensive loss..... (9,293) (9,293) Balance at December 31, 1998 (carried forward)..... $ (9,424) $ (6,038) See accompanying notes.

Cosine Communications, Inc. (A Development Stage Company)

CONSOLIDATED STATEMENT OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (CONTINUED) (NET CAPITAL DEFICIENCY) (IN THOUSANDS, EXCEPT SHARES AND PER SHARE DATA)

REDEEMABLE CONVERTIBLE PREFERRED STOCK	CONVERTIBLE PREFERRED STOCK	COMMON STOCK	NOTES RECEIVABLE FROM STOCKHOLDERS	ACCUMULATED OTHER COMPREHENSIVE INCOME	DEFERRED COMPENSATION

Balance at December 31, 1998 (brought forward)..... $ 9,823 $3,360 $ 106 $ (80) $-- $ -- Issuance of 73,667 shares of common stock for services at various dates at prices ranging from $0.545 to $2.60 per share..... -- -- 163 -- -- -- Issuance of 24,503,677 shares of Series C preferred stock to investors in March 1999 at $0.897 per share, net of issuance costs of $29..... 21,950 -- -- -- -- -- Issuance of 17,118,253 shares of Series D preferred stock to investors in September and October 1999

at $3.505 per share, net of issuance costs of $3,079..... 56,921 -- -- -- -- -- Issuance of warrants to purchase 641,904 shares of Series C preferred stock in connection with technical and marketing services..... 392 -- -- -- -- -- Issuance of warrants to purchase 154,064 shares of Series D preferred stock in connection with services..... 302 -- -- -- -- -- Issuance of 4,023,820 shares of common stock in connection with stock options for cash and promissory notes..... -- -- 1,603 (873) -- -- Increase in value of variable award warrants of Series A preferred stock issued in connection with lease of building..... -- 396 -- -- -- -- Increase in value of variable award warrants of common stock issued in connection with services..... -- -- 255 -- -- -- Repayment of notes receivable from stockholders..... -- -- -- 50 -- -- Deferred stock-based compensation..... -- -- 33,955 -- -- (33,955) Amortization of deferred stock-based compensation..... -- -- -- -- -- 3,569 Issuance of options to nonemployees to purchase common stock..... -- -- 211 -- -- -- Components of comprehensive loss:..... Net loss..... -- -- -- -- -- -- Unrealized gains on investments..... -- -- -- -- 11 -- Total comprehensive loss... -- -- -- -- 11 -- Balance at December 31, 1999 (carried forward)..... $89,388 $3,756 $36,293 $ (903) $11 $(30,386)

DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	TOTAL STOCKHOLDERS' EQUITY (NET CAPITAL DEFICIENCY)
Balance at December 31, 1998 (brought forward).....	$ (9,424) $ (6,038)
Issuance of 73,667 shares of common stock for services at various dates at prices ranging from $0.545 to $2.60 per share.....	-- 163
Issuance of 24,503,677 shares of Series C preferred stock to investors in March 1999 at $0.897 per share, net of issuance costs of $29.....	-- --
Issuance of 17,118,253 shares of Series D preferred stock to investors in September and October 1999 at $3.505 per share, net of issuance costs of $3,079.....	-- --
Issuance of warrants to purchase 641,904 shares of Series C preferred stock in connection with technical and marketing services.....	-- --
Issuance of warrants to purchase 154,064 shares of Series D preferred stock in connection with services.....	-- --
Issuance of 4,023,820 shares of common stock in connection with stock options for cash and promissory notes.....	-- 730
Increase in value of variable award warrants of Series A preferred stock issued in connection with lease of building.....	-- 396
Increase in value of variable award warrants of common stock issued in connection with services.....	-- 255
Repayment of notes receivable from stockholders.....	-- 50
Deferred stock-based compensation.....	-- --
Amortization of deferred stock-based compensation.....	-- 3,569
Issuance of options to nonemployees to purchase common stock.....	-- 211
Components of comprehensive loss:.....	
Net loss.....	(37,721) (37,721)
Unrealized gains on investments.....	-- 11
Total comprehensive loss...	(37,721) (37,710)
Balance at December 31, 1999 (carried forward).....	$(47,145) $(38,374)

See accompanying notes.

Cosine Communications, Inc. (A Development Stage Company)

CONSOLIDATED STATEMENT OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (CONTINUED) (NET CAPITAL DEFICIENCY) (IN THOUSANDS, EXCEPT SHARES AND PER SHARE DATA)

	REDEEMABLE CONVERTIBLE PREFERRED STOCK	CONVERTIBLE PREFERRED STOCK	COMMON STOCK	NOTES RECEIVABLE FROM STOCKHOLDERS	ACCUMULATED OTHER COMPREHENSIVE INCOME	DEFERRED COMPENSATION
Balance at December 31, 1999 (brought forward)	$ 89,388	$3,756	$36,293	$ (903)	$ 11	$(30,386)
Issuance of 15,426 shares of common stock for services in February and March at $4.00 per share (unaudited)	--	--	62	--	--	--
Issuance of warrants to purchase 1,233,499 shares of Series C preferred stock in connection with technical and marketing services (unaudited)	10,300	--	--	--	--	--
Issuance of warrants to purchase 200,000 shares of common stock in connection with technical and marketing services (unaudited)	--	--	1,840	--	--	--
Issuance of warrants to purchase 468,849 shares of common stock in connection with technical and marketing services (unaudited)	--	--	4,112	--	--	--
Issuance of warrants to purchase 37,500 shares of common stock in connection with lease agreement (unaudited)	--	--	357	--	--	--
Issuance of 625,000 shares of Series D preferred stock to investors in March 2000 at $8.00 per share, net of issuance costs of $26 (unaudited)	4,974	--	--	--	--	--
Issuance of 7,045,249 shares of common stock in connection with exercise of stock options for cash and notes (unaudited)	--	--	8,529	(7,470)	--	--
Increase in value of variable award warrants of common stock issued in connection with services (unaudited)	--	--	139	--	--	--
Deferred stock-based compensation (unaudited)	--	--	36,816	--	--	(36,816)
Amortization of deferred stock-based compensation (unaudited)	--	--	--	--	--	7,640
Issuance of options to non-employees to purchase common stock (unaudited)	--	--	260	--	--	--
Components of comprehensive loss: Net loss (unaudited)	--	--	--	--	--	--
Unrealized losses on investments (unaudited)	--	--	--	--	(39)	--
Total comprehensive loss (unaudited)	--	--	--	--	(39)	--
Balance at March 31, 2000 (unaudited)	$104,662	$3,756	$88,408	$(8,373)	$(28)	$(59,562)

	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	TOTAL STOCKHOLDERS' EQUITY (NET CAPITAL DEFICIENCY)
Balance at December 31, 1999 (brought forward)	$(47,155)	$(38,384)
Issuance of 15,426 shares of common stock for services in February and March at $4.00 per share (unaudited)	--	62
Issuance of warrants to purchase 1,233,499 shares of Series C preferred stock in connection with technical and marketing services (unaudited)	--	--
Issuance of warrants to purchase 200,000 shares of common stock in connection with technical and marketing services (unaudited)	--	1,840
Issuance of warrants to purchase 468,849 shares of common stock in connection with technical and		

marketing services (unaudited)... -- 4,112 Issuance of warrants to purchase 37,500 shares of common stock in connection with lease agreement (unaudited)..... -- 357 Issuance of 625,000 shares of Series D preferred stock to investors in March 2000 at $8.00 per share, net of issuance costs of $26 (unaudited)..... -- -- Issuance of 7,045,249 shares of common stock in connection with exercise of stock options for cash and notes (unaudited)..... -- 1,059 Increase in value of variable award warrants of common stock issued in connection with services (unaudited)..... -- 139 Deferred stock-based compensation (unaudited)..... -- -- Amortization of deferred stock-based compensation (unaudited)..... -- 7,640 Issuance of options to non-employees to purchase common stock (unaudited)..... -- 260 Components of comprehensive loss: Net loss (unaudited)..... (39,231) (39,231) Unrealized losses on investments (unaudited)..... -- (39) Total comprehensive loss (unaudited)..... (39,231) (39,270) Balance at March 31, 2000 (unaudited)..... $(86,376) $(62,175) See accompanying notes.

Cosine Communications, Inc. (A Development Stage Company)

Consolidated Statements of Cash Flows (In Thousands)

	PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31,	YEARS ENDED DECEMBER 31,		PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31,	THREE MONTHS ENDED MARCH 31,	
	1997	1998	1999	1999	1999	2000
					(UNAUDITED)	
OPERATING ACTIVITIES:						
Net loss	$ (131)	$(9,293)	$(37,721)	$(47,145)	$(6,789)	$(39,231)
Adjustments to reconcile net loss to net cash used in operating activities:						
Depreciation	2	284	1,921	2,207	265	1,031
Noncash warrant expense -- preferred stock	--	227	511	738	25	10,355
Noncash warrant expense -- common stock	--	--	29	29	--	5,952
Common stock issued for services	--	--	163	163	--	62
Amortization of deferred stock compensation	--	--	3,569	3,569	32	7,640
Issuance of options to purchase common stock	--	--	211	211		

--	260						
Accrued expense on bridge note converted into preferred stock...	--	9	--	9	--	--	
Changes in unrealized gains or losses.....	--	--	11	11	--	(39)	
Changes in operating assets and liabilities:							
Accounts receivable (trade).....	--	--	--	--	--	(5,016)	
Other receivables.....	--	--	--	--	--	(1,536)	
Inventory.....	--	(670)	343	(327)	(57)	(952)	
Prepaid expenses and other current assets.....	(10)	(169)	(1,437)	(1,616)	(79)	189	
Other assets.....	(100)	(302)	(504)	(906)	(16)	(48)	
Accounts payable.....	73	2,767	(335)	2,505	(58)	3,235	
Accrued liabilities.....	--	730	738	1,468	809	2,911	
Accrued compensation.....	--	121	691	812	(121)	1,090	
Note payable.....	--	201	(201)	--	--	223	
Obligations under capital lease.....	--	--	--	--	--	1,536	
Deferred rent.....	--	762	886	1,648	427	92	
Other liabilities.....	--	--	312	312	74	893	
Net cash used in operating activities.....	(166)	(5,333)	(30,813)	(36,312)	(5,488)	(11,353)	
INVESTING ACTIVITIES:							
Capital expenditures.....	(34)	(3,019)	(6,785)	(9,838)	(1,025)	(5,591)	
Purchase of short-term investments...	--	--	(34,497)	(34,497)	--	(4,404)	
Proceeds from maturities of short-term investments.....	--	--	--	--	--	9,430	
Proceeds from sales of short-term investments.....	--	--	--	--	--	4,035	
Net cash provided by (used in) investing activities.....	(34)	(3,019)	(41,282)	(44,335)	(1,025)	3,470	

Cosine Communications, Inc. (A Development Stage Company)

Consolidated Statements of Cash Flows (Continued) (In Thousands)

	PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31,	YEARS ENDED DECEMBER 31,		PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31,	THREE MONTHS ENDED MARCH 31,	
	1997	1998	1999	1999	1999	2000
					(UNAUDITED)	
FINANCING ACTIVITIES: Proceeds from equipment and working capital loans.....	--	2,853	7,001	9,854	670	1,486
Principal payments of equipment and working capital loans.....	--	(193)	(1,350)	(1,543)	(194)	(646)
Proceeds from issuance of bridge loans.....	--	1,500	--	1,500	--	--
Proceeds from issuance of preferred stock, net.....	1,500	8,451	79,173	89,124	21,950	4,974
Proceeds from issuance of common stock.....	1	20	730	751	10	1,059
Proceeds from notes receivable from stockholders.....	--	1,000	50	1,050	49	--
Net cash provided by financing activities.....	1,501	13,631	85,604	100,736	22,485	6,873
Net increase in cash and cash equivalents.....	1,301	5,279	13,509	20,089	15,972	(1,010)
Cash and cash equivalents at beginning of period.....	--	1,301	6,580	--	6,580	20,089
Cash and cash equivalents at end of period.....	$1,301	$ 6,580	$ 20,089	$ 20,089	$22,552	$19,079
SUPPLEMENTAL INFORMATION: Cash paid for interest.....	$ --	$ 59	$ 552	$ 611	$ 90	$ 304
SUPPLEMENTAL SCHEDULE OF NONCASH INVESTING AND FINANCING ACTIVITIES:						
Issuance of preferred stock in exchange for bridge loans.....	$ --	$ 1,500	$ --	$ 1,500	$ --	$ --
Issuance and remeasurement of warrants.....	$ --	$ 728	$ 1,345	$ 2,073	$ 149	$16,391
Notes receivable received from stockholders (in exchange for issuance of common stock).....	$1,000	$ 80	$ 873	$ 1,953	$ --	$ 7,470

See accompanying notes. F-9

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED)

1. Summary of Significant Accounting Policies

Description of Business

CoSine Communications, Inc. (the "Company") was incorporated in California on April 14, 1997 and is engaged in the development of network-based, high- performance Internet service delivery platforms for the global, carrier-class business IP Service Provider market. Since inception, the Company's principal activities have been recruiting personnel, raising capital, and performing product development. Accordingly, the Company is classified as a development stage enterprise at December 31, 1999.

During the first quarter of 2000, the Company commenced shipping product and recognizing revenue, and therefore ceased to be classified as a development stage enterprise.

Basis of Presentation

The consolidated financial statements include all of the accounts of the Company and its wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated.

Management's Plans

As of December 31, 1999, the Company had an accumulated deficit of approximately $47.1 million. Even though the Company commenced shipping product and recognizing revenue in the first quarter of 2000, management expects to continue to incur substantial operating losses for the foreseeable future primarily as a result of expected increases in expenses for:

- - Sales and marketing activities - - Research and product development activities - - General and administrative activities The Company currently does not have a credit facility or committed sources of capital. To the extent operating and capital resources are insufficient to meet future requirements, the Company will have to raise additional funds to continue the development and commercialization of future technologies. These funds may not be available on favorable terms, or at all. If adequate funds are not available on attractive terms, the Company may be required to curtail operations significantly or to obtain funds by entering into financing, supply or operating agreements on unattractive terms. In addition, the Company may choose to raise additional capital due to market conditions or strategic considerations even if it has sufficient funds for current or future operating plans.

The Company believes that its available cash, cash equivalents, and short-term investments of $54.6 million as of December 31, 1999 together with the cash proceeds to be raised from the issuance of Series E preferred stock (see note 11) will be adequate to fund its operations through December 31, 2000.

Unaudited Pro Forma Information

In February 2000, the Board of Directors authorized the management of the Company to file a registration statement with the Securities and Exchange Commission permitting the Company to sell shares of its common stock to the public. If the initial public offering is consummated under the terms presently anticipated, all of the convertible preferred stock outstanding, and certain of the warrants to purchase common and preferred stock which are automatically exercised upon the closing of an initial public offering of the Company's common stock, will automatically convert into common stock. Unaudited pro forma stockholders' equity, as adjusted for the assumed conversion of the

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) preferred stock, and the automatic and assumed exercise of certain of the warrants to purchase common and preferred stock as set forth on the balance sheet.

Interim Consolidated Financial Data

The consolidated financial information at March 31, 2000 and for the three months ended March 31, 1999 and 2000 is unaudited but has been prepared on the same basis as the annual consolidated financial statements and, in the opinion of management, includes all adjustments (consisting only of normal recurring adjustments) that the Company considers necessary for a fair presentation of the consolidated financial position at such dates and the consolidated operating results and cash flows for such periods. Results for the interim periods are not necessarily indicative of the results to be expected for any subsequent period.

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. Actual results could differ from these estimates.

Revenue Recognition

The Company generally recognizes product revenue at the time of shipment, assuming that collectibility is probable, unless the Company has future obligations for installation or has to obtain customer acceptance, in which case revenue is deferred until these obligations are met. Revenue from

service obligations for specified future periods is deferred and recognized on a straight-line basis over the contractual period. Amounts billed in excess of revenue recognized are included as deferred revenue in the accompanying balance sheets. Revenue from engineering and consulting services is recognized as the services are provided or based upon the achievement of contractual milestones.

The Company's initial two customers were provided limited price protection rights which expire in September and December 2000. The Company believes that the likelihood that there will be any price adjustments in connection with these rights is remote.

Cost of Good Sold

Cost of goods sold is comprised primarily of material, labor, overhead and estimated warranty reserves.

Warranty Reserves

The warranty period for the Company's product is generally outlined in the specific sales agreements. Estimated expenses for warranty obligations are accrued as revenue is recognized and included in cost of goods sold.

Cash, Cash Equivalents and Short-term Investments

The Company considers all highly liquid investments purchased with original maturities of three months or less from the date of purchase to be cash equivalents. Investments with maturities in excess of three months and less than one year are considered to be short-term investments. Management determines the appropriate classification of its cash equivalents and investment securities at the time of purchase and reevaluates such determination as of each balance sheet date. Management has classified the Company's marketable securities as available-for-sale securities in the accompanying consolidated financial statements. Available-for-sale securities are carried at fair value, with F-11

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) unrealized gains and losses reported in a separate component of stockholders' equity. Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are included in interest income. Interest on securities classified as available-for-sale is also included in interest income. The cost of securities sold is based on the specific identification method.

The Company invests its excess cash in U.S. government and agency securities, debt instruments of financial institutions and corporations, and money market funds with strong credit ratings. The Company has established guidelines regarding diversification of its investments and their maturities which should maintain safety and liquidity.

Inventories

Inventories, stated at the lower of cost (first-in, first-out) or market, consist principally of raw materials at December 31, 1998 and 1999, and work-in-process at March 31, 2000.

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Property and equipment are depreciated using the straight-line method over estimated useful lives of the assets (ranging from three to five years) or the related lease term.

Impairment of Long-lived Assets

In accordance with the provisions of Statement of Financial Accounting Standards No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" ("SFAS 121"), the Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Under SFAS 121, an impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. Impairment, if any, is assessed using discounted cash flows. Through December 31, 1999, there have been no such losses.

Research and Development

The Company expenses research and development costs as incurred. Research and development expenses consist primarily of materials, labor, and overhead costs for the development and testing of prototypes and salaries and related personnel costs associated with independent research.

Stock-based Compensation

The Company accounts for employee and director stock option grants using the intrinsic value method in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25") which does not require the recognition of compensation expense for options granted to employees with exercise prices equal to the fair value of the common stock at the date of grant. The fair value disclosures required by Statement of Financial Accounting Standards Board

Statement No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123") are included in Note 8. SFAS 123 requires the disclosure of pro forma information regarding net loss and net loss per share as if the Company had accounted for its stock options under the fair value method.

Stock options granted to non-employees are accounted for in accordance with SFAS 123 and the Emerging Issues Task Force Consensus No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) Conjunction with Selling, Goods or Services" which requires the value of such options to be periodically re-measured as they vest over a performance period. The fair value of such options is determined using the Black-Scholes model.

Comprehensive Income (Loss)

As of January 1, 1998, the Company adopted SFAS No. 130, "Reporting Comprehensive Income" ("SFAS 130"). SFAS 130 requires unrealized gains or losses on the Company's available-for-sale securities to be included in other comprehensive income. For the year ended December 31, 1999, comprehensive loss was reduced by $11,000 in unrealized gains on available-for-sale securities. During the three months ended March 31, 2000, comprehensive loss was increased by $39,000 in unrealized losses on available-for-sale securities. For the years ended December 31, 1998, comprehensive loss equaled net loss.

Segment Reporting

Effective January 1, 1998, the Company adopted SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information" ("SFAS 131"). SFAS 131 establishes annual and interim reporting standards for an enterprise's operating segments and related disclosures about its products, services, geographic areas and major customers. The Company has determined that it operates in only one segment. Accordingly, the adoption of SFAS 131 had no impact on the Company's financial statements.

For the quarter ended March 31, 2000, the Company generated $1,715,000 of revenue from a customer based in Europe. Substantially all of the Company's assets are located in the United States at December 31, 1998 and 1999 and at March 31, 2000.

Significant Concentrations

Financial instruments that potentially subject the Company to concentrations of credit risk primarily consist of cash equivalents and short-term investments (see Note 2).

The Company relies on a few companies as the sole source of various materials in its production process. The Company also utilizes a few third-party subcontractors to manufacture all of the product that it sells. If these suppliers were unable to satisfy the Company's material and production requirements, the Company may be unable to meet customer demand.

For the quarter ended March 31, 2000, two customers accounted for substantially all of the Company's revenue.

Advertising Expense

The cost of advertising is expensed as incurred. The Company's advertising costs through December 31, 1999 have been immaterial.

Recent Accounting Pronouncements

In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Financial Instruments and for Hedging Activities" ("SFAS 133") which provides a comprehensive and consistent standard for the recognition and measurement of derivatives and hedging activities. SFAS 133 is effective for fiscal years beginning after June 15, 2000. The Company will assess the impact of SFAS 133 if such activities are undertaken.

In March 1998, the AICPA issued Statement of Position 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use" ("SOP 98-1").

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) SOP 98-1 requires that entities capitalize certain costs related to internal use software once certain criteria have been met. The Company adopted the provisions of SOP 98-1 on January 1, 1999.

In December 1999, the Securities and Exchange Commission ("SEC") issued SEC Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" ("SAB 101"). SAB 101 summarizes certain of the SEC's views in applying generally accepted accounting principles to revenue recognition

in financial statements. The Company believes its revenue recognition policy is in compliance with SAB 101 as of March 31, 2000.

Net Loss Per Common Share

Basic net loss per common share is calculated based on the weighted-average number of common shares outstanding during the periods presented, less the weighted-average shares outstanding which are subject to the Company's right of repurchase. Diluted net loss per common share would give effect to the dilutive effect of common stock equivalents consisting of convertible preferred stock, stock options and warrants (calculated using the treasury stock method). Potentially dilutive securities have been excluded from the diluted net loss per common share computations as their inclusion would be antidilutive.

The computation of pro forma basic and diluted net loss per common share includes shares issuable upon the conversion of outstanding shares of convertible preferred stock (using the as-if converted method) from the original date of issuance. Shares issuable upon exercise of certain warrants for common and preferred stock, which are automatically exercised upon closing of an initial public offering, do not affect the computation, as such shares are issued on the date of the assumed conversion.

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) The following table presents the calculation of historical basic and diluted net loss per share and pro forma basic and diluted net loss per share (in thousands, except per share data):

	PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31,	YEARS ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,	
	1997	1998	1999	1999	2000
Historical: Net loss allocable to common shareholders.....	$ (131)	$(9,293)	$(37,721)	$(6,789)	$(41,731)
Basic and diluted: Weighted-average shares of common stock outstanding.....	1,868	6,484	7,659	6,702	15,323
Less: weighted-average shares subject to repurchase.....	(1,346)	(4,433)	(2,822)	(2,885)	(9,068)
Weighted-average shares used in basic and diluted net loss per common share.....	522	2,051	4,837	3,817	6,255
Basic and diluted net loss per common share.....	$ (0.25)	$ (4.53)	$ (7.80)	$ (1.78)	$ (6.67)
Pro forma: Net loss allocable to common shareholders.....			$(37,721)		$(41,731)
Pro forma basic and diluted: Shares used above.....			4,837		6,255
Pro forma adjustment to reflect weighted-average effect of assumed conversion of convertible preferred stock (unaudited).....			45,541		62,040
Weighted-average shares used in pro forma basic and diluted net loss per common share (unaudited).....			50,378		68,295
Pro forma					

basic and diluted net loss per common share (unaudited)..... $ (0.75) $ (0.61) During all periods presented, the Company had securities outstanding which could potentially dilute basic earnings per share in the future, but were excluded from the computation

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) of diluted net loss per share as their effect would have been antidilutive. These outstanding securities consist of the following:

	PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31, 1997	YEARS ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,	
		1998	1999	1999	2000
		(IN THOUSANDS)			
Convertible preferred stock (as-if converted basis).....	6,250	20,384	62,006	44,888	62,631
Stock options.....	--	2,618	10,761	5,098	8,320
Warrants to purchase common stock....	--	43	43	43	749
Warrants to purchase preferred stock (as-if converted basis).....	--	1,331	2,127	1,331	3,360

2. Short-term Investments

Short-term investments as of December 31, 1999, including cash equivalents and short-term investments, were as follows (in thousands):

Money market funds.....	$ 11,448
Commercial paper.....	17,751
Corporate bonds.....	24,670
	53,869
Amounts classified as cash equivalents.....	(19,372)
Short-term investments.....	$ 34,497

As of December 31, 1999, the fair value approximated the amortized cost of available-for-sale securities. As of December 31, 1999, the average portfolio duration was 122 days. There were no short-term investments as of December 31, 1998.

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED)

3. Property and Equipment

Property and equipment consists of the following:

	DECEMBER 31,		MARCH 31,
	1998	1999	2000
	(IN THOUSANDS)		
Computer equipment	$1,716	$ 2,175	$ 3,956
Furniture and fixtures	526	1,069	1,768
Leasehold improvements	155	364	885
Computer software	656	2,002	2,715
Manufacturing and laboratory equipment	--	4,228	6,105
	3,053	9,838	15,429
Less accumulated depreciation	(286)	(2,207)	(3,238)
Property and equipment, net	$2,767	$ 7,631	$12,191

4. Leases

The Company leases its facilities under an operating lease which commenced August 1, 1998 and has been extended to expire December 31, 2011.

Minimum future lease payments due under this lease agreement are as follows at December 31, 1999:

Amount (In Thousands)

2000	$ 1,924
2001	1,983
2002	2,038
2003	2,088
2004	2,148
Thereafter	16,710
Total minimum lease payments	$26,891

Rent expense was $19,000, $1,045,000, and $2,093,000 for the period from inception (April 14, 1997) to December 31, 1997, and the years ended December 31, 1998 and 1999, respectively, and is calculated on a straight-line basis.

The Company subleases a portion of the space at its facility. Rental income relating to the sublease was $0, $13,000 and $323,000 for the period from inception (April 14, 1997) to December 31, 1997 and the years ended December 31, 1998 and 1999, respectively. The sublease arrangements, which expire on June 30, 2001, provide for income of $531,000 in 2000 and $261,000 in 2001.

In connection with its facility lease, the Company has issued a noninterest-bearing promissory note due January 2001 for approximately $222,000 relating to a security deposit, which is included in other long-term liabilities at December 31, 1999.

On February 12, 2000, the Company leased additional facilities in Redwood City,

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) California, primarily for office space. The term of the lease is twelve years commencing on February 12, 2000. Minimum annual rental commitments under the operating lease are $1,835,000, $2,127,000, $2,186,000, $2,246,000 and $2,305,000 for the years ending December 31, 2000, 2001, 2002, 2003 and 2004, respectively, and $18,018,000 for the period subsequent to December 31, 2004.

On January 1, 2000, the Company leased additional facilities in Reston, Virginia, primarily for office space. The term of the lease is fifty-three months commencing on January 1, 2000. Minimum annual rental Commitments under the operating lease are $185,000, $194,000, $204,000, $214,000 and $94,000 for the years ending December 31, 2000, 2001, 2002, 2003 and 2004, respectively.

5. Equipment and Working Capital Loans

As of December 31, 1999, the Company has entered into equipment and working capital loan agreements totaling $9,854,000 that are secured by the assets purchased using the loans. Principal and interest are due in monthly installments through 2003. Interest accrues at rates between 12.9% and 14.1% per annum. As of December 31, 1999, total principal payments due under these agreements are $8,311,000. The fair value of the loans is estimated based on current interest rates available to the Company for debt instruments with similar terms, degrees of risk, and remaining maturities. The carrying value of the loans approximates their fair value.

Future minimum principal payments under these equipment and working capital loans at December 31, 1999 are as follows:

Amount (In Thousands)

2000	$ 3,221
2001	3,005
2002	2,528
2003	1,570
Total minimum payments	10,324
Less: amount representing interest	(2,013)
	8,311
Less: current portion	(2,274)
	$ 6,037

During the three months ended March 31, 2000, the Company obtained additional equipment loans totaling $1,486,000 that are secured by the assets purchased using the loans. Principal and interest are due in monthly installments through 2004. Interest accrues at 14.3% per annum. As of March 31,

2000, total principal payments due under these agreements are $1,382,000. Future minimum principal payments under these loans are as follows: 2000 -- $204,000, 2001 -- $308,000, 2002 -- $355,000, 2003 -- $385,000, and 2004 -- $130,000.

At March 31, 2000, the Company was in violation of certain financial reporting loan

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) covenants in connection with these loans. The financial institutions have agreed to waive these covenants.

6. Commitments

As of December 31, 1999, the Company had commitments of approximately $6,067,000 relating to purchases of raw material components and $3,813,000 relating to royalties payable on software licenses on future product sales.

7. 401(k) PLAN

The Company has a defined contribution benefit plan established under the provisions of Section 401(k) of the Internal Revenue Code. All employees may elect to contribute up to 20% of their compensation to the plan through salary deferrals, subject to IRS limits. The Company may contribute a discretionary matching contribution. Since inception (April 14, 1997) through December 31, 1999, the Company made no matching contributions to the plan.

8. REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (NET CAPITAL DEFICIENCY) The Company has convertible preferred stock that consists of (i) Series A convertible preferred stock and (ii) Series B, C, and D redeemable convertible preferred stock, collectively referred to as "preferred stock."

Convertible Preferred Stock

Series a

Series A convertible preferred stock ranks senior to the Company's common stock and junior to the Series B, C and D preferred stock with respect to liquidation preference. Series A convertible preferred stock has a liquidation preference of $1.60 per share, plus any accrued dividends.

Each share of Series A convertible preferred stock is, at the option of the holder, convertible into common stock as determined by dividing the original issue price by the following conversion price: $0.40 (subject to adjustment). The outstanding shares of Series A convertible preferred stock automatically convert into common stock either immediately preceding the closing of an underwritten public offering of common stock in which the Company receives at least $15,000,000 in gross proceeds, and the price per share is at least $5.00 per share, or at the election of the holders of a majority of the then outstanding shares of Series A convertible preferred stock.

Series A convertible preferred stock is not redeemable by the Company.

The Series A convertible preferred stockholders have voting rights equal to the common shares issuable upon conversion. In addition, the holders of Series A convertible preferred stock, voting together as a class, are entitled to elect one member of the Company's board of directors (as long as 500,000 shares of the class are outstanding).

Series A convertible preferred stock ranks senior to the common stock with respect to dividends. Each fiscal year, Series A convertible stockholders are entitled to cumulative dividends of $0.16 per share. Dividends will be paid only when declared by the board of directors, out of legally available funds. To date, no dividends have been declared.

Redeemable Convertible Preferred Stock

Series B

Series B convertible preferred stock ranks senior to the Series A stock and pari passu with the Series C and D preferred stock with respect to liquidation preference. Series B convertible preferred stock has a liquidation preference of $0.738 per share,

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) plus any accrued dividends. In no event shall the aggregate per share liquidation amount for the holders of Series B convertible preferred stock exceed $2.50.

Each share of Series B convertible preferred stock is, at the option of the holder, convertible into common stock as determined by dividing the original issue price by the following conversion price: $0.738 (subject to adjustment). The outstanding shares of Series B convertible preferred stock automatically convert into common stock either immediately preceding the closing of an underwritten

public offering of common stock in which the Company receives at least $15,000,000 in gross proceeds, and the price per share is at least $7.00 per share, or at the election of the holders of a majority of the then outstanding shares of Series B convertible preferred stock.

If at any time within the 90 day period following November 23, 2003, the Company receives a written request from the holders of not less than 67% of the then outstanding Series B, C and D convertible preferred stock, requesting redemption of all or a portion of the Series B, C and D convertible preferred stock, the Company shall redeem pro rata to their respective requests for redemption one-third of each of the Series B, C and D convertible preferred stock requested to be redeemed, and shall redeem the Series B, C and D convertible preferred stock remaining outstanding after such redemption pro rata to the respective number of shares of each then outstanding, in two equal installments on November 23, 2004 and November 23, 2005. The Company shall pay in cash for Series B preferred the higher of $0.738 per share or the fair market value of such shares as determined by a qualified independent appraiser.

The Series B convertible preferred stockholders have voting rights equal to the common shares issuable upon conversion. In addition, the holders of Series B convertible preferred stock, voting together as a class, are entitled to elect two members of the Company's board of directors (as long as 500,000 shares of the class are outstanding).

Series B convertible preferred stock ranks senior to the common stock with respect to dividends. Each fiscal year, Series B convertible stockholders are entitled to noncumulative dividends of $0.0738 per share. Dividends will be paid only when declared by the board of directors, out of legally available funds. To date, no dividends have been declared.

Series C

Series C convertible preferred stock ranks senior to the Series A stock and pari passu with the Series B and D preferred stock with respect to liquidation preference. Series C convertible preferred stock has a liquidation preference of $0.897 per share, plus any accrued dividends. In no event shall the aggregate per share liquidation amount for the holders of Series C preferred stock exceed $3.588.

Each share of Series C convertible preferred stock is, at the option of the holder, convertible into common stock as determined by dividing the original issue price by the following conversion price: $0.897 (subject to adjustment). The outstanding shares of Series C convertible preferred stock automatically convert into common stock either upon the close of business on the day immediately preceding the closing of an underwritten public offering of common stock in which the Company receives at least $15,000,000 in gross proceeds, and the price per share is at least $7.00 per share, or at the election of the holders of a majority of the then outstanding shares of Series C convertible preferred stock.

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) If at any time within the 90 day period following November 23, 2003, the Company receives a written request from the holders of not less than 67% of the then outstanding Series B, C and D convertible preferred stock, requesting redemption of all or a portion of the Series B, C and D convertible preferred stock, the Company shall redeem pro rata to their respective requests for redemption one-third of each of the Series B, C and D convertible preferred stock requested to be redeemed, and shall redeem the Series B, C and D convertible preferred stock remaining outstanding after such redemption pro rata to the respective number of shares of each then outstanding, in two equal installments on November 23, 2004 and November 23, 2005. The Company shall pay in cash for Series C preferred the higher of $0.897 per share or the fair market value of such shares as determined by a qualified independent appraiser.

The Series C convertible preferred stockholders have voting rights equal to the common shares issuable upon conversion.

Series C convertible preferred stock ranks senior to the common stock with respect to dividends. Each fiscal year, Series C convertible stockholders are entitled to noncumulative dividends of $0.0897 per share. Dividends will be paid only when declared by the board of directors, out of legally available funds. To date, no dividends have been declared.

Series D

Series D convertible preferred stock ranks senior to the Series A stock and pari passu with the Series B and C preferred stock with respect to liquidation preference. Series D convertible preferred stock has a liquidation preference of $3.505 per share, plus any accrued dividends. In no event shall the aggregate per share liquidation amount for the holders of Series D preferred stock exceed $14.02.

Each share of Series D convertible preferred stock is, at the option of the holder, convertible into common stock as determined by dividing the original issue price by the following conversion price: $3.505 (subject to adjustment). The outstanding shares of Series D convertible preferred stock automatically convert into common stock either immediately preceding the closing of an underwritten public offering of common stock in which the Company receives at least $15,000,000 in gross proceeds, and the price per share is at least $7.00 per share, or at the election of the holders of a majority of the then outstanding shares of Series D convertible preferred stock.

If at any time within the 90 day period following November 23, 2003, the Company receives a written request from the holders of not less than 67% of the then outstanding Series B, C and D convertible preferred stock, requesting redemption of all or a portion of the Series B, C and D convertible preferred stock, the Company shall redeem pro rata to their respective requests for redemption one-

third of each of the Series B, C and D convertible preferred stock requested to be redeemed, and shall redeem the Series B, C and D convertible preferred stock remaining outstanding after such redemption pro rata to the respective number of shares of each then outstanding, in two equal installments on November 23, 2004 and November 23, 2005. The Company shall pay in cash for Series D preferred the higher of $3.505 per share or the fair market value of such shares as determined by a qualified independent appraiser.

The Series D convertible preferred stockholders have voting rights equal to the common shares issuable upon conversion.

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) Series D convertible preferred stock ranks senior to the common stock with respect to dividends. Each fiscal year, Series D convertible stockholders are entitled to noncumulative dividends of $0.3505 per share. Dividends will be paid only when declared by the board of directors, out of legally available funds. To date, no dividends have been declared.

Deemed Dividend

In March 2000, the Company consummated the sale of an additional 625,000 shares of Series D redeemable convertible preferred stock from which the Company received proceeds of approximately $5 million or $8.00 per share. At the date of issuance, the Company believed the per share price of $8.00 represented the fair value of the preferred stock. Subsequent to the commencement of the Company's initial public offering process, the Company reevaluated the fair value of its common stock as of March 2000. Accordingly, the increase in fair value has resulted in a beneficial conversion feature of $2.5 million, that has been recorded as a deemed dividend to preferred stockholders in 2000. The Company recorded the deemed dividend at the date of issuance by offsetting charges and credits to stockholders' equity. The preferred stock dividend increases the net loss allocable to common stockholders in the calculation of basic and diluted net loss per common share for the three months ended March 31, 2000.

Reserved Shares

The Company has reserved a total of 159,105, 694,444, 641,904, and 154,064 shares of Series A, B, C, and D convertible preferred stock, respectively, for issuance under warrant agreements. As of December 31, 1999, warrants were outstanding and exercisable for similar amounts of shares of Series A, B, C, and D preferred stock.

Common Stock

As of December 31, 1999, 1,666,666 shares of common stock issued to two of the Company's founders are subject to repurchase.

In 1999, and during the three months ended March 31, 2000, 4,023,820 and 7,045,249 shares of common stock, respectively, were issued upon stock option exercises for cash and notes.

At December 31, 1999, the Company has reserved shares of common stock for future issuance as follows:

```
Stock options:
  Options outstanding.....................................   10,761,834
  Reserved for future grants..............................    6,834,346
Convertible preferred stock...............................   64,288,738
Warrants outstanding......................................    2,169,899
                                                            84,054,817
```

Holders of common stock, voting together as a class, are entitled to elect one member of the Company's board of directors.

Stock Dividend

In May 1998, a stock dividend was authorized for the issuance of three common

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) shares for every common share held at such date. As a result, the conversion price for Series A preferred stock was reduced from $1.60 to $0.40. Furthermore, holders of options for shares of common stock at such date (effectively a 4-for-1 stock split) are entitled to receive four times the number of shares of common stock for the same aggregate price upon exercise. The stock dividend was accounted for as a stock split and common share numbers have been adjusted accordingly.

1997 Stock Option Plan

In October 1997, the Board of Directors adopted the 1997 Stock Option Plan (the "1997 Plan") for issuance of common stock and grants of options for common stock to employees, consultants and directors. Incentive stock options granted under the 1997 Plan are at prices not less than the fair value of stock at the date of grant, except in the case of a sale to a person who owns stock representing more than 10% of all the voting power of all classes of stock of the Company, in which case the purchase price will be 110% of the fair market value of the common stock on the date of grant. Nonstatutory

stock options granted under the 1997 Plan are at prices not less than 85% of the fair value of stock at the date of grant, except in the case of a sale to a person who owns stock representing more than 10% of all the voting power of all classes of stock of the Company, in which case the purchase price will be 110% of the fair market value of the common stock on the date of grant. Options granted under the Plan generally vest over four years at a rate of 25% one year from the grant date and ratably monthly thereafter and expire ten years after the grant, or earlier upon termination. Options may be granted from time to time with different vesting terms.

The 1997 Plan also allows for the exercise of options prior to vesting and the related issuance of restricted stock that is subject to right of repurchase by the Company. The right of repurchase generally lapses at the rate noted above. An aggregate 2,782,227 and 9,118,247 shares of common stock acquired through the exercise of options are subject to repurchase at an aggregate repurchase price of $1,485,000 and $9,902,000 as of December 31, 1999 and March 31, 2000, respectively.

As discussed in Note 1, the Company has elected to follow APB 25 and related interpretations in accounting for its employee stock options. Under APB 25, when the exercise price of the Company's employee stock options equals the market price of the underlying stock on the date of grant, no compensation expense is recognized.

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) Stock activity under the 1997 Stock Option Plan was as follows:

	SHARES AVAILABLE FOR GRANT	OPTIONS OUTSTANDING	WEIGHTED-AVERAGE EXERCISE PRICE
Authorized	833,332	--	--
Balance as of December 31, 1997	833,332	--	--
Authorized	1,786,668	--	--
Granted	(2,618,127)	2,618,127	$0.08
Balance as of December 31, 1998	1,873	2,618,127	$0.08
Authorized	19,000,000	--	--
Granted	(12,604,225)	12,604,225	$0.70
Exercised	--	(4,023,820)	$0.40
Canceled	436,698	(436,698)	$0.17
Balance as of December 31, 1999	6,834,346	10,761,834	$0.69
Authorized (subject to stockholders' approval) (unaudited)	6,000,000		
Granted (unaudited)	(5,066,483)	5,066,483	$3.72
Exercised (unaudited)	--	(7,045,249)	$1.21
Canceled (unaudited)	463,363	(463,363)	$1.25
Balance as of March 31, 2000 (unaudited)	8,231,226	8,319,705	$2.06

The following table summarizes information concerning outstanding options at December 31, 1999:

OPTIONS OUTSTANDING AND EXERCISABLE WEIGHTED- AVERAGE REMAINING EXERCISE NUMBER CONTRACTUAL PRICE OUTSTANDING LIFE (IN YEARS)

$0.038	570,163	8.1
$0.150	1,697,976	9.1
$0.225	853,544	9.2
$0.545	1,537,763	9.5
$1.000	6,102,388	9.9
	10,761,834	9.5

Stock-based Compensation

During the year ended December 31, 1999 and the three months ended March 31, 2000, the Company issued stock options to employees with exercise prices which it believed represented the fair value of the options. Subsequent to the commencement of the Company's initial public offering process, the Company reevaluated the fair value of its common stock options as of March 2000.

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) Accordingly, in connection with such stock option grants deferred stock compensation was recorded totaling $33,955,000 and $36,816,000, respectively, representing the difference between the deemed fair value of the common stock for financial reporting purposes and the exercise price of the underlying options. This amount is recorded as a reduction of stockholders' equity and is being amortized over the vesting period of the individual options, generally four years. The Company recorded amortization of deferred stock compensation of $3,569,000 and $7,640,000 for the year ended December 31, 1999 and the three months ended March 31, 2000, respectively.

During the years ended December 31, 1998 and 1999 and the three months ended March 31, 2000, the Company granted common stock options to nonemployees at exercise prices that range from $0.15 to $1.00 per share for services rendered. Such options are included in the option tables disclosed above. The options generally vest over four years at a rate of 25% one year from the grant date and ratably monthly thereafter and expire ten years after the grant date. Expense of $211,000 and $260,000 was recognized in 1999 and during the three months ended March 31, 2000, respectively, related to these transactions. The related expense in 1998 was not material. The fair value of these options is periodically re-measured as they vest over the performance period and was estimated using the Black-Scholes model with the following assumptions: risk-free interest rate of 5%, expected life of 10 years, a dividend yield of zero, and an expected volatility of the Company's common stock of 0.6.

Pro Forma Information

Pro forma information regarding net loss and net loss per share is required by FAS 123, which also requires the information to be determined as if the Company has accounted for its employee stock options granted under the fair value method of that statement. The fair value of the Company's options

was estimated at the grant date using the Black-Scholes option pricing model with the following assumptions: volatility of 0.6, risk-free interest rate of 5%, an expected life of four years, and a dividend yield of zero. The weighted-average fair value of options granted during 1998 and 1999 was $0.02 and $2.92, respectively.

Pro forma information is as follows:

Years Ended December 31, 1997 1998 1999

```
As reported:
  Net loss (in thousands)..............................  $ (131)   $(9,293)   $(37,721)
  Net loss per share...................................  $(0.25)   $ (4.53)   $  (7.80)
Pro forma:
  Net loss (in thousands)..............................  $ (131)   $(9,299)   $(37,721)
  Net loss per share...................................  $(0.25)   $ (4.53)   $  (7.80)
```

Proforma net loss and net loss per share equals actual net loss and net loss per share in 1999 due to the fact that the amortization of deferred stock-based compensation exceeds proforma compensation expense calculated under FAS 123.

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED)

Warrants

In November 1998, in connection with consulting services, the Company issued warrants to purchase 43,067 shares of common stock. The warrants are exercisable at any time at $0.15 per share and expire on the earlier of ten years following the issue date or a corporate reorganization. The warrants are automatically exercised upon the closing of an initial public offering or other defined events. The warrants have a variable measurement date and accordingly they are periodically revalued in accordance with Emerging Issues Task Force Consensus No. 96-18 "Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services." The warrants vest over a period of four years and their fair value was calculated to be $260,000 at December 31, 1999 and $399,000 at March 31, 2000 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6%, risk-free interest rate of 5%, and an initial expected life of 10 years. The fair value of the warrants is being amortized over the term of the lease.

In August 1998, in connection with a facilities lease arrangement, the Company issued warrants to purchase 157,915 shares of Series A preferred stock. The warrants are exercisable at any time at no cost to the holder and expire on the earlier of five years following the issue date or a corporate

reorganization. The warrants have a variable measurement date and accordingly they are periodically revalued in accordance with Emerging Issues Task Force Consensus No. 96-18 "Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services." The warrants vest over a period of one year and their fair value was calculated to be $767,000 at December 31, 1999 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6, risk-free interest rate of 5%, and an initial expected life of 5 years. The fair value of the warrants is being amortized over the term of the lease.

In May 1998, in connection with a loan and security agreement, the Company issued warrants to purchase 84,688 shares of Series B preferred stock. The warrants are fully vested immediately upon issuance and exercisable at any time at $0.738 per share and expire five years following the issue date. There are no forfeiture rights. As there are no future performance obligations, the measurement date of the warrants was fixed at the issuance date. The fair value of the warrants was calculated to be $35,000 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6, risk-free interest rate of 5%, and an expected life of 5 years, and was expensed in full during 1998.

In October 1998, in connection with an equipment and working capital loan arrangement, the Company issued warrants to purchase 304,878 shares of Series B preferred stock. The warrants are fully vested immediately upon issuance and exercisable at any time and expire eight years following the issue date. The fair value of the warrants was calculated to be $152,000 using the Black- Scholes valuation method, utilizing a volatility factor of 0.6, risk-free interest rate of 5%, and an expected life of 8 years. The fair value of the warrants is being amortized over the term of the loan.

In November 1998, in connection with a bridge note agreement, the Company issued warrants to purchase 304,878 shares of Series B preferred stock. The warrants are fully vested immediately upon issuance and exercisable at any time and expire on the earlier of ten years following the issue date and a corporate reorganization. There are no forfeiture rights. As there are no future performance obligations, the measurement date of the warrants was fixed at the

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) issuance date. The fair value of the warrants was calculated to be $165,000 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6, risk-free interest rate of 5%, and an expected life of 10 years, and was expensed in full during 1998.

In May 1999, in connection with technical and marketing services related to its products, the Company issued warrants to a customer to purchase 641,904 shares of Series C preferred stock. The warrants are fully vested immediately upon issuance and exercisable at any time and expire five years following the issue date. The warrants are automatically exercised upon the closing of an initial public offering or other defined events. There are no forfeiture rights. As there are no future performance obligations, the

measurement date of the warrants was fixed at the issuance date. The fair value of the warrants was calculated to be $392,000 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6, risk-free interest rate of 5%, and an expected life of 5 years, and was expensed in full during 1999.

In September 1999, in connection with placement services for the first round of Series D issuance, the Company issued warrants to purchase 148,929 shares of Series D preferred stock. The warrants are fully vested immediately upon issuance and exercisable at any time and expire five years following the issue date. The warrants are automatically exercised upon the closing of an initial public offering or other defined events. There are no forfeiture rights. As there are no future performance obligations, the measurement date of the warrants was fixed at the issuance date. The fair value of the warrants was calculated to be $292,000 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6, risk-free interest rate of 5%, and an expected life of 5 years, and was recorded as Series D first round issuance costs.

In October 1999, in connection with placement services for the second round of Series D issuance, the Company issued warrants to purchase 5,135 shares of Series D preferred stock. The warrants are fully vested immediately upon issuance and exercisable at any time and expire five years following the issue date. The warrants are automatically exercised upon the closing of an initial public offering or other defined events. There are no forfeiture rights. As there are no future performance obligations, the measurement date of the warrants was fixed at the issuance date. The fair value of the warrants was calculated to be $10,000 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6, risk-free interest rate of 5%, and an expected life of 5 years, and was recorded as Series D second round issuance costs.

9. Related Parties

As of December 31, 1998 and 1999, the Company has full-recourse promissory notes, with values of $80,000 and $30,000, respectively, from officers of the Company. In addition, the notes are secured by a pledge of the Company's common stock and bear interest at 6.13% per annum. The notes and interest accrued but unpaid are due and payable during 2008.

As of December 31, 1999, the Company had full recourse promissory notes totaling $873,000 from employees of the Company for the payment of stock option exercises (none at December 31, 1998). Interest on the notes ranges from 6.39% to 6.77% per annum. The notes are due and payable at the earliest of the following events: 10 years from the date of loan, termination of the employee or sale of the shares.

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) In 1999, the Company granted 18,604 shares of common stock to a firm of immigration attorneys in lieu of compensation. A partner of that firm is a relative of an officer of the Company.

10. Income Taxes

Due to operating losses and the Company's inability to recognize an income tax benefit from these losses, there is no provision for income taxes for the period from inception (April 14, 1997) to December 31, 1997, and for the years ended December 31, 1998 and 1999.

The difference between the provision (benefit) for income taxes and the amount computed by applying the Federal statutory income tax rate to income (loss) before taxes is explained below:

	PERIOD FROM INCEPTION (APRIL 14, 1997) TO DECEMBER 31, 1997	YEARS ENDED DECEMBER 31, 1998	1999
		(IN THOUSANDS)	
Tax (benefit) at federal statutory rate	$(45)	$(3,253)	$(13,206)
Loss for which no tax benefit is currently recognizable	45	3,253	13,206
Total provision (benefit)	$ --	$ --	$ --

Significant components of the Company's deferred tax assets are as follows:

DECEMBER 31, 1998 1999 (IN THOUSANDS)

Deferred tax assets:		
Net operating loss carryforwards	$ 3,100	$ 10,300
Tax credit carryforwards	270	900
Accruals and reserves not currently deductible	600	3,300
Total deferred tax assets	3,970	14,500
Valuation allowance	(3,970)	(14,500)
Net deferred tax assets	$ --	$ --

Financial Accounting Standards Board Statement No. 109 provides for the recognition of deferred tax assets if realization of such assets is more likely than not. Based upon the weight of available evidence, which includes the Company's historical operating performance and the reported cumulative net losses in all prior years, the Company has provided a full valuation allowance against its net deferred tax assets.

The valuation allowance increased by $10,530,000 and $3,925,000 during the year ended December 31, 1998 and 1999, respectively.

As of December 31, 1999, the Company had federal and state net operating loss

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) carryforwards of approximately $25,600,000 and $28,900,000, respectively. As of December 31, 1999, the Company also had federal and state research and development tax credit carryforwards of approximately $600,000 and $500,000, respectively. The net operating loss and tax credit carryforwards will expire at various dates beginning in 2005, if not utilized.

Utilization of the net operating loss and tax credit carryforwards may be subject to substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating loss and tax credit carryforwards before utilization.

11. Subsequent Events

Warrants

In February 2000, in connection with technical and marketing services related to its products, the Company issued warrants to a customer to purchase 200,000 shares of common stock at $4.00 per share, subject to adjustment. The warrants have a life of 4 years. They are fully vested and exercisable immediately and are automatically exercised upon the closing of an initial public offering of the Company's common stock or other defined events. There are no forfeiture rights. As there are no future performance obligations, the measurement date of the warrants was fixed at the issuance date. The fair value of the warrants was calculated to be $1,840,000 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6, risk-free interest rate of 5% and expected lives of 4 years, and such amount was charged to sales and marketing expense in the period ended March 31, 2000.

In March 2000, in connection with technical and marketing services related to its products, the Company agreed to issue warrants to a customer to purchase 468,849 shares of common stock at $3.73 per share, subject to adjustment. The Company has accounted for the warrants as if they had been issued as of March 31, 2000. The warrants have a life of 2 years. They are fully vested and exercisable immediately. There are no forfeiture rights. As there are no future performance obligations, the measurement date of the warrants was fixed at the issuance date. The fair value of the warrants was calculated to be $4,112,000 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6 risk-free interest rate of 5% and expected lives of 2 years and such amount was charged to sales and marketing expense in the period ended March 31, 2000.

In January 2000, in connection with technical and marketing services related to its products, the Company issued warrants to a customer to purchase 1,233,499 shares of Series C Redeemable Preferred Stock at $0.81 per share, subject to adjustment. The warrants have a life of 4 years. They are

fully vested and exercisable immediately and are automatically exercised upon the closing of an initial public offering of the Company's common stock or other defined events. There are no forfeiture rights. As there are no future performance obligations, the measurement date of the warrants was fixed at the issuance date. The fair value of the warrants was calculated to be $10,300,000 using the Black-Scholes valuation method, utilizing a volatility factor of 0.6, risk-free interest rate of 5% and expected lives of 4 years and such amount was charged to sales and marketing expense in the period ended March 31, 2000.

In March 2000, in connection with an equipment lease, the Company issued warrants for the purchase of 37,500 shares of its common stock at $8.00 per share to a leasing company. The warrants may be exercised at any time prior to the earlier of 10

Cosine Communications, Inc. (A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS -- (CONTINUED) (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED) years from the date of the warrant or the fifth anniversary of the first public offering of the Company's common stock. There are no forfeiture rights. As there are no future performance obligations, the measurement date of the warrants was fixed at the issuance date. The fair value of the warrant was calculated to be $357,000 using the Black-Scholes valuation method utilizing a volatility factor of 0.6, risk-free interest rate of 5% and expected lives of 10 years. At March 31, 2000, this amount has been deferred as prepaid interest and will be amortized over the lease term of 3 years. In April 2000, in connection with assistance with specific marketing activities the Company agreed to issue a warrant to a customer for the purchase of 75,000 shares of common stock at $15.00 per share, subject to adjustment. The issuance of the warrant is contingent upon the customer obtaining financing for its purchase order.

Capital Lease

On March 29, 2000, the Company entered into a thirty-six month capital lease under a sale and leaseback agreement to finance the purchase of computer equipment. Capitalized costs of $1,536,000 and accumulated amortization of $62,000 are included in property and equipment at March 31, 2000. The proceeds from this agreement have not been received by the Company as of March 31, 2000 and are therefore included in other accounts receivable in the accompanying balance sheet.

Future minimum payments under this capital lease as of March 31, 2000 are as follows (in thousands):

2000..... $ 450 2001..... $ 594 2002..... $ 594 2003..... $ 302 Total minimum lease payments..... $1,940 Less amount representing interest... (404) Present value of net minimum lease payments..... $1,536 Less current portion..... (408) Long-term portion..... $1,128

Series E Redeemable Convertible Preferred Stock

On April 26, 2000, the Company entered into a stock purchase agreement to sell 4,666,668 shares of Series E redeemable convertible preferred stock at $15.00 per share. The shares will be issued upon satisfaction of customary closing conditions. The shares automatically convert into common stock upon the closing of a firmly underwritten public offering of common stock in which the company receives gross proceeds of at least $15,000,000, and the price per share is at least $7.00. The conversion price upon such an offering is $15.00 per share. If the offering price is less than $15.00 per share, the conversion price will be reduced to the actual offering price. However, it will not be reduced to less than $7.00 per share. The shares are redeemable on substantially the same terms as those described above for Series D (Note 8) except that the redemption price will be the higher of $15.00 per share or the fair market value of the shares as determined by a qualified independent appraiser.

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Cosine Communications, Inc.

[Art Work]

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

Table of Contents

Page

Prospectus Summary..... 3
Risk Factors..... 8
Note Regarding Forward Looking Statements..... 20
Use of Proceeds..... 21
Dividend Policy..... 21
Capitalization..... 22
Dilution..... 23
Selected Consolidated Financial Data..... 25
Management's Discussion and Analysis of Financial Condition and Results of Operations..... 27
Business..... 33
Management..... 51
Certain Transactions..... 62
Principal Stockholders..... 66

Description of Capital Stock..... 69
Shares Eligible For Future Sale..... 72
Underwriting..... 74
Validity of Common Stock..... 76
Experts..... 76
Where You May Find Additional Information..... 76
Index To Consolidated Financial Statements..... F-1

Through and including , 2000 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Shares COSINE COMMUNICATIONS, INC. Common Stock COSINE LOGO GOLDMAN, SACHS & CO. CHASE H&Q ROBERTSON STEPHENS J.P. MORGAN & CO. Representatives of the Underwriters

Part Ii

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable by us in connection with the sale of Common Stock being registered. All amounts are estimates except the SEC registration fee and the NASD filing fee.

SEC registration fee..... $31,680 NASD filing fee..... 12,500 Nasdaq National Market listing fee..... 95,000 Printing and engraving costs..... Legal fees and expenses..... Accounting fees and expenses..... Blue Sky fees and expenses..... $15,000 Transfer Agent and Registrar fees..... Miscellaneous expenses..... Total.....

Item 14. Indemnification of Directors and Officers

Sections 145(a) and (b) of the Delaware General Corporation Law permit us to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative by reason of the fact that such person is or was one of our directors, officers, employees or agents, or is or was serving at our request as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by

the person if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to our best interests, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful; provided, that with respect to actions or suits brought on our behalf, such person may only be indemnified with respect to expenses (including attorneys' fees) and may not be indemnified with respect to any claim, issue or matter as to which the person is adjudged to be liable unless a court determines otherwise. Moreover, under Section 145(c), to the extent that one of our present or former directors or officers is successful on the merits or otherwise in defense of any such action, suit or proceeding, or in defense of any claim, issue or matter therein, such director or officer shall be indemnified against expenses (including attorneys' fees) that such director or officer actually and reasonably incurs in connection therewith. Section 145 of the Delaware General Corporation Law permits a corporation to include in its charter documents, and in agreements between the corporation and its directors and officers, provisions expanding the scope of indemnification beyond that specifically provided by the current law.

Article XI of our restated Certificate of incorporation requires us to indemnify our directors, officers, employees and agents to the fullest extent permitted by law. Article XI also requires us or our stockholders, to the fullest extent permitted by Delaware law, to indemnify our directors for monetary damages for breach of fiduciary duty as a director.

Article VI of our bylaws requires us to indemnify our directors, officers, employees, and agents to the extent permitted by Sections 145(a) and (b) of the Delaware General Corporation Law. Article VI also provides that, to the extent that a director, officer, employee or agent has been successful on the merits or otherwise in defense of any such action, suit or proceeding, or in defense of any claim, issue or matter therein, we shall indemnify such person for his reasonable expenses incurred in connection with such defense.

In addition to the indemnification provided for in our restated certificate of incorporation and bylaws, we intend to enter into indemnification agreements with our existing and future directors and officers. We also intend to obtain, as permitted by Article VI of our bylaws, liability insurance for the benefit of our directors and officers.

Item 15. Recent Sales of Unregistered Securities

Since inception, we have issued unregistered securities to a limited number of persons as described below:

1. On September 1, 1997, we sold 4,000,000 shares of our common stock to Dean E.G. Hamilton for an aggregate purchase price of $1,000.00.

2. On January 15, 1998, we sold 1,833,332 shares of our common stock to Lianghwa Jou for an aggregate purchase price of $68,749.95 of which approximately $20,625 was paid in cash and approximately $48,125 was paid by issuance of a promissory note payable to us.

3. On February 19, 1998 we sold 833,332 shares of our common stock to a former member of our board of directors for an aggregate purchase price of approximately $31,250, which consideration was paid for by issuance of a promissory note payable to us.

4. On November 7, 1997 and April 2, 1998, we sold 1,562,500 shares and 312,500 shares, respectively, of our Series A preferred stock for $1.60 per share to a group of private investors for an aggregate purchase price of $3,000,000.

5. On May 29, 1998 and June 22, 1998, in connection with an equipment lease and loan facility, we issued to the equipment financier a warrant to purchase an aggregate of 84,688 shares of our Series B preferred stock at an exercise price of $0.738 per share.

6. On August 26, 1998, in connection with the lease of office space in Redwood City, California, we issued to the lessor a warrant to purchase an aggregate of 157,915 shares of our Series A preferred stock at no cost to the grantee.

7. On October 21, 1998 and January 20, 1999, in connection with an equipment lease and loan facility, we issued to the equipment financier warrants to purchase an aggregate of 304,878 shares of our Series B preferred stock at an exercise price of $0.738 per share.

8. On November 2 and November 9, 1998, in connection with a bridge loan financing, we issued to a group of private investors warrants to purchase an aggregate of 304,878 shares of our Series B preferred stock at an exercise price of $0.738 per share.

9. On November 17, 1998, we issued a warrant to purchase 43,067 shares of our common stock to a public relations firm at an exercise price of $0.15 per share.

10. On November 17, 1998, in connection with the lease of office space in Redwood City, California, we issued to an affiliate of the lessor a warrant to purchase an aggregate of 1,190 shares of our Series A preferred stock at an exercise price of $8.41 per share.

11. On December 4, 1998, we sold 12,884,205 shares of our Series B preferred stock for $0.738 per share to a group of private investors for an aggregate purchase price of approximately $8,000,000. Each share of our Series B preferred stock is convertible into one share of our common stock.

12. On March 2 and 8, 1999, we sold an aggregate of 24,503,677 shares of our Series C preferred stock for $0.897 per share to a group of private investors for an aggregate purchase price of approximately $21,979,799. Each share of our Series C preferred stock is convertible into one share of our common stock.

13. On May 28, 1999, in connection with technical and marketing services, we issued a warrant to purchase an aggregate of 641,904 shares of our Series C preferred stock at an exercise price of $1.0905 per share.

14. On June 28, 1999, in connection with the provision of recruitment services to us, we sold 7,374 shares of our common stock to a recruiting services firm in exchange for services rendered which were valued at approximately $8,111.

15. On June 28, 1999, we issued 5,000 shares of our common stock in settlement of a dispute to the complaining party.

16. On July 27, 1999, in connection with the provision of immigration recruitment services to us, we sold 16,514 shares of our common stock to a recruiting services firm in exchange for services rendered which were valued at $9,000.

17. On September 13, 1999, we issued 15,000 shares of our common stock in settlement of a dispute to the complaining party.

18. On September 1, 1999, in connection with the provision of immigration recruitment services to us, we sold 2,000 shares of our common stock to a recruiting services firm in exchange for services valued at $2,000.

19. On September 17 and October 14, 1999, we sold 17,118,253 shares of our Series D preferred stock at $3.505 per share to a group of private investors for an aggregate purchase price of approximately $59,999,477. Each share of our Series D preferred stock is convertible into one share of our common stock.

20. On September 17 and October 14, 1999, in connection with the private placement of our Series D preferred stock, we issued to the private placement agent warrants to purchase an aggregate of 154,064 shares of our Series D preferred stock at an exercise price of $3.505 per share 21. On September 1, 1999, in connection with the provision of recruitment services to us, we sold 22,297 shares of our common stock to a recruiting services firm in exchange for services rendered which were valued at $22,297.

22. On December 8, 1999, in connection with the provision of recruitment services to us, we sold 5,482 shares of our common stock to two recruiting services firms in exchange for services rendered which were valued at $41,115.

23. On January 26, 2000, in connection with technical and marketing services related to our products, we issued a warrant to purchase an aggregate of 1,233,499 shares of our Series C preferred stock at an exercise price of $0.8107 per share.

24. On February 3, 2000, in connection with the provision of recruitment services to us, we sold 9,101 shares of our common stock at a price of $4.00 per share for an aggregate purchase price of $36,404.

25. On March 9, 2000, in connection with the provision of recruitment services for us, we sold 6,325 shares of our common stock at a price of $4.00 per share for an aggregate purchase price of $25,300.

26. On February 11, 2000, in connection with technical and marketing services related to our products, we issued a warrant to purchase an aggregate of 200,000 shares of our common stock at an exercise price of $4.00 per share.

27. On March 27, 2000, we sold an aggregate of 625,000 shares of our Series D preferred stock at $8.00 per share to a group of private investors for an aggregate purchase price of $5,000,000.

28. On March 31, 2000, in connection with an equipment lease and loan facility, we issued to the equipment financier and an entity affiliated with the equipment financier warrants to purchase an aggregate of 37,500 shares of our common stock at an exercise price of $8.00 per share.

29. On March 29, 2000, in connection with technical and marketing services related to our products, we agreed to issue a warrant to purchase an aggregate of 468,849 shares of our common stock at an exercise price of $3.7325 per share.

30. On April 26, 2000, we entered into an agreement to sell 4,666,668 shares of our Series E preferred stock, upon satisfaction of customary closing conditions, to a group of private investors for an aggregate purchase price of $70,000,020.

31. From inception through April 28, 2000 (the most recent practicable date), we granted stock options to purchase an aggregate of 21,192,135 shares of our common stock at prices ranging from $0.15 to $9.50 per share to employees, consultants and directors pursuant to our 1997 Stock Plan.

32. From inception through April 28, 2000 (the most recent practicable date), we issued and sold an aggregate of 12,205,499 shares of our common stock to employees, consultants and directors for aggregate consideration of approximately $15,484,742, consisting of a mix of cash and promissory notes, pursuant to the exercise of options granted under our 1997 Stock Plan.

For additional information concerning these equity investment transactions, reference is made to the information contained under the caption "Certain Transactions" in the form of prospectus included herein.

None of the foregoing transactions involved a public offering, and we believe that each transaction was exempt from the registration requirements of the Securities Act by virtue of Section 4(2) thereof, Regulation D promulgated thereunder or Rule 701 pursuant to compensatory benefit plans and contracts relating to compensation as provided under such Rule 701. Except as indicated above, none of the foregoing transactions involved any underwriters, underwriting discounts or commissions. The recipients in such transactions represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the share certificates and instruments issued in such transactions. All recipients had adequate access, through their relationships with us, to information about us. All share amounts indicated above reflect a 4-for-1 stock split of our common stock that was effected as a stock dividend in May 1998. Each share of our Series A preferred stock is convertible into four shares of our common stock pursuant to a conversion price adjustment resulting from the May 1998 stock dividend and the Series A share amounts above reflect the conversion price adjustment.

Item 16. Exhibits and Consolidated Financial Statement Schedules

(a) INDEX TO EXHIBITS

Exhibit Number Description of Document

1.1*	Form of Underwriting Agreement.
3.1	Fifth Amended and Restated Articles of Incorporation of the Registrant.
3.2*	Form of Restated Certificate of Incorporation to be filed upon the closing of the offering made pursuant to this Registration Statement.
3.3	Bylaws of the Registrant.
3.4	Certificate of Amendment of the Bylaws of the Registrant.

Exhibit Number Description of Document

3.5*	Amended and Restated Bylaws of the Registrant to be effective upon the closing of the offering made pursuant to this Registration Statement.
4.1*	Form of Registrant's Common Stock certificate.
5.1*	Opinion of Wilson Sonsini Goodrich & Rosati Professional Corporation.
10.1*	Form of Indemnification Agreement entered into by the Registrant with each of its directors and officers.
10.2*	2000 Stock Plan and forms of agreements thereunder.
10.3*	2000 Employee Stock Purchase Plan and forms of agreements thereunder.
10.4*	2000 Director Option Plan and forms of agreements thereunder.
10.5	1997 Stock Plan (as amended and restated) and forms of agreements thereunder.
10.6	Third Amended and Restated Investors' Rights Agreement.
10.7	Master Equipment Lease Agreement between the Registrant and Relational Funding Corporation dated as of February 1, 2000.
10.8	Loan and Security Agreement between Registrant and Venture Lending and Leasing II, Inc. dated as of September 21, 1998.
10.9	Amended and Restated Supplement between Registrant and Venture Lending and Leasing II, Inc. dated as of October 21, 1998.
10.10	Master Loan and Security Agreement between Registrant and Finova Capital Corporation dated as of May 19, 1999.
10.11	Loan and Security Agreement between Registrant and Silicon Valley Bank dated as of May 29, 1998.
10.12	Loan Modification Agreement between Registrant and Silicon Valley Bank dated as of June 22, 1998
10.13	Loan and Security Agreement between Registrant and Silicon Valley Bank dated as of September 30, 1999.
10.14	Building Lease Agreement between Registrant and Westport Joint Venture dated as of May 26, 1998.
10.15	Amendment No. 1 to Lease between Registrant and Westport Joint Venture dated as of September 9, 1999.
10.16	Building Lease Agreement between Registrant and Westport Joint Venture dated as of September 20, 1999.
22.1	Subsidiaries of Registrant
23.1	Consent of Ernst & Young LLP, independent auditors.
23.2*	Consent of Counsel. Reference is made to Exhibit 5.1.
24.1	Power of Attorney see page II-7.
27.1*	Financial Data Schedule.

* To be filed by amendment.

(b) CONSOLIDATED FINANCIAL STATEMENT SCHEDULES Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or notes thereto.

Item 17. Undertakings

We hereby undertake to provide to the Underwriters at the closing specified in the Underwriting Agreement certificates in such denominations and registered in such names as required by the Underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification by Registrant for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of Registrant pursuant to the provisions referenced in Item 14 of this Registration Statement or otherwise, Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities other than the payment by Registrant of expenses incurred or paid by a director, officer, or controlling person of Registrant in the successful defense of any action, suit or proceeding is asserted by a director, officer or controlling person in connection with the securities being registered hereunder, Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of Prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of Prospectus filed by Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of Prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Signatures

Pursuant to the requirements of the Securities Act of 1993, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Redwood City, State of California, on April 28, 2000.

Cosine Communications, Inc.

By: /s/ DEAN E.G. HAMILTON Dean E.G. Hamilton President and Chief Executive Officer

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Dean E.G. Hamilton and Craig B. Collins, and each of them acting individually, as his true and lawful attorneys-in-fact and agents, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Registration Statement including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought, and to file the same, with all exhibits thereto and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, with full power of each to act alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that such attorneys-in-fact and agents or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature Title Date

/s/ DEAN E.G. HAMILTON President, Chief Executive Officer and April 28, 2000 - ---------- ---------- Director (Principal Executive Officer) Dean E.G. Hamilton

/s/ CURTIS S. DUDNICK - ---------- Curtis S. Dudnick	Chief Financial Officer, Vice President of Finance and Secretary (Principal Financial and Accounting Officer)	April 28, 2000

/s/ GLENN HARTMAN Director April 28, 2000 Glenn Hartman /s/ DONALD GREEN Director April 24, 2000 Donald Green /s/ R. DAVID SPRENG Director April 25, 2000 R. David Spreng /s/ VINTON CERF Director April 28, 2000 Vinton Cerf

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