

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D)
OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE YEAR ENDED DECEMBER 31, 2001

COMMISSION FILE NUMBER 000-30229

SONUS NETWORKS, INC.

(Exact name of Registrant as specified in its charter)

DELAWARE

(State or other jurisdiction of incorporation
or organization)

04-3387074

(I.R.S. employer identification no.)

5 CARLISLE ROAD, WESTFORD, MASSACHUSETTS 01886
(Address of principal executive offices, including zip code)

(978) 692-8999
(Registrant's telephone number, including area code)

SECURITIES REGISTERED PURSUANT TO SECTION 12(B) OF THE ACT:
None

SECURITIES REGISTERED PURSUANT TO SECTION 12(G) OF THE ACT:
Common stock, \$0.001 par value

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [x] No []

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the Registrant's knowledge, in definitive proxy statement or information proxy statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. []

As of January 31, 2002, there were 204,220,958 shares of \$0.001 par value per share, common stock, outstanding. As of that date, the aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately \$740,000,000.

DOCUMENTS INCORPORATED BY REFERENCE

The information required in Items 10-13 are incorporated by reference to specified portions of the Registrant's definitive Proxy Statement to be issued in conjunction with the Registrant's 2002 Annual Meeting of Shareholders, which is expected to be filed not later than 120 days after the Registrant's fiscal year ended December 31, 2001.

ITEM 1. BUSINESS.

OVERVIEW

We are a leading provider of voice infrastructure products for the new public network. Our products are a new generation of carrier-class switching equipment and software that enable voice services to be delivered over packet-based networks. Our target customers include new and established communications service providers, including long distance carriers, local exchange carriers, Internet service providers, cable operators, international telephone companies and carriers that provide services to other carriers. Many of these carriers have been building packet-based networks to support the dramatic growth in data traffic resulting from Internet use. Packet-based networks, which transport traffic in small bundles, or "packets," offer a significantly more flexible, cost-effective and efficient means for providing communications services than existing circuit-based networks, designed years ago for telephone calls. By enabling voice traffic to be carried over these packet-based networks, our products will accelerate the convergence of voice and data into the new public network.

Our suite of voice infrastructure products includes the GSX9000-TM- Open Services Switch, the Insignus-TM- Softswitch and the Sonus Insight-TM- Management System. Our products, designed for deployment at the core of a service provider's network, significantly reduce the cost to build and operate voice services compared to traditional alternatives. Moreover, our products

offer a powerful and open platform for service providers to increase their revenues through the creation and delivery of new and innovative voice and data services. Our switching equipment and software can be rapidly and easily deployed, and readily expanded to accommodate growth in traffic volumes. Our products also interoperate with service providers' existing telephone infrastructure, allowing them to preserve the investment in their current networks. Designed for the largest telephone networks in the world, our products offer the reliability and voice quality that have been hallmarks of the public telephone network for decades.

We have been recognized as the 2001 worldwide market share leader for carrier-class packet voice infrastructure products by three market research firms. Our announced customers include many of the world's major service providers: Alestra (Mexico), BellSouth Corporation, China Netcom, Fusion Communications (Japan), Global Crossing, Level 3 Communications, Qwest Communications, Time Warner Telecom, Williams Communications and XO Communications. We sell our products principally through a direct sales force and, in some markets, through distributors and resellers. We also collaborate with our customers to identify and develop new advanced services and applications that they can offer to their customers.

As a result of the current challenging business environment in the telecommunications industry, many service providers, including some of Sonus' customers, are experiencing financial difficulties, and some are in the process of restructuring their businesses or have filed for bankruptcy. While this has resulted in recent reductions in spending by service providers for products such as those we offer, we believe that over time the market opportunity for packet voice solutions is one of the largest in networking and communications. Synergy Research Group projects that the market for service provider voice over Internet protocol equipment will grow dramatically to more than \$6 billion in 2006. Our objective is to capitalize on our early technology and market lead and build the premier franchise in voice infrastructure solutions for the new public network. The following are key elements of our strategy:

- leverage our technology leadership to achieve key service provider design wins;
- extend our technology platform from the core of the network to the access edge;
- expand and broaden our customer base by targeting specific market segments;
- expand our global sales, marketing, support and distribution capabilities;
- grow our base of software applications and development partners;
- actively contribute to the standards definition and adoption process; and
- pursue strategic acquisitions and alliances.

3

INDUSTRY BACKGROUND

The public telephone network is an integral part of our everyday lives. For most of its 100-year history, the telephone industry has been heavily regulated, which has slowed the evolution of its underlying circuit-switching technologies and limited innovation in service offerings and the pricing of telephone services. We expect two global forces--deregulation and the expansion of the Internet--to revolutionize the public telephone network worldwide.

Deregulation of the telephone industry accelerated with the passage of the Telecommunications Act of 1996. The barriers that once restricted service providers to a specific geography or service offering, such as local or long distance, are disappearing. The opportunity created by opening up the \$750 billion telephone services market has encouraged new participants to enter the market and incumbent service providers to expand into new markets, both domestically as well as internationally.

Competition between new players and incumbents is driving down service prices. With limited ability to reduce the cost structure of the public telephone network, profit margins for traditional telephone services are eroding. In response, service providers are seeking new, creative and differentiated service offerings as the means to introduce new revenue opportunities and to reduce costs.

Simultaneously, the rapid adoption of the Internet is driving dramatic growth of data traffic. Today, a significant portion of this data traffic is carried over the traditional circuit-switched telephone network. However, the circuit-switched network, designed for voice traffic and built long before the advent of the Internet, is not suited to efficiently transport data traffic. In a circuit-switched network, a dedicated path, or circuit, is established for each call, reserving a fixed amount of capacity or bandwidth in each direction. The dedicated circuit is maintained for the duration of the call across all of the circuit switches spanning the path from origination to the destination of the call, even when no traffic is being sent. As a result, a circuit-switched architecture is highly inefficient for Internet applications, which tend to create large bursts of data traffic followed by long periods of silence.

In contrast, a packet network divides traffic into distinct units called packets and routes each packet independently. By combining traffic from users with differing capacity demands at different times, packet networks more efficiently fill available network bandwidth with packets of data from many

users, thereby reducing the bandwidth wasted due to silence from any single user. The volume of data traffic continues to increase as use of the Internet and the number of connected users grow, driving service providers to build large-scale, more efficient packet networks.

With voice traffic carried over the vast installed base of traditional circuit-switched networks and data traffic carried over rapidly expanding packet networks, service providers are faced with the expense and complexity of building and maintaining parallel networks.

The following diagrams depict these parallel voice and data networks.

[Two diagrams appear: the first diagram is symmetric and depicts a circuit-switched network. A large, rectangular box labeled "Circuit Switched Network" is in the center. The box contains a series of small shapes aligned linearly and connected by a straight bold line. From left to right, the shapes are a small circle labeled "End Office," two small hexagons labeled "Tandem" and a small circle labeled "End Office." Outside of the rectangular box on each side is an icon representing a telephone connected to the outer circle labeled "End Office" by a bold line. Also on each side and connected to the outer "End Office" circle by dotted lines are icons representing a fax machine and second telephone. Above the rectangular box and connected by dotted lines to each of the small shapes inside of the large rectangle is a shaded oval labeled "SS7." Lower diagram is symmetric and depicts a generic packet-switched network. Shaded cloud labeled "Packet Network" is aligned directly below the rectangular box of the upper diagram. On the left and right side of the cloud, aligned linearly, are icons representing a computer, connected to the cloud by dotted lines. Connected to the bottom of the cloud by dotted lines are three additional computers.]

4

THE NEED FOR, AND BENEFITS OF, COMBINING VOICE AND DATA NETWORKS

We believe significant opportunities exist in uniting these separate, parallel networks into a new integrated public network capable of transporting both voice and data traffic. Enormous potential savings can be realized by eliminating redundant or overlapping equipment purchases and reducing network operating costs. Also, combining traditional voice services with Internet or Web-based services in a single network is expected to enable new and powerful high-margin, revenue-generating service offerings such as one-number/follow-me services, unified messaging, Internet click-to-talk, sophisticated call centers and other services.

The packet network is the platform for the new public network. The volume of data traffic has already eclipsed voice traffic and is growing much faster than voice. Packet architectures are more efficient at moving data, more flexible and reduce equipment and operating costs. The key to realizing the full potential of a converged, packet-based network is to enable the world's voice traffic to run over those networks.

Early attempts to develop new technologies to carry voice traffic over packet networks have included voice over Internet protocol, or VoIP, systems using a personal computer platform and devices that added VoIP capability to existing data devices such as remote access servers. While demonstrating the viability of transmitting voice over packet technology, these approaches have fallen far short of the quality, reliability and scalability required by the public telephone network.

The early VoIP systems also lack the ability to interoperate with the signaling infrastructure of the circuit-switched network. Without this signaling capability, VoIP applications cannot provide the consistent "look, sound and feel" of traditional telephone calls and are not well-suited to more complex applications such as voicemail, unified messaging and other value-added services.

The public telephone network is large, highly complex and generates significant revenues, a substantial majority of which are derived from voice services. Given service providers' substantial investment in, and dependence upon, traditional circuit-switched technology, their transition to the new public network will be gradual. During this transition, immediate opportunities exist to reduce the burden on overloaded and expensive circuit-switched resources, such as Internet call diversion. Internet call diversion allows modem-connected Internet calls to be identified and diverted from the circuit-switched network to the packet network, thus optimizing use of valuable network bandwidth.

REQUIREMENTS FOR VOICE INFRASTRUCTURE PRODUCTS FOR THE NEW PUBLIC NETWORK

Users demand high levels of quality and reliability from the public telephone network and service providers require a cost-efficient network that enables new revenue-generating services. As a result, voice infrastructure products for the new public network must satisfy the following requirements:

CARRIER-CLASS PERFORMANCE. Because they operate complex, mission-critical networks, service providers have clear infrastructure requirements. These include extremely high reliability, quality and interoperability. For example, service providers typically require equipment that complies with their 99.999% availability standard.

COMPATIBILITY WITH STANDARDS AND EXISTING INFRASTRUCTURE. New infrastructure equipment and software must support the full range of telephone network standards, including signaling protocols such as SS7 or ISDN and various physical interfaces such as T1 and E1. It must also support data networking

protocols such as Internet protocol, or IP, and asynchronous transfer mode, or ATM, as well as newer protocols such as SIP, MGCP, Megaco (H.248) and H.323. Infrastructure solutions must also seamlessly integrate with service providers' existing operations support systems.

SCALABILITY AND DENSITY. Infrastructure solutions for the new public network face challenging scalability requirements. Service providers' central offices typically support tens or even hundreds of thousands of simultaneous calls. In order to be economically attractive, the new infrastructure must

5

compare favorably with existing networks in terms of cost per port, space occupied, power consumption and cooling requirements.

INTELLIGENT SOFTWARE IN AN OPEN AND FLEXIBLE PLATFORM. The architecture for the new public network decouples the capabilities of traditional circuit-switching equipment into robust hardware elements and highly intelligent software platforms that provide control, signaling and service creation capabilities. This approach will transform the closed, proprietary circuit-switched public telephone network into a flexible, open environment accessible to a wide range of software developers. Service providers and third-party vendors will be able to develop and implement new applications independent of switch vendors. Moreover, the proliferation of independent software providers promises to drive the creation of innovative voice and data services that could expand service provider revenues.

SIMPLE AND RAPID INSTALLATION, DEPLOYMENT AND SUPPORT. Infrastructure solutions must be easy to install, deploy, configure and manage. These attributes will enable rapid growth and effective management of dynamic and complex service provider networks.

THE SONUS SOLUTION

We develop, market and sell what we believe to be the first comprehensive suite of voice infrastructure products purpose-built for the deployment and management of voice and data services over the new public network. The Sonus solution consists of the following carrier-class products:

- GSX9000-TM- Open Services Switch;
- Insignus-TM- Softswitch; and
- Sonus Insight-TM- Management System.

These products are designed to offer high reliability, toll-quality voice, improved economics, interoperability, rapid deployment and an open architecture enabling the design and implementation of new services and applications. Our solution has been specifically designed to meet the requirements of the new public network. As shown in the following diagram, our products unite the voice and data networks, unleashing the potential of the new public network.

[Symmetric diagram with shaded cloud labeled "Packet Network" at the center. Extending from left side of the "Packet Network" cloud is a box with caption reading "Sonus GSX9000(TM) Open Services Switch" and extending from that, connected by a bold line, a small cloud labeled "PSTN", or Public Switched Telephone Network. Extending from right side of the "Packet Network" cloud is a box with caption reading "3rd Party Media Gateways" and extending from that, connected by a bold line, a small cloud labeled "PSTN", or Public Switched Telephone Network. Below the "Packet Network" cloud is a box labeled "IADs" and connected by bold lines are three icons representing telephones. Above the "Packet Network" cloud on the left side are three small boxes labeled "OSPA Enhanced Services." Directly above the "Packet Network" cloud are three icons representing servers labeled "Sonus Insignus(TM) Softswitch." Above the "Packet Network" cloud on the right side is a small icon representing a computer terminal labeled "Sonus Insight(TM) Management."]

6

CARRIER-CLASS PERFORMANCE. Our products are designed to offer the highest levels of quality, reliability and interoperability, including:

- full redundancy, enabling 99.999% availability;
- voice quality equal or superior to today's circuit-switched network;
- system hardware designed for Network Equipment Building Standards, or NEBS Level 3, compliance;
- network monitoring and provisioning designed for Operations System Modifications for the Integration of Network Elements, or OSMINE, compliance;
- a complete set of service features, addressing those found in the existing voice network and extending them to offer greater flexibility; and
- sophisticated network management and configuration capabilities.

COMPATIBILITY WITH INDUSTRY STANDARDS AND EXISTING INFRASTRUCTURE. Our products are designed to be compatible with all applicable voice and data networking standards and interfaces, including:

- SS7 and other telephone network signaling protocols, including advanced services as well as simple call management and routing;

- IP, ATM, Ethernet and optical data networking standards;
- call management standards including SIP, MGCP, H.323 and others;
- voice coding standards such as G.711 and echo cancellation standard G.168; and
- all common interfaces, including T1, T3, E1 and optical interfaces.

The Sonus solution is designed to interface with legacy circuit-switching equipment, supporting the transparent flow of calls and other information between the circuit and packet networks. As a result, our products allow service providers to migrate to the new public network, while preserving their significant legacy infrastructure investments.

COST EFFECTIVENESS AND HIGH SCALABILITY. The Sonus solution can be used to cost-effectively build packet-based switch configurations supporting a range from a few hundred calls to hundreds of thousands of simultaneous calls. In addition, the capital cost of our equipment is typically half that of traditional circuit-switched equipment. At the same time, our GSX9000-TM- Open Services Switch offers unparalleled density, requires less than one-tenth of the space needed by circuit-switching implementations and requires significantly less power and cooling. This enables a significant reduction in expensive central office facilities cost and allows service providers to deploy our equipment in locations where traditional circuit switches are not even an option given the limited space and environmental services.

The GSX9000-TM- Open Services Switch can create central office space savings as shown below.

[Three dimensional diagram with a set of four rectangular bars parallel to one another and lined up evenly with caption reading "Traditional Circuit Switch (50,000 calls)." Depicted in front of the rectangular bars is a single, small, upright rectangular box labeled "Sonus GSX9000(TM) Open Services Switch (50,000 calls)." Extending from each of the left and right sides of the small rectangular box back to the sides of the first of the four larger bars is a thin line.]

OPEN SOFTWARE ARCHITECTURE AND FLEXIBLE PLATFORM. Our Open Services Architecture, or OSA, is based on a software-centric design and a flexible platform, allowing rapid development of new products and services. New services may be developed by us, by service providers or by any number of third parties including software developers and systems integrators. The OSA also facilitates the creation of services that were previously not possible on the circuit-switched network. In addition, we have partnered with a

7

number of third-party application software developers in our Open Services Partner Alliance, or OSPA, to stimulate the growth of new applications available for our platform.

EASE OF INSTALLATION AND DEPLOYMENT. Our equipment and software can be installed and placed in service by our customers much more quickly than circuit-switching equipment. By offering comprehensive testing, configuration and management software, we expedite the deployment process as well as the ongoing management and operation of our products. We believe that typical installations of our solution require just weeks of time from product arrival to final testing, thereby reducing the cost of deployment and speeding the time to market for new services.

THE SONUS STRATEGY

Our objective is to capitalize on our early technology and market lead and build the premier franchise in voice infrastructure solutions for the new public network. The following are key elements of our strategy:

LEVERAGE OUR TECHNOLOGY LEADERSHIP TO ACHIEVE KEY SERVICE PROVIDER DESIGN WINS. As the first company to provide voice infrastructure products for the new public network, we have achieved key design wins with market-leading service providers as they develop the architecture for their new voice networks. We expect service providers to select vendors that provide leading technology and the ability to maintain that technology leadership. Our equipment is an integral part of the network architecture and achieving design wins will enable us to expand our business as these networks are deployed. We have been awarded contracts by major service providers including Alestra, BellSouth Corporation, China Netcom, Fusion Communications, Global Crossing, Level 3 Communications, Qwest Communications, Time Warner Telecom, Williams Communications and XO Communications. Furthermore, by working closely with our customers as they deploy these networks, we gain valuable knowledge regarding their requirements, positioning us to develop product enhancements and extensions that address evolving service provider needs.

EXTEND OUR TECHNOLOGY PLATFORM FROM THE CORE OF THE NETWORK TO THE ACCESS EDGE. Our robust and sophisticated technology platform has been designed to operate at the heart of the largest networks in the world. From this fundamental position in the trunking infrastructure, we are extending our reach by moving outward to the access segments of the network. Sonus supports multiple carrier applications in a single platform. These applications include long distance/international calling, tandem switching, Internet call diversion, business PBX access, residential access/Centrex, H.323 termination, direct voice over broadband and enhanced services. This approach will allow our customers to design and execute a co-ordinated migration and expansion strategy as they build

entirely new networks or transition from their legacy circuit-switched infrastructure.

EXPAND AND BROADEN OUR CUSTOMER BASE BY TARGETING SPECIFIC MARKET SEGMENTS. We plan to leverage our early success to penetrate new customer segments. We believe new and incumbent service providers will build the new public network at different rates. The next-generation service providers, who are relatively unencumbered by legacy equipment, have been among the initial purchasers of our equipment and software. Other newer entrants, cable operators, and Internet service providers, or ISPs, are also likely to be early adopters of our products. Incumbents, including interexchange service providers, or IXCs, Regional Bell Operating Companies, or RBOCs, and international PTTs are also expected to adopt packet voice technologies over time.

8

EXPAND OUR GLOBAL SALES, MARKETING, SUPPORT AND DISTRIBUTION CAPABILITIES. Becoming the primary supplier of voice infrastructure for the new public network will require a strong worldwide presence. We are broadening our sales, marketing, support and distribution capabilities to address this need. We have established offices throughout the United States, in China, Japan, Singapore, Germany and France, and in the United Kingdom. In addition, we plan to augment our global direct sales effort with international distribution partners. As a carrier-class solution provider, we are making a significant investment in professional services and customer support.

GROW OUR BASE OF SOFTWARE APPLICATIONS AND DEVELOPMENT PARTNERS. We have established and promote a partner program, the OSPA, that brings together a broad range of development partners to provide our customers with a variety of advanced services, application options and interoperability testing. Our OSPA partners include companies such as Agilent Technologies, Ericsson, Juniper Networks, Priority Call Management, Redback Networks, Riverstone Networks and Uticom.

ACTIVELY CONTRIBUTE TO THE STANDARDS DEFINITION AND ADOPTION PROCESS. To advance our technology and market leadership, we will continue to actively lead and contribute to standards bodies such as the International Softswitch Consortium, the Internet Engineering Task Force and the International Telecommunications Union. The definition of standards for the new public network is in an early stage and we intend to drive these standards to meet the requirements for an open, accessible, scalable and powerful new public network infrastructure.

PURSUE STRATEGIC ACQUISITIONS AND ALLIANCES. We intend to expand our products and services through selected acquisitions and alliances. These may include acquisitions of complementary products, technologies and businesses that further enhance our technology leadership or product breadth. We also believe that teaming with companies providing complementary products or services for the new public network will enable us to bring greater value to our customers and extend our lead over potential competitors.

SONUS PRODUCTS

GSX9000-TM- OPEN SERVICES SWITCH

The Sonus GSX9000-TM- Open Services Switch enables voice traffic to be transported over packet networks. Its carrier-class hardware, which is NEBS Level 3 compliant and designed to provide 99.999% availability with no single point of failure, offers optional full redundancy and full hot-swap capability. It is powered from -48VDC sources standard in central offices and attaches to the central office timing network. The basic building block of a GSX9000-TM- is a shelf. Each shelf is 28" high, mounts in a standard 19" or 23" rack and provides 16 slots for server and adapter modules. The first 2 slots are reserved for management modules, while the other 14 slots may be used for any mix of other module types. It supports the following interfaces:

- - T1;
 - - T3;
 - - E1;
 - - OC3;
 - - 100BaseT;
 - - 1000BaseT; and
 - - OC12c/STM-4.
- [Diagram depicting a large box. Detail on the face includes the Sonus logo in the upper left corner and a set of vertical slots.]

9

The GSX9000-TM- is designed to deliver voice quality equal, or superior, to that of the legacy circuit-switched public network. It is designed to support the multiple encoding schemes used in circuit switches such as G.711 and delivers a number of other voice compression algorithms. It also is designed to provide world-class echo cancellation, conforming to the latest G.168 standard, on every circuit port. It automatically disables echo cancellation when it detects a modem signal. The GSX9000-TM- is also designed to minimize delay, further enhancing perceived voice quality. The GSX9000-TM- scales to the very large configurations required by major service providers. With density improvements introduced in March 2002, a single GSX9000-TM- shelf will be able to support up to 22,176 simultaneous calls. A single GSX9000-TM-, consisting of multiple shelves, can support 100,000 or more simultaneous calls. The GSX9000-TM- is designed to operate with our Insignus-TM- Softswitch and with softswitches and network products offered by other vendors.

INSIGNUS-TM- SOFTSWITCH

Softswitches provide the network intelligence in next-generation networks, including call control, signaling, core network routing and a management foundation. Our Insignus-TM- Softswitch is based on a modular architecture that is designed for high performance and scalability, as well as interoperability with third-party gateways, devices and services. The Insignus-TM- Softswitch includes the following functionality:

- call control and signaling;
- service selection and routing;
- line-side endpoint control and services for both residential and enterprise markets;
- local calling features and regulatory requirements such as emergency services routing; and
- a gateway between existing SS7/C7 signaling networks and the packet network.

The Insignus-TM- Softswitch functions can be deployed on the same or separate platforms, and can be configured in either a centralized or distributed manner, based on a service providers' network requirements. This high level of flexibility allows service providers to precisely allocate functionality and processing performance, avoiding the cost of unused resources. Service providers can also deploy additional Insignus-TM- modules as their requirements change. For instance, a service provider deploying the functions for a long distance application might require only service selection routing and SS7 connectivity. As the service provider moves into the local market, it can add line-side endpoint control to deliver access services on the same platform. The Insignus-TM- Softswitch can scale from the smallest single point of presence to the largest global networks.

The Insignus-TM- Softswitch supports industry-standard protocols such as SIP, H.323 and MGCP, using them for both interaction with third-party products and for communication among components of the Open Services Architecture. The Insignus-TM- Softswitch supports a large number of international SS7/C7 variants, for both call signaling and interaction with legacy intelligent network, or IN, and advanced intelligent network, or AIN, services.

The Insignus-TM- Softswitch is deployed on industry-standard, NEBS-compliant computing platforms. The Insignus-TM- Softswitch supports redundancy, providing carrier-class reliability. In fully redundant configurations, there is no loss of active calls during switchover for any hardware and software component.

We believe that in addition to traditional voice services, our Insignus-TM- Softswitch will enable service providers to offer differentiated, value-added features and services developed by us, by application software developers, system integrators or service providers themselves, including:

- one-number/follow-me services, which route a subscriber's email, phone and Web services to any location;

10

- unified messaging that integrates telephone services, email and Web applications, and allows subscribers to have a unified mailbox for email, voicemail and message filtering;
- conference calling across the Internet;
- multimedia conferencing;
- Internet-enabled call centers; and
- Internet content delivered with voice.

SONUS INSIGHT-TM- MANAGEMENT SYSTEM

Sonus Insight-TM- is a complete, web-based management system designed to simplify the operation of carrier-class packet voice networks. Sonus Insight-TM- includes the Element Management System, or EMS, and the DataStream Integrator, or DSI, that together provide comprehensive configuration, provisioning, security, alarm reporting, performance data and billing mediation capabilities. Sonus Insight-TM- seamlessly integrates with service providers' existing back-office systems, and offers many tools that enhance and consolidate key management functions, allowing service providers to streamline many of today's labor-intensive processes. Sonus Insight-TM- scales to support hundreds of switches and concurrent users, and is based on industry standards and protocols to facilitate management from any location worldwide.

CUSTOMER SUPPORT AND PROFESSIONAL SERVICES

We believe our comprehensive technical customer support and professional services capabilities are an important element of our solution for customers. These services cover the full network lifecycle: planning; design; installation; and operations. We help our customers create or revise their business plans and design their networks and also provide the following:

- turnkey network installation services;
- system integration and testing;

- 24-hour technical support; and
- educational services to customer personnel on the installation, operation and maintenance of our equipment.

We have established technical assistance centers in Westford, Massachusetts, Richardson, Texas and in the United Kingdom. The technical assistance centers provide customers with around-the-clock technical support, as well as periodic updates to our software and product documentation. We offer our customers a variety of service plans.

A key differentiator of our support activities is our professional services group, many members of which hold advanced technical degrees in electrical engineering or related disciplines. We offer a broad range of professional services, including sophisticated network deployment, assistance with logistics and project management support. We also maintain a customer support laboratory in which customers can test the utility of our products for their specific applications and in which they can gain an understanding of the applications enabled by the converged network. Our approach to professional services is designed to ensure that our products are integrated into our customers' networks to meet their specific needs and that these customers realize the maximum value from their networking technology investments. As of December 31, 2001, our customer support and professional services organization consisted of 111 employees.

CUSTOMERS

Our target customer base includes long distance carriers, local exchange carriers, ISPs, cable operators, international telephone companies and carriers that provide services to other carriers. We

11

have shipped products to customers including: Alestra, BellSouth Corporation, China Netcom, Fusion Communications, Global Crossing, Level 3 Communications, Qwest Communications, Time Warner Telecom, Williams Communications and XO Communications. As a result of the current challenging business environment in the telecommunications industry, many service providers, including some of Sonus' customers, are experiencing financial difficulties, and some are in the process of restructuring their businesses or have filed for bankruptcy. For the year ended December 31, 2001, Fusion Communications, Global Crossing, Qwest Communications and XO Communications each contributed more than 10% of our revenues and collectively represented an aggregate of 67% of our total revenues. Currently, some of our customers have deployed our products in their commercial networks while others are using our products in laboratory testing and internal trials.

SALES AND MARKETING

We sell our products principally through a direct sales force and, in some markets, through distributors and resellers, including Nissho Electronics Corporation (Japan), Samsung Corporation (Korea) and Sumitomo Corporation (Japan). In addition, we intend to establish relationships with selected original equipment manufacturers and other marketing partners in order to serve particular markets or geographies and provide our customers with opportunities to purchase our products in combination with related services and products.

Through our Open Services Partner Alliance, or OSPA, vendors achieve interoperability with our products quickly and efficiently, allowing those vendors, as well as service providers, to reduce the time to deploy new services. This partner program also allows service providers to select from a list of vendors that are Sonus "Powered," which signifies proven interoperability with Sonus products. We believe that this flexibility offers those service providers a choice of solutions and value-added services, and enables them to achieve differentiation through an integrated suite of "best-of-breed" solutions.

As of December 31, 2001, our sales and marketing organization consisted of 101 employees, of which 20 were located in Westford, Massachusetts and 81 were located in sales and support offices in the United States and around the world.

RESEARCH AND DEVELOPMENT

We believe that strong product development capabilities are essential to our strategy of enhancing our core technology, developing additional applications, incorporating that technology into new products and maintaining comprehensive product and service offerings. Our research and development process is driven by the availability of new technology, market data and customer feedback. We have invested significant time and resources in creating a structured process for undertaking all product development projects.

We have assembled a team of highly skilled engineers with significant telecommunications and networking industry experience. Our engineers have experience in, and have been drawn from, leading computer data networking, telecommunications and multimedia companies. As of December 31, 2001, we had 306 employees responsible for research and development, of which 268 were software and quality assurance engineers and 38 were hardware engineers. Our engineering effort is focused on new applications and network access features, new network interfaces, improved scalability, interoperability, quality, reliability and next generation technologies. We currently maintain United States research and development offices in Massachusetts, New Jersey, Virginia and Texas and have an office in the United Kingdom. In addition, we have a joint development effort in Japan with Nissho Electronics Corp. and NTT Communicationware Corp., a wholly

owned subsidiary of NTT, the world's largest carrier.

We have made, and intend to continue to make, a substantial investment in research and development. Research and development expenses were \$65.0 million for the year ended December 31, 2001, \$26.4 million for the year ended December 31, 2000 and \$10.8 million for the year ended December 31, 1999.

12

COMPETITION

The market for voice infrastructure products for the new public network is intensely competitive, subject to rapid technological change and significantly affected by new product introductions and other market activities of industry participants. We expect competition to persist and intensify in the future. Our primary sources of competition include vendors of networking and telecommunications equipment, such as Cisco Systems, Lucent Technologies and Nortel Networks. Some of our competitors have significantly greater financial resources than we do and are able to devote greater resources to the development, promotion, sale and support of their products. In addition, these competitors have more extensive customer bases and broader customer relationships than we do, including relationships with our potential customers. Numerous smaller and mostly private companies are also focusing on similar market opportunities.

In order to compete effectively, we must deliver innovative products that:

- provide extremely high network reliability and voice quality;
- scale easily and efficiently;
- interoperate with existing network designs and other vendors' equipment;
- provide effective network management;
- are accompanied by comprehensive customer support and professional services; and
- provide a cost-effective and space-efficient solution for service providers.

In addition, we believe that the ability to provide vendor-sponsored financing, which some of our competitors currently offer, is an important competitive factor in our market.

INTELLECTUAL PROPERTY

Our success and ability to compete are dependent on our ability to develop and maintain our technology and operate without infringing on the proprietary rights of others. We rely on a combination of patent, trademark, trade secret and copyright law and contractual restrictions to protect the proprietary aspects of our technology. These legal protections afford only limited protection for our technology. We presently hold three patents, and have seven patent applications pending in the United States. In addition, we have fifteen patent applications pending abroad. We can't be certain that patents will be granted based on these pending applications. We seek to protect our intellectual property by:

- protecting our source code for our software, documentation and other written materials under trade secret and copyright laws;
- licensing our software pursuant to signed license agreements, which impose restrictions on others' ability to use our software; and
- seeking to limit disclosure of our intellectual property by requiring employees and consultants with access to our proprietary information to execute confidentiality agreements.

Due to rapid technological change, we believe that factors such as the technological and creative skills of our personnel, new product developments and enhancements to existing products are more important than the various legal protections of our technology to establishing and maintaining technology leadership.

13

We have incorporated third-party licensed technology into our current products. From time to time, we may be required to license additional technology from third parties to develop new products or product enhancements. Third-party licenses may not be available or continue to be available to us on commercially reasonable terms. The inability to maintain or re-license any third-party licenses required in our current products, or to obtain any new third-party licenses to develop new products and product enhancements, could require us to obtain substitute technology of lower quality or performance standards or at greater cost, and delay or prevent us from making these products or enhancements, any of which could seriously harm the competitiveness of our products.

MANUFACTURING

Currently, we outsource the manufacturing of our products. Our contract manufacturers provide comprehensive manufacturing services, including assembly of our products and procurement of materials on our behalf. We perform final test and assembly at our facility to ensure that we meet our internal and

external quality standards. We believe that outsourcing our manufacturing will enable us to conserve working capital, better adjust manufacturing volumes to meet changes in demand and more quickly deliver products. At present, we purchase products from our outside contract manufacturers on a purchase order basis. We may not be able to enter into long-term contracts with outside manufacturers on terms acceptable to us, if at all. As of December 31, 2001, we had 40 employees responsible for manufacturing, purchasing, final testing and assembly.

EMPLOYEES

As of December 31, 2001, we had a total of 593 employees, including 306 in research and development, 101 in sales and marketing, 111 in customer support and professional services, 40 in manufacturing and 35 in finance and administration. Our employees are not represented by any collective bargaining unit. We believe our relations with our employees are good.

ITEM 2. PROPERTIES.

Our headquarters are located in a leased facility in Westford, Massachusetts, consisting of 90,000 square feet under leases that expire in March 2004. We have additional facilities in Westford and Littleton, Massachusetts, consisting of an aggregate of 51,000 square feet under subleases that expire through December 2008, and in Richardson, Texas, consisting of 25,000 square feet under a lease expiring in April 2003. We also lease short-term office space in Colorado, Oklahoma, New Jersey, Virginia, China, Japan, Singapore and the United Kingdom. We believe our existing facilities are adequate for our current needs and that suitable additional space will be available as needed.

ITEM 3. LEGAL PROCEEDINGS.

On November 8, 2001, a purchaser of Sonus' common stock filed a complaint in the federal district court for the Southern District of New York against Sonus, two of its officers and the lead underwriters alleging violations of the federal securities laws in connection with our initial public offering (IPO) and seeking unspecified monetary damages. The purchaser seeks to represent a class of persons who purchased Sonus' common stock between the IPO on May 24, 2000 and December 6, 2000. The complaint alleges that Sonus' registration statement contained false or misleading information or omitted to state material facts concerning the alleged receipt of undisclosed compensation by the underwriters and the existence of undisclosed arrangements between underwriters and certain purchasers to make additional purchases in the after market. The claims against Sonus are asserted under Section 11 of the Securities Act of 1933 and against the individual defendants under Sections 11 and 15 of that Act. Sonus intends to vigorously defend this action.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

No matters were submitted to a vote of security holders during the fourth quarter of the fiscal year covered by this report.

ITEM 5. MARKET FOR REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS.

Our common stock has been quoted on the Nasdaq National Market under the symbol "SONS" since May 25, 2000. Prior to that time, there was no public market for the common stock.

On October 6, 2000, Sonus effected a three-for-one stock split in the form of a stock dividend to each stockholder of record. All stock information has been retroactively adjusted to reflect the stock split.

In May 2000, Sonus completed its IPO of 17,250,000 shares of common stock, which includes the exercise of the underwriters' over-allotment option of 2,250,000 shares, at \$7.67 per share. The IPO generated net proceeds of \$121,705,000, after deducting the underwriting discount and commissions and offering expenses of \$10,545,000.

The following table sets forth, for the time periods indicated, the high and low sales prices of the common stock as reported on the Nasdaq National Market.

HIGH	LOW	-----	-----	FISCAL 2001: First
quarter.....				
	\$46.50	\$16.25	Second	
quarter.....				
	33.80	12.00	Third	
quarter.....				
	25.00	2.26	Fourth	
quarter.....				
8.37	2.44	FISCAL 2000: Second	quarter (since May 25,	
quarter.....			2000).....	56.65 10.67 Third
	93.67	38.50	Fourth	
quarter.....				
	49.00	18.50		

We have never declared or paid cash dividends and have no present intention to pay cash dividends in the foreseeable future. Further, our bank agreement prohibits us from declaring any cash dividends. At January 9, 2002, there were approximately 960 holders of record of our common stock.

(1) Excludes non-cash, stock-based compensation expense as follows:

YEAR ENDED DECEMBER 31, -----	2001	2000	1999	1998	-----
----- 2001 2000 1999 1998 -----					
(IN THOUSANDS) Cost of					
revenues.....					
\$ 1,328 \$ 404 \$ 92 \$-- Research and					
development.....					
43,553 11,428 1,537 29 Sales and					
marketing.....					
18,300 12,051 2,104 12 General and					
administrative.....					
12,319 2,846 671 18 -----					
\$75,500 \$26,729 \$4,404 \$59 =====					
====					

(2) See Note 1 (o) to our consolidated financial statements for an explanation of the method of calculation. Pro forma per share calculation reflects the conversion of all outstanding shares of redeemable convertible preferred stock into shares of common stock which occurred upon the closing of our IPO in May 2000, as if the conversion occurred at the date of original issuance.

ITEM 7: MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

THE FOLLOWING DISCUSSION SHOULD BE READ IN CONJUNCTION WITH OUR CONSOLIDATED FINANCIAL STATEMENTS AND NOTES TO THOSE STATEMENTS AND OTHER FINANCIAL INFORMATION APPEARING ELSEWHERE IN THIS REPORT. THE FOLLOWING DISCUSSION CONTAINS FORWARD-LOOKING INFORMATION THAT INVOLVES RISKS AND UNCERTAINTIES. OUR ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE ANTICIPATED IN THE FORWARD-LOOKING STATEMENTS AS A RESULT OF A NUMBER OF FACTORS, INCLUDING THE RISKS DISCUSSED IN "RISK FACTORS" AND ELSEWHERE IN THIS REPORT.

OVERVIEW

Sonus is a leading provider of voice infrastructure products for the new public network. We offer a new generation of carrier-class switching equipment and software that enables voice services to be delivered over packet-based networks.

Since our inception, we have incurred significant losses and, as of December 31, 2001, had an accumulated deficit of \$729.4 million. We have not achieved profitability on a quarterly or an annual basis, and anticipate that we will continue to incur net losses. We have a lengthy sales cycle for our products and, accordingly, we expect to incur sales and other expenses before we realize the related revenues. We expect to continue to incur significant sales and marketing, research and development and general and administrative expenses and, as a result, we will need to generate significant revenues to achieve and maintain profitability.

We sell our products primarily through a direct sales force and, in some markets, through resellers and distributors. In the future, we anticipate expanding our sales efforts to include additional overseas distribution partners. Customers' decisions to purchase our products to deploy in commercial networks involve a significant commitment of resources and a lengthy evaluation, testing and product qualification process. We believe these long sales cycles, as well as our expectation that customers will tend to sporadically place large orders with short lead times, will cause our revenues and results of operations to vary significantly and unexpectedly from quarter to quarter. We expect to recognize revenues from a limited number of customers for the foreseeable future.

Sonus began shipping product to customers during the fourth quarter of fiscal 1999 and recorded its first revenues of \$51.8 million in fiscal 2000. For the year ended December 31, 2001, Sonus recognized \$173.2 million in revenue. For the six consecutive quarters ending June 30, 2001, our revenue increased each quarter sequentially compared to the previous quarter. However, our revenue declined sequentially in the third and fourth quarters of fiscal 2001 to \$40.3 million and \$38.9 million, due to unfavorable business conditions primarily caused by declines in capital spending by telecommunications service providers. As a result of the current challenging business environment in the telecommunications industry, many service providers, including some of Sonus' customers are experiencing financial difficulties, and some are in the process of restructuring their businesses or have filed for bankruptcy. Due to these factors, our revenues could be further reduced.

In response to these unfavorable economic conditions, in September 2001, Sonus announced a restructuring plan designed to reduce expenses and align its cost structure with its revised business outlook. Accordingly, Sonus recorded a restructuring charge in fiscal 2001 of \$25.8 million for a worldwide workforce reduction, consolidation of excess facilities and other charges, a non-cash impairment charge of \$374.7 million for the write-off of goodwill and certain purchased intangibles related to the acquisition of telecom technologies, inc. (TTI) and a \$25.4 million write-off of deferred compensation for shares and options held by terminated employees. See Note 2 to our consolidated financial statements.

CRITICAL ACCOUNTING POLICIES

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

18

accounting policies are impacted significantly by judgments, assumptions and estimates used in the preparation of our consolidated financial statements.

Our revenue recognition policy complies with SEC Staff Accounting Bulletin No. 101, REVENUE RECOGNITION IN FINANCIAL STATEMENTS. See Note 1(h) to our consolidated financial statements.

The allowance for doubtful accounts is based on our assessment of the collectibility of specific customer accounts. If there is a deterioration of a major customer's credit worthiness or actual defaults are higher than our historical experience, the actual results could differ from these estimates.

Inventory purchases and commitments are based upon estimated future demand for our products. If there is a sudden and significant decrease in demand for our products or there is a higher risk of inventory obsolescence because of rapidly changing technology and customer requirements, we may be required to increase our inventory allowances and our gross profit could be adversely affected.

We accrue for warranty costs based on the historical rate of claims and costs to provide warranty services. If we experience an increase in warranty claims which are higher than our historical experience or our costs to provide warranty services increase, our gross profit could be adversely affected.

We are subject to the possibility of various loss contingencies arising in the ordinary course of business. We consider the likelihood of the loss or impairment of an asset or the incurrence of a liability as well as our ability to reasonably estimate the amount of loss in determining loss contingencies. An estimated loss contingency is accrued when it is probable that a liability has been incurred or an asset has been impaired and the amount of loss can be reasonably estimated. We regularly evaluate current information available to us to determine whether such accruals should be adjusted.

ACQUISITION OF TELECOM TECHNOLOGIES, INC.

In January 2001, we acquired TTI. Upon the closing of this acquisition, we issued an aggregate of 10,800,000 shares of common stock in exchange for all outstanding capital stock of TTI. Of the 10,800,000 shares issued to the TTI shareholders, 1,200,000 shares were placed into escrow as security for indemnity obligations which were released to TTI shareholders on January 18, 2002. Also during 2001, TTI shareholders received an additional 4,200,000 shares of common stock upon the achievement of certain specified business expansion and product development milestones. In connection with our acquisition of TTI, we adopted our 2000 Retention Plan and issued 3,000,000 shares of common stock under this plan to certain employees of TTI who became employees of Sonus. These shares vest subject to continued employment and the attainment of the business expansion and product development milestones. Due to the termination of certain former TTI employees in connection with the restructuring plan in September 2001, restrictions associated with approximately 860,000 shares of common stock awarded under the 2000 Retention Plan have been removed.

We accounted for the acquisition as a purchase for financial reporting purposes. Accordingly, Sonus' financial statements for the year ended December 31, 2001 reflect the results of operations of TTI since the date of acquisition. The purchase price was allocated to TTI's assets and liabilities based on the fair value of the assets acquired and the liabilities assumed. The excess of the purchase price over the fair value of the net tangible assets and identifiable intangible assets acquired has been classified as goodwill. In addition, a portion of the purchase price was allocated to in-process research and development. Additionally, since the closing date, the purchase price has been increased as escrowed shares subject to milestone conditions were earned. Goodwill and other intangibles have been amortized by charges to operations over their estimated useful lives of three years and purchased in-process research and development was charged to operations at the time of closing. Sonus has recorded deferred stock-based compensation relating to the issuance of awards under our 2000 Retention Plan. For the year ended December 31, 2001, Sonus recorded a non-cash impairment charge of \$374.7 million for the write-off of goodwill and certain purchased intangibles related to the acquisition of TTI. See Notes 2 and 3 to our consolidated financial statements.

19

RESULTS OF OPERATIONS

REVENUES. Revenue is recognized from product sales to end users, resellers and distributors upon shipment, provided there are no uncertainties regarding acceptance, persuasive evidence of an arrangement exists, the sales price is fixed or determinable and collection of the related receivable is probable. If uncertainties exist, we recognize revenue when those uncertainties are resolved. In multiple element arrangements, in accordance with Statement of Position 97-2 and 98-9, we use the residual method to recognize revenue when vendor-specific objective evidence does not exist for one of the delivered elements in the arrangement. Service revenue is recognized as the services are provided. Revenue from maintenance and support arrangements is recognized ratably over the term of the contract. Amounts collected prior to satisfying the revenue recognition criteria are reflected as deferred revenue. We estimate and record warranty

costs at the time of product revenue recognition.

COST OF REVENUES. Our cost of revenues consists primarily of amounts paid to third-party manufacturers for purchased materials and services, and manufacturing and professional services personnel and related costs. Manufacturing engineering, documentation control, final testing and assembly are performed at our facility.

GROSS PROFIT. We believe that our gross profit margins will be affected primarily by the following factors:

- demand for our products and services;
- new product introductions and enhancements both by us and by our competitors;
- product service and support costs associated with initial deployment of our products in customers' networks;
- changes in our pricing policies and those of our competitors;
- write off of any obsolete inventory;
- the mix of product configurations sold;
- the mix of sales channels through which our products and services are sold; and
- the volume of manufacturing and costs of manufacturing and components.

We expect gross profit as a percentage of revenues to increase modestly from their current levels in the future due to continuing product mix changes and increases in support and maintenance revenues.

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses consist primarily of salaries and related personnel costs, recruiting expenses and prototype costs related to the design, development, testing and enhancement of our products. We expense our research and development costs as incurred. Some aspects of our research and development effort require significant short-term expenditures, the timing of which can cause significant quarterly variability in our expenses. We believe that our recent restructuring actions will reduce research and development expenses in fiscal 2002 from the fiscal 2001 level. However, rapid technological innovation is critical to our long-term success and we intend to continue to make substantial investments to enhance our products and technologies.

SALES AND MARKETING EXPENSES. Sales and marketing expenses consist primarily of salaries and related personnel expenses, commissions, travel and entertainment expenses, promotions, customer evaluations and other marketing expenses. We believe that our recent restructuring actions will reduce sales and marketing expenses in fiscal 2002 from the fiscal 2001 level.

GENERAL AND ADMINISTRATIVE EXPENSES. General and administrative expenses consist primarily of salaries and related expenses for executive and administrative personnel, recruiting expenses, provision for bad debts and professional fees. We believe that our recent restructuring actions will reduce general and administrative expenses in fiscal 2002 from the fiscal 2001 level.

20

STOCK-BASED COMPENSATION EXPENSES. Stock-based compensation expenses include the amortization of stock compensation charges resulting from the granting of stock options, including those TTI stock options assumed by Sonus, stock awards to TTI employees under the 2000 Retention Plan, the sales of restricted common stock to employees and compensation expense associated with the grant of stock options and issuance of restricted stock to non-employees. See Note 13 (i) to our consolidated financial statements. Deferred compensation related to the granting of stock options and sales of restricted common stock to employees, including those TTI stock options assumed by Sonus, are being amortized over the vesting periods of four to five years. The deferred compensation associated with the 2000 Retention Plan awarded to TTI employees will be expensed over the approximate two-year vesting period of the retention shares. These amounts have been adjusted for changes in the fair value of Sonus common stock on the date the related milestone release conditions were earned. Upon the termination of an employee, the remaining value of shares held under the 2000 Retention Plan, to which such employee is entitled, if any, will be expensed. The compensation expense associated with non-employees is recorded at the time services are provided. As of December 31, 2001, we expect to record up to approximately \$21.0 million, \$6.5 million and \$1.2 million in employee stock-based compensation expense in the years ending December 31, 2002, 2003 and 2004.

BENEFICIAL CONVERSION OF PREFERRED STOCK. In fiscal 1999, we recorded a charge to accumulated deficit of \$2.5 million, representing the beneficial conversion feature of our Series C redeemable convertible preferred stock that was sold in the fourth quarter of 1999. This charge was accounted for as a dividend to preferred stockholders and, as a result, increased the net loss available to common stockholders and the related net loss per share.

YEARS ENDED DECEMBER 31, 2001 AND 2000

REVENUES. Revenues were \$173.2 million for fiscal 2001, an increase of \$121.4 million, or 235% from \$51.8 million in fiscal 2000. The increase in revenues was the result of a significant increase in the sale of voice

infrastructure products. For the years ended December 31, 2001 and 2000, four and three customers each contributed more than 10% of our revenues, representing an aggregate of 67% and 70% of total revenues. International revenues, primarily to Asia and Europe, were 18% and 11% of revenues for the years ended December 31, 2001 and 2000.

GROSS PROFIT. Gross profit was \$97.5 million, or 56% of revenues, for fiscal 2001, compared with \$23.9 million, or 46% of revenues, in fiscal 2000. The increase in gross profit as a percentage of revenues is primarily the result of improved manufacturing efficiencies due to increased volume, a favorable product mix and a reduction in material costs.

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses were \$65.0 million for fiscal 2001, an increase of \$38.6 million, or 146%, from \$26.4 million in fiscal 2000. The increase reflects costs primarily associated with a significant increase in personnel and personnel-related expenses including those in connection with our acquisition of TTI, and, to a lesser extent, prototype and software expenses for the development of our products.

SALES AND MARKETING EXPENSES. Sales and marketing expenses were \$42.3 million for fiscal 2001, an increase of \$20.7 million, or 96%, from \$21.6 million in fiscal 2000. The increase reflects costs primarily associated with the hiring of additional U.S. and international sales and marketing personnel including those in connection with our acquisition of TTI, commissions, the opening of international sales offices and, to a lesser extent, travel-related expenses, marketing program costs and trade shows.

GENERAL AND ADMINISTRATIVE EXPENSES. General and administrative expenses were \$13.1 million for fiscal 2001, an increase of \$7.6 million, or 139%, from \$5.5 million in fiscal 2000. The increase reflects the hiring of additional personnel including those in connection with our acquisition of TTI, and, to a lesser extent, an increase in professional fees, bad debt expense and costs associated with being a public company.

21

STOCK-BASED COMPENSATION EXPENSES. Stock-based compensation expenses were \$75.5 million for fiscal 2001, an increase of \$48.8 million, or 182% from \$26.7 million in fiscal 2000. The increase is primarily due to the amortization of deferred stock-based compensation resulting from the unvested TTI stock options assumed by Sonus, retention stock awards issued to TTI employees and the write-off of \$25.4 million of deferred compensation of shares and options held by terminated employees impacted by the restructuring plan.

GOODWILL, PURCHASED INTANGIBLES AND IN-PROCESS RESEARCH AND DEVELOPMENT EXPENSES. In January 2001, Sonus acquired certain intellectual property, in-process research and development and intangible assets in connection with our acquisition of TTI, which resulted in the recording of \$523.7 million of goodwill and other intangibles. Results of operations for fiscal 2001 include \$107.6 million in amortization of TTI goodwill and purchased intangibles, a \$40.0 million write-off of TTI purchased in-process research and development and the write-off of \$374.7 million in TTI goodwill and certain purchased intangibles. Due to the implementation of Statement of Financial Accounting Standards (SFAS) No. 142, GOODWILL AND OTHER INTANGIBLE ASSETS, amortization expense for fiscal 2002 will be substantially reduced from the fiscal 2001 level. See Notes 2 and 3 to our consolidated financial statements.

In July 2001, Sonus completed the acquisition of certain intellectual property and other assets of privately-held LinguatEQ Incorporated, a provider of data distribution and billing application software, which resulted in the recording of \$5.4 million of goodwill and other intangibles. Results of operations for fiscal 2001 include the amortization of purchased intangibles of \$167,000 and a non-cash charge of \$3.8 million for purchased in-process research and development. See Note 4 to our consolidated financial statements.

RESTRUCTURING CHARGES. On September 26, 2001, in response to unfavorable business conditions largely caused by a rapid further decrease in capital spending by telecommunications service providers, Sonus announced a restructuring plan designed to reduce expenses and align its cost structure with its revised business outlook. Accordingly, during the third quarter of fiscal 2001, Sonus recorded a restructuring charge of \$25.8 million for a worldwide workforce reduction, consolidation of excess facilities and other charges.

WORKFORCE REDUCTION. Restructuring actions in September 2001 resulted in the reduction of Sonus' workforce by approximately 150 employees, or 21%. The affected employees were entitled to severance and other benefits for which Sonus recorded a charge of \$4.5 million in fiscal 2001. Remaining cash expenditures of \$871,000 at December 31, 2001 relating to workforce reductions are expected to be substantially paid in the first quarter of fiscal 2002.

CONSOLIDATION OF EXCESS FACILITIES AND OTHER CHARGES. Sonus recorded a restructuring charge in fiscal 2001 of \$21.3 million for the consolidation of excess facilities and other miscellaneous charges, which are included on the balance sheet as accrued restructuring expenses and long-term obligations. In March 2002, we completed a lease renegotiation for certain excess space and expect to record a restructuring benefit in the first quarter of fiscal 2002. The remaining cash expenditures relating to the consolidation of excess facilities and other miscellaneous charges are expected to be paid through May 2004.

WRITE-OFF OF GOODWILL AND PURCHASED INTANGIBLES. In light of negative industry and economic conditions, a general decline in technology valuations and our decision to discontinue the development and use of certain acquired

technology, we performed an assessment of the carrying value of the goodwill and purchased intangibles recorded in connection with our acquisition of TTI. In accordance with SFAS No. 121, Sonus recorded a non-cash impairment charge of \$374.7 million in fiscal 2001 for the write-off of goodwill and certain purchased intangibles because the estimated undiscounted future cash flows of these assets was less than the carrying value.

22

INTEREST INCOME (EXPENSE), NET. Interest income consists of interest earned on our cash balances and marketable securities. Interest expense consists of interest incurred on convertible subordinated notes, equipment financing and capital lease arrangements. Interest income, net of interest expense, was \$5.0 million for fiscal 2001, a decrease of \$1.2 million from \$6.2 million in fiscal 2000. The decrease reflects a reduction in interest rates and invested balances and increasing interest expense incurred on capital lease arrangements assumed in the TTI acquisition and convertible subordinated notes.

NET OPERATING LOSS CARRYFORWARDS. As of December 31, 2001, we had approximately \$92.8 million of federal net operating loss carryforwards for tax purposes available to offset future taxable income. These net operating loss carryforwards expire at various dates through 2021, to the extent that they are not used. We have not recognized any benefit from the future use of net operating loss carryforwards for fiscal 2001 and 2000, or for any other periods since inception. Use of the net operating loss carryforwards may be limited in future years if there is a significant change in our ownership. Management has recorded a full valuation allowance for the related net deferred tax asset due to the uncertainty of realizing the benefit of this asset.

INCOME TAXES. No provision for income taxes has been recorded for fiscal 2001 and 2000, due to accumulated net losses.

YEARS ENDED DECEMBER 31, 2000 AND 1999

REVENUES. Revenues were \$51.8 million for fiscal 2000, as a result of the introduction of our voice infrastructure products. No revenues were reported for fiscal 1999. For the year ended December 31, 2000, three customers each contributed more than 10% of our revenues and represented an aggregate of 70% of total revenues. International revenues, primarily to Europe, were 11% of revenues for the year ended December 31, 2000.

COST OF REVENUES. Cost of revenues was \$27.8 million, or 54% of revenues, for fiscal 2000, an increase of \$25.9 million from \$1.9 million in fiscal 1999. The increase is primarily the result of an increase in product manufacturing and personnel costs associated with revenues recorded in fiscal 2000.

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses were \$26.4 million in fiscal 2000, an increase of \$15.6 million, or 145%, from \$10.8 million in fiscal 1999. The increase reflects costs primarily associated with a significant increase in personnel and personnel-related expenses and, to a lesser extent, prototype and software expenses for the development of our products.

SALES AND MARKETING EXPENSES. Sales and marketing expenses were \$21.6 million in fiscal 2000, an increase of \$16.0 million, or 285%, from \$5.6 million in fiscal 1999. The increase reflects costs primarily associated with the hiring of additional U.S. and international sales and marketing personnel and the opening of international sales offices and, to a lesser extent, sales commissions, travel-related expenses, marketing program costs, trade shows and product launch activities.

GENERAL AND ADMINISTRATIVE EXPENSES. General and administrative expenses were \$5.5 million in fiscal 2000, an increase of \$3.8 million, or 218%, from \$1.7 million in fiscal 1999. The increase reflects the hiring of additional general and administrative personnel and, to a lesser extent, costs associated with being a public company.

STOCK-BASED COMPENSATION EXPENSES. Stock-based compensation expenses were \$26.7 million in fiscal 2000, an increase of \$22.3 million from \$4.4 million in fiscal 1999. This increase is due to the amortization of deferred stock-based compensation resulting from the granting of additional stock options and sale of restricted common stock to employees and non-employees.

INTEREST INCOME (EXPENSE), NET. Interest income, net of interest expense, was \$6.2 million in fiscal 2000, an increase of \$5.7 million from \$487,000 in fiscal 1999. This increase reflects higher invested cash and marketable securities balances as a result of our May 2000 IPO and private financings and is partially offset by interest expense from increased borrowings, which were repaid in June 2000.

23

INCOME TAXES. No provision for income taxes has been recorded for fiscal 2000 and 1999, due to accumulated net losses. We did not record any tax benefits relating to these losses or other tax benefits due to the uncertainty surrounding the realization of these future tax benefits.

LIQUIDITY AND CAPITAL RESOURCES

Prior to our IPO, we financed our operations primarily through private sales of redeemable convertible preferred stock totaling \$70.7 million in net proceeds. Upon the closing of our IPO on May 31, 2000, Sonus received cash proceeds, net of underwriters' discount and offering expenses, totaling \$121.7 million, and all of our redeemable convertible preferred stock converted

into 96,957,222 shares of common stock. At December 31, 2001, cash, cash equivalents and marketable securities totaled \$125.1 million.

Net cash used in operating activities was \$1.2 million for fiscal 2001, as compared to \$14.4 million for fiscal 2000. The net cash used in operating activities for fiscal 2001 compared to the prior year primarily reflects a significantly higher net loss and reductions in accounts payable and deferred revenues offset by significantly higher non-cash charges, decreases in accounts receivable and inventories and an increase in accrued expenses.

Net cash used in investing activities was \$50.4 million for fiscal 2001, as compared to \$55.8 million for fiscal 2000. Net cash used in investing activities for fiscal 2001 primarily reflects net purchases of marketable securities of \$21.0 million, purchases of property and equipment of \$23.1 million and cash expenditures associated with our acquisitions of \$6.1 million. Sonus has no current material commitments for capital expenditures but does expect approximately \$8.0 million in purchases during fiscal 2002.

In January 2002, we established a \$10.0 million equipment line of credit and a \$20.0 million working capital line of credit with a bank available through March 24, 2003. The lines of credit are collateralized by all of our assets, except intellectual property and bear interest at the banks prime rate. We are required to comply with various financial and restrictive covenants.

Net cash provided by financing activities was \$13.6 million for fiscal 2001, as compared to \$148.4 million for fiscal 2000. The net cash provided by financing activities for fiscal 2001 resulted from the sale of common stock, the exercise of stock options and the issuance of \$10.0 million in convertible subordinated notes offset by the repayment of \$8.0 million in a bank note payable assumed as part of the acquisition of TTI. The net cash provided by financing activities in fiscal 2000, was primarily a result of net proceeds received from Sonus' IPO and to a lesser extent, from the sale of Series D redeemable convertible preferred stock, partially offset by repayment of long-term obligations.

The following summarizes our future contractual cash obligations as of December 31, 2001, after reflecting the lease renegotiation in March 2002, in thousands:

	2002	2003	2004	2005	2006	
THEREAFTER TOTAL	-----	-----	-----	-----	-----	

----- Capital lease obligations.....	\$	\$	\$	\$	\$	\$
640	\$ 539	\$ 193	\$ 30	\$ --	\$ --	\$
1,402	Operating leases.....					
3,493	2,956	942	186	195	418	8,190
Convertible subordinated notes.....				475	475	475
475	10,238	--	12,138	-----	-----	-----

- Total contractual cash obligations.....	\$3,970	\$1,610	\$691	\$10,433	\$418	
\$21,730	=====	=====	=====	=====	=====	=====
=====	=====	=====	=====	=====	=====	=====

We believe our current cash, cash equivalents, marketable securities and available bank financing, will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least 12 months. The rate at which we will consume cash will be dependent on the cash needs of future operations that in turn will be directly effected by the levels of demand for our products. If our existing resources and cash generated from operations are insufficient to satisfy our liquidity requirements, we may seek to sell additional equity or debt securities. The sale of additional equity or convertible debt securities could result in additional dilution to our stockholders, and we cannot be certain that additional financing will be available in amounts or on terms acceptable to us, if at all. If we are unable to obtain this additional financing, we may be required to reduce the scope of our planned product development and sales and marketing efforts, which could harm our business, financial condition and operating results.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 2001, the Financial Accounting Standards Board (FASB) issued SFAS No. 141, BUSINESS COMBINATIONS, and SFAS No. 142, GOODWILL AND OTHER INTANGIBLE ASSETS. SFAS No. 141 requires that all business combinations initiated after June 30, 2001 be accounted for using the purchase method of accounting and prohibits the use of the pooling of interest method. SFAS No. 142 eliminates the amortization of goodwill and certain other intangibles and instead subjects these assets to periodic impairment assessments. SFAS No. 142 is effective immediately for all goodwill and certain other intangible assets acquired after June 30, 2001 and shall commence on January 1, 2002 for all goodwill and certain other intangibles existing on June 30, 2001. Sonus has adopted SFAS No. 141 and is currently assessing the potential impact that SFAS No. 142 will have on its consolidated financial statements.

In August 2001, the FASB issued SFAS No. 144, ACCOUNTING FOR THE IMPAIRMENT OR DISPOSAL OF LONG-LIVED ASSETS, which supersedes SFAS No. 121, ACCOUNTING FOR THE IMPAIRMENT OF LONG-LIVED ASSETS AND FOR LONG-LIVED ASSETS TO BE DISPOSED OF,

and the accounting and reporting provisions of APB No. 30, REPORTING THE RESULTS OF OPERATIONS--REPORTING THE EFFECTS OF DISPOSAL OF A SEGMENT OF A BUSINESS, AND EXTRAORDINARY, UNUSUAL AND INFREQUENTLY OCCURRING EVENTS AND TRANSACTIONS. SFAS No. 144 addresses financial accounting and reporting for the impairment or disposal of long-lived assets and is effective for fiscal years beginning after December 15, 2001, and interim periods within those fiscal years. Sonus is currently reviewing this statement to determine the effect on its consolidated financial statements.

25

RISK FACTORS

INVESTING IN OUR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE RISKS DESCRIBED BELOW BEFORE BUYING OUR COMMON STOCK. IF ANY OF THE FOLLOWING RISKS ACTUALLY OCCURS, THE TRADING PRICE OF OUR COMMON STOCK COULD DECLINE AND YOU MAY LOSE ALL OR PART OF YOUR INVESTMENT.

OUR BUSINESS HAS BEEN ADVERSELY AFFECTED BY RECENT DEVELOPMENTS IN THE TELECOMMUNICATIONS INDUSTRY AND THESE DEVELOPMENTS WILL CONTINUE TO IMPACT OUR REVENUES AND OPERATING RESULTS.

From our inception through the end of 2000, the telecommunications market was experiencing rapid growth spurred by a number of factors including deregulation in the industry, entry of a large number of new emerging service providers, growth in data traffic and the availability of significant capital from the financial markets. In 2001, the telecommunications industry experienced a reversal of some of these trends, marked by a dramatic reduction in current and projected future capital expenditures by service providers, financial difficulties and in some cases bankruptcies experienced by emerging service providers and a sharp contraction in the availability of capital. These conditions caused a substantial reduction in demand for telecommunications equipment, including our products.

We expect the developments described above to affect our business for the next several quarters in the following manner:

- our ability to accurately forecast revenue will be diminished;
- our revenues could be reduced; and
- our losses may increase because operating expenses are largely based on anticipated revenue trends and a high percentage of our expenses are and will continue to be fixed in the short-term.

Our business, operating results and financial condition could be materially and adversely impacted by any one or a combination of the above.

THE WEAKENED FINANCIAL POSITION OF MANY EMERGING SERVICE PROVIDERS WILL INCREASE THE UNPREDICTABILITY OF OUR RESULTS.

A substantial portion of our revenues to date are from emerging service providers who have been the primary early adopters of our voice infrastructure products. Several of our emerging service provider customers, including XO Communications and Global Crossing, who contributed 17% and 13% of our total 2001 revenues, are experiencing financial difficulties and are in the process of restructuring their operations or have filed for bankruptcy. Our operating results could be materially and adversely affected if any present or future emerging service provider chooses to reduce its level of orders, delays or fails to pay our receivables, or fails to successfully and timely reorganize its operations including emerging from bankruptcy.

WE EXPECT THAT A MAJORITY OF OUR REVENUES WILL BE GENERATED FROM A LIMITED NUMBER OF CUSTOMERS AND WE WILL NOT BE SUCCESSFUL IF WE DO NOT GROW OUR CUSTOMER BASE.

To date, we have shipped our products to a limited number of customers. We expect that in the foreseeable future, substantially all of our revenues will depend on sales of our products to a limited number of customers. Four and three customers each contributed more than 10% of our revenues for the years ended December 31, 2001 and 2000, which represented an aggregate of 67% and 70% of total revenues. Our future success will depend on our ability to attract additional customers beyond our current limited number. The growth of our customer base could be adversely affected by:

- customer unwillingness to implement our new voice infrastructure products;
- any delays or difficulties that we may incur in completing the development and introduction of our planned products or product enhancements;
- our customers' inability to raise capital to finance their business plans and capital expenditures;
- new product introductions by our competitors;

26

- any failure of our products to perform as expected; or
- any difficulty we may incur in meeting customers' delivery requirements.

The loss of any of our significant customers or any substantial reduction in orders from these customers could materially adversely affect our financial condition and results of operations. If we do not expand our customer base to

include additional customers that deploy our products in operational commercial networks, our revenues will not grow significantly, or at all.

THE MARKET FOR VOICE INFRASTRUCTURE PRODUCTS FOR THE NEW PUBLIC NETWORK IS NEW AND EVOLVING AND OUR BUSINESS WILL SUFFER IF IT DOES NOT DEVELOP AS WE EXPECT.

The market for our products is rapidly evolving. Packet-based technology may not be widely accepted as a platform for voice and a viable market for our products may not develop or be sustainable. If this market does not develop, or develops more slowly than we expect, we may not be able to sell our products in significant volumes, or at all.

WE WILL NOT RETAIN CUSTOMERS OR ATTRACT NEW CUSTOMERS IF WE DO NOT ANTICIPATE AND MEET SPECIFIC CUSTOMER REQUIREMENTS OR IF OUR PRODUCTS DO NOT INTEROPERATE WITH OUR CUSTOMERS' EXISTING NETWORKS.

To achieve market acceptance for our products, we must effectively anticipate, and adapt in a timely manner to, customer requirements and offer products and services that meet changing customer demands. Prospective customers may require product features and capabilities that our current products do not have. The introduction of new or enhanced products also requires that we carefully manage the transition from older products in order to minimize disruption in customer ordering patterns and ensure that adequate supplies of new products can be delivered to meet anticipated customer demand. If we fail to develop products and offer services that satisfy customer requirements, or to effectively manage the transition from older products, our ability to create or increase demand for our products would be seriously harmed and we may lose current and prospective customers.

Many of our customers will require that our products be designed to interface with their existing networks, each of which may have different specifications. Issues caused by an unanticipated lack of interoperability may result in significant warranty, support and repair costs, divert the attention of our engineering personnel from our hardware and software development efforts and cause significant customer relations problems. If our products do not interoperate with those of our customers' networks, installations could be delayed or orders for our products could be cancelled, which would seriously harm our gross margins and result in loss of revenues or customers.

WE MAY NOT BECOME PROFITABLE.

We have incurred significant losses since inception and expect to continue to incur losses in the future. As of December 31, 2001 we had an accumulated deficit of \$729.4 million and had only recognized cumulative revenues since inception of \$225.0 million through December 31, 2001. We have not achieved profitability on a quarterly or annual basis. Our revenues may not grow and we may never generate sufficient revenues to achieve or sustain profitability.

WE MAY NEED ADDITIONAL CAPITAL IN THE FUTURE, WHICH MAY NOT BE AVAILABLE TO US, AND IF IT IS AVAILABLE, MAY DILUTE THE OWNERSHIP OF OUR COMMON STOCK.

We may need to raise additional funds through public or private debt or equity financings in order to:

- fund ongoing operations and capital requirements;
- take advantage of opportunities, including more rapid expansion or acquisition of complementary products, technologies or businesses;
- develop new products; or
- respond to competitive pressures.

27

Any additional capital raised through the sale of equity may dilute an investor's percentage ownership of our common stock. Furthermore, additional financings may not be available on terms favorable to us, or at all. A failure to obtain additional funding could prevent us from making expenditures that may be required to grow or maintain our operations.

THE UNPREDICTABILITY OF OUR QUARTERLY RESULTS MAY ADVERSELY AFFECT THE TRADING PRICE OF OUR COMMON STOCK.

Our revenues and operating results will vary significantly from quarter to quarter due to a number of factors, many of which are outside of our control and any of which may cause our stock price to fluctuate. Generally, purchases by service providers of telecommunications equipment from manufacturers have been unpredictable and clustered, rather than steady, as the providers build out their networks. The primary factors that may affect our revenues and results include the following:

- fluctuation in demand for our voice infrastructure products and the timing and size of customer orders;
- the cancellation or deferral of existing customer orders;
- the failure of certain of our customers to successfully and timely reorganize their operations, including emerging from bankruptcy;
- the length and variability of the sales cycle for our products and the corresponding timing of recognizing or deferring revenues;
- new product introductions and enhancements by our competitors and us;

- changes in our pricing policies, the pricing policies of our competitors and the prices of the components of our products;
- our ability to develop, introduce and ship new products and product enhancements that meet customer requirements in a timely manner;
- the mix of product configurations sold;
- our ability to obtain sufficient supplies of sole or limited source components;
- our ability to attain and maintain production volumes and quality levels for our products;
- costs related to acquisitions of complementary products, technologies or businesses; and
- general economic conditions, as well as those specific to the telecommunications, networking and related industries.

As with other telecommunications product suppliers, we may recognize a substantial portion of our revenue in a given quarter from sales booked and shipped in the last weeks of that quarter. As a result, a delay in customer orders is likely to result in a delay in shipments and recognition of revenue beyond the end of a given quarter, which would have a significant impact on our operating results for that quarter.

Our operating expenses are largely based on anticipated organizational growth and revenue trends. As a result, a delay in generating or recognizing revenues for the reasons set forth above, or for any other reason, could cause significant variations in our operating results. We believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance. It is likely that in some future quarters, our operating results may be below the expectations of public market analysts and investors. In this event, the price of our common stock will probably substantially decrease.

IF WE FAIL TO HIRE AND RETAIN NEEDED PERSONNEL, THE IMPLEMENTATION OF OUR BUSINESS PLAN COULD SLOW OR OUR FUTURE GROWTH COULD HALT.

Competition for highly skilled engineering, sales, marketing and support personnel is intense because there are a limited number of people available with the necessary technical skills and

28

understanding of our market. Any failure to attract, assimilate or retain qualified personnel to fulfill our current or future needs could impair our growth. The support of our products requires highly trained customer support and professional services personnel. Once we hire them, they may require extensive training in our voice infrastructure products. If we are unable to hire, train and retain our customer support and professional services personnel, we may not be able to increase sales of our products. Our future success depends upon the continued services of our executive officers who have critical industry experience and relationships that we rely on to implement our business plan. Most of our officers or key employees are not bound by employment agreements for any specific term. The loss of the services of any of our officers or key employees could delay the development and introduction of, and negatively impact our ability to sell, our products.

OUR FAILURE TO MANAGE OUR EXPANSION EFFECTIVELY IN A RAPIDLY CHANGING MARKET COULD INCREASE OUR COSTS, HARM OUR ABILITY TO SELL FUTURE PRODUCTS AND IMPAIR OUR FUTURE GROWTH.

We have expanded our operations rapidly and have hired a significant number of employees during fiscal 2001. Our growth has placed, and our anticipated growth will continue to place, a significant strain on our management systems and resources. Our ability to successfully offer our products and implement our business plan in a rapidly evolving market requires effective planning and management processes. We expect that we will need to continue to improve our financial, managerial and manufacturing controls and reporting systems, and will need to continue to train and manage our worldwide workforce. If we fail to implement adequate control systems in an efficient and timely manner, our costs may be increased and our growth could be impaired and we may not be able to accurately anticipate and fulfill market demand, the result of which will be a loss of revenues and customers.

WE MAY FACE RISKS ASSOCIATED WITH OUR INTERNATIONAL EXPANSION THAT COULD IMPAIR OUR ABILITY TO GROW OUR REVENUES ABROAD.

International revenues, primarily to Asia and Europe, were 18% of our revenues for fiscal 2001 and we intend to continue to expand our sales into international markets. This expansion will require significant management attention and financial resources to successfully develop direct and indirect international sales and support channels. In addition, we may not be able to develop international market demand for our products, which could impair our ability to grow our revenues. We have limited experience marketing, distributing and supporting our products internationally and, to do so, we expect that we will need to develop versions of our products that comply with local standards. Furthermore, international operations are subject to other inherent risks, including:

- greater difficulty collecting accounts receivable and longer collection

periods;

- difficulties and costs of staffing and managing international operations;
- the impact of differing technical standards outside the United States;
- the impact of recessions in economies outside the United States;
- unexpected changes in regulatory requirements and currency exchange rates;
- certification requirements;
- reduced protection for intellectual property rights in some countries;
- potentially adverse tax consequences; and
- political and economic instability.

WE ARE ENTIRELY DEPENDENT UPON OUR VOICE INFRASTRUCTURE PRODUCTS AND OUR FUTURE REVENUES DEPEND UPON THEIR COMMERCIAL SUCCESS.

Our future growth depends upon the commercial success of our voice infrastructure products. We intend to develop and introduce new products and enhancements to existing products in the future. We

29

may not successfully complete the development or introduction of these products. If our target customers do not adopt, purchase and successfully deploy our current or planned products, our revenues will not grow.

BECAUSE OUR PRODUCTS ARE SOPHISTICATED AND DESIGNED TO BE DEPLOYED IN COMPLEX ENVIRONMENTS, THEY MAY HAVE ERRORS OR DEFECTS THAT WE FIND ONLY AFTER FULL DEPLOYMENT, WHICH COULD SERIOUSLY HARM OUR BUSINESS.

Our products are sophisticated and are designed to be deployed in large and complex networks. Because of the nature of our products, they can only be fully tested when substantially deployed in very large networks with high volumes of traffic. Some of our customers have only recently begun to commercially deploy our products and they may discover errors or defects in the software or hardware, or the products may not operate as expected. If we are unable to fix errors or other performance problems that may be identified after full deployment of our products, we could experience:

- loss of, or delay in, revenues;
- loss of customers and market share;
- a failure to attract new customers or achieve market acceptance for our products;
- increased service, support and warranty costs and a diversion of development resources; and
- costly and time-consuming legal actions by our customers.

IF WE DO NOT RESPOND RAPIDLY TO TECHNOLOGICAL CHANGES OR TO CHANGES IN INDUSTRY STANDARDS, OUR PRODUCTS COULD BECOME OBSOLETE.

The market for voice infrastructure products for the new public network is likely to be characterized by rapid technological change and frequent new product introductions. We may be unable to respond quickly or effectively to these developments. We may experience difficulties with software development, hardware design, manufacturing or marketing that could delay or prevent our development, introduction or marketing of new products and enhancements. The introduction of new products by our competitors, the 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. If the standards adopted are different from those that we have chosen to support, market acceptance of our products may be significantly reduced or delayed. If our products become technologically obsolete, we may be unable to sell our products in the marketplace and generate revenues.

IF WE FAIL TO COMPETE SUCCESSFULLY, OUR ABILITY TO INCREASE OUR REVENUES OR ACHIEVE PROFITABILITY WILL BE IMPAIRED.

Competition in the telecommunications market is intense. This market has historically been dominated by large companies, such as Lucent Technologies and Nortel Networks, both of whom are our direct competitors. We also face competition from other large telecommunications and networking companies, including Cisco Systems, which have entered our market by acquiring companies that design competing products. In addition, a number of smaller and mostly private companies have announced plans for new products that target market opportunities similar to those we address. Because this market is rapidly evolving, additional competitors with significant financial resources may enter these markets and further intensify competition.

Many of our current and potential competitors have significantly greater selling and marketing, technical, manufacturing, financial and other resources, including the ability to offer vendor-sponsored financing programs. If we are unable or unwilling to offer vendor-sponsored financing, prospective customers may decide to purchase products from one of our competitors that offers this type of financing. Furthermore, some of our competitors are currently selling significant amounts of other products to our current and prospective customers.

Our competitors' broad product portfolios, coupled with already existing relationships, may cause our customers to buy our competitors' products or harm our ability to attract new customers.

30

To compete effectively, we must deliver innovative products that:

- provide extremely high reliability and voice quality;
- scale easily and efficiently;
- interoperate with existing network designs and other vendors' equipment;
- provide effective network management;
- are accompanied by comprehensive customer support and professional services; and
- provide a cost-effective and space-efficient solution for service providers.

If we are unable to compete successfully against our current and future competitors, we could experience price reductions, order cancellations, loss of revenues and reduced gross profit margins.

WE DEPEND UPON CONTRACT MANUFACTURERS AND ANY DISRUPTION IN THESE RELATIONSHIPS MAY CAUSE US TO FAIL TO MEET THE DEMANDS OF OUR CUSTOMERS AND DAMAGE OUR CUSTOMER RELATIONSHIPS.

We rely on a small number of contract manufacturers to manufacture our products according to our specifications and to fill orders on a timely basis. Our contract manufacturers provide comprehensive manufacturing services, including assembly of our products and procurement of materials. Each of our contract manufacturers also builds products for other companies and may not always have sufficient quantities of inventory available to fill our orders or may not allocate their internal resources to fill these orders on a timely basis. We do not have long-term supply contracts with our manufacturers and they are not required to manufacture products for any specified period. We do not have internal manufacturing capabilities to meet our customers' demands. Qualifying a new contract manufacturer and commencing commercial-scale production is expensive and time consuming and could result in a significant interruption in the supply of our products. If a change in contract manufacturers results in delays in our fulfillment of customer orders or if a contract manufacturer fails to make timely delivery of orders, we may lose revenues and suffer damage to our customer relationships.

WE AND OUR CONTRACT MANUFACTURERS RELY ON SINGLE OR LIMITED SOURCES FOR SUPPLY OF SOME COMPONENTS OF OUR PRODUCTS AND IF WE FAIL TO ADEQUATELY PREDICT OUR MANUFACTURING REQUIREMENTS OR IF OUR SUPPLY OF ANY OF THESE COMPONENTS IS DISRUPTED, WE WILL BE UNABLE TO SHIP OUR PRODUCTS.

We and our contract manufacturers currently purchase several key components of our products, including commercial digital signal processors, from single or limited sources. We purchase these components on a purchase order basis. If we overestimate our component requirements, we could have excess inventory, which would increase our costs. If we underestimate our requirements, we may not have an adequate supply, which could interrupt manufacturing of our products and result in delays in shipments and revenues.

We currently do not have long-term supply contracts with our component suppliers and they are not required to supply us with products for any specified periods, in any specified quantities or at any set price, except as may be specified in a particular purchase order. In the event of a disruption or delay in supply, or inability to obtain products, we may not be able to develop an alternate source in a timely manner or at favorable prices, or at all. A failure to find acceptable alternative sources could hurt our ability to deliver high-quality products to our customers and negatively affect our operating margins. In addition, reliance on our suppliers exposes us to potential supplier production difficulties or quality variations. Our customers rely upon our ability to meet committed delivery dates, and any disruption in the supply of key components would seriously impact our ability to meet these dates and could result in legal action by our customers, loss of customers or harm to our ability to attract new customers.

31

IF WE ARE NOT ABLE TO OBTAIN NECESSARY LICENSES OF THIRD-PARTY TECHNOLOGY AT ACCEPTABLE PRICES, OR AT ALL, OUR PRODUCTS COULD BECOME OBSOLETE.

We have incorporated third-party licensed technology into our current products. From time to time, we may be required to license additional technology from third parties to develop new products or product enhancements. Third-party licenses may not be available or continue to be available to us on commercially reasonable terms. The inability to maintain or re-license any third-party licenses required in our current products or to obtain any new third-party licenses to develop new products and product enhancements could require us to obtain substitute technology of lower quality or performance standards or at greater cost, and delay or prevent us from making these products or enhancements, any of which could seriously harm the competitiveness of our products.

OUR ABILITY TO COMPETE AND OUR BUSINESS COULD BE JEOPARDIZED IF WE ARE UNABLE TO PROTECT OUR INTELLECTUAL PROPERTY OR BECOME SUBJECT TO INTELLECTUAL PROPERTY

RIGHTS LITIGATION, WHICH COULD REQUIRE US TO INCUR SIGNIFICANT COSTS.

We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. 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. If competitors are able to use our technology, our ability to compete effectively could be harmed. In addition, we may become involved in litigation as a result of allegations that we infringe the intellectual property rights of others. Any parties asserting that our products infringe upon their proprietary rights would force us to defend ourselves and possibly our customers or contract manufacturers against the alleged infringement. These claims and any resulting lawsuit, if successful, could subject us to significant liability for damages and invalidation of our proprietary rights. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop selling, incorporating or using our products 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 that use any allegedly infringing technology.

Any lawsuits regarding intellectual property rights, regardless of their success, would be time-consuming, expensive to resolve and would divert our management's time and attention.

ANY INVESTMENTS OR ACQUISITIONS WE MAKE COULD DISRUPT OUR BUSINESS AND SERIOUSLY HARM OUR FINANCIAL CONDITION.

Although we have no current agreements to do so, we intend to consider investing in, or acquiring, complementary products, technologies or businesses. In the event of future investments or acquisitions, we could:

- issue stock that would dilute our current stockholders' percentage ownership; incur debt or assume liabilities;
- incur significant impairment charges related to the write-off of goodwill and purchased intangible assets;
- incur significant amortization expenses related to purchased intangible assets; or
- incur large and immediate write-offs for in-process research and development and stock-based compensation.

32

Our integration of any acquired products, technologies or businesses will also involve numerous risks, including:

- problems and unanticipated costs associated with combining the purchased products, technologies or businesses;
- diversion of management's attention from our core business;
- adverse effects on existing business relationships with suppliers and customers;
- risks associated with entering markets in which we have limited or no prior experience; and
- potential loss of key employees, particularly those of the acquired organizations.

We may be unable to successfully integrate any products, technologies, businesses or personnel that we might acquire in the future without significant costs or disruption to our business.

IF WE ARE SUBJECT TO UNFAIR HIRING CLAIMS, WE COULD INCUR SUBSTANTIAL COSTS IN DEFENDING OURSELVES.

Companies in our industry whose employees accept positions with competitors frequently claim that their competitors have engaged in unfair hiring practices. We may be subject to claims of this kind in the future as we seek to hire qualified personnel. Those claims may result in material litigation. We could incur substantial costs defending ourselves or our employees against those claims, regardless of their merits. In addition, defending ourselves from those types of claims could divert our management's attention from our operations. If we are found to have engaged in unfair hiring practices, or our employees are found to have violated agreements with previous employers, we may suffer a significant disruption in our operations.

SECURITIES LITIGATION COULD RESULT IN SUBSTANTIAL COST AND DIVERT THE ATTENTION OF KEY PERSONNEL, WHICH COULD SERIOUSLY HARM OUR BUSINESS.

On November 8, 2001, a securities class action complaint was filed against Sonus, two of its officers and the lead underwriters in connection with our IPO.

Sonus has reviewed the complaint and intends to vigorously defend this action. In the past, securities class action litigation has often been brought against companies following periods of volatility in the market price of their securities. Securities litigation could result in substantial costs and divert management's attention and resources, which could seriously harm our business.

OUR STOCK PRICE HAS BEEN AND MAY CONTINUE TO BE VOLATILE.

The market for technology stocks has been and will likely continue to be extremely volatile. The following factors could cause the market price of our common stock to fluctuate significantly:

- loss of any of our major customers;
- changes in the financial condition or anticipated capital expenditure purchases of any of our major customers;
- the addition or departure of key personnel;
- variations in our quarterly operating results;
- announcements by us or our competitors of significant contracts, new products or product enhancements, acquisitions, distribution partnerships, joint ventures or capital commitments;
- changes in financial estimates by securities analysts;
- sales of common stock or other securities by us or by our stockholders in the future;
- economic conditions for the telecommunications, networking and related industries;
- worldwide economic instability; and
- any acquisitions, distribution partnerships, joint ventures or capital commitments.

33

SALES OF A SUBSTANTIAL AMOUNT OF OUR COMMON STOCK IN THE FUTURE COULD CAUSE OUR STOCK PRICE TO FALL.

Some stockholders who acquired shares prior to our IPO or in connection with our acquisition of TTI hold a substantial number of shares of our common stock that have not yet been sold in the public market. Further, additional shares may become available for sale upon the conversion or redemption of convertible subordinated notes. Sales of a substantial number of shares of our common stock within a short period of time in the future could impair our ability to raise capital through the sale of additional debt or stock and/or cause our stock price to fall.

INSIDERS HAVE SUBSTANTIAL CONTROL OVER US AND COULD LIMIT YOUR ABILITY TO INFLUENCE THE OUTCOME OF KEY TRANSACTIONS, INCLUDING A CHANGE OF CONTROL.

Our executive officers, directors and entities affiliated with them beneficially own, in the aggregate, a significant portion of our outstanding common stock. These stockholders, if acting together, would be able to influence significantly all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions.

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

Provisions of our amended and restated certificate of incorporation, our amended and restated by-laws and Delaware law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our stockholders.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements that involve substantial risks and uncertainties. In some cases you can identify these statements by forward-looking words such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "should," "will," and "would" or similar words. You should read statements that contain these words carefully because they discuss future expectations, contain projections of future results of operations or of financial position or state other "forward-looking" information. The important factors listed above in the section captioned "Risk Factors," as well as any cautionary language in this report, provide examples of risks, uncertainties and events that may cause the actual results to differ materially from the expectations described in these forward-looking statements. You should be aware that the occurrence of the events described in the risk factors and elsewhere in this report could have a material adverse effect on the business, results of operations and financial position of Sonus.

Any forward-looking statements in this report are not guarantees of future performances, and actual results, developments and business decisions may differ from those envisaged by such forward-looking statements, possibly materially. Sonus disclaims any duty to update any forward-looking statements, all of which are expressly qualified by the statements in this section.

34

Agreement and
Plan of Merger
and
Reorganization,
dated as of
November 2,
2000, by and
among the
Registrant,
Storm Merger
Sub, Inc. and
telecom
technologies,
inc. 3.1***
Certificate of
Amendment to
Fourth Amended
and Restated
Certificate of
Incorporation
of Sonus
Networks, Inc.
3.2** Fourth
Amended and
Restated
Certificate of
Incorporation
of Sonus
Networks, Inc.
3.3** Amended
and Restated
By-Laws of
Sonus Networks,
Inc. 4.1** Form
of Stock
Certificate
representing
shares of Sonus
Networks, Inc.
Common Stock.
9.1**** Voting
Agreement,
dated as of
November 2,
2000, among the
Registrant, the
Stockholder
parties thereto
and telecom
technologies,
inc. 10.1*
Registration
Rights
Agreement,
dated as of
November 2,
2000, by and
among Sonus
Networks, Inc.
and the
Stockholder
parties
thereto. 10.2*
Sonus 2000
Retention Plan.
10.3* Telecom
technologies,
inc. 1998
Amended Equity
Incentive Plan.
10.4** Amended
and Restated
1997 Stock
Incentive Plan
of the
Registrant.
10.5** 2000
Employee Stock
Purchase Plan
of the
Registrant.
10.6** Lease,
dated January
21, 1999, as
amended,
between the
Registrant and
Glenborough
Fund V, Limited
Partnership
with respect to
property
located at 5
Carlisle Road,

Westford,
Massachusetts.
10.7* Sub-
lease, dated
October 20,
2000, between
the Registrant
and Unisphere
Networks, Inc.
with respect to
property
located at 5
Carlisle Road,
Massachusetts.

10.8* Sub-
Lease, dated
October 20,
2000, between
the Registrant
and Unisphere
Networks, Inc.
with respect to
property
located at 235
Littleton Road,
Westford,
Massachusetts.

10.9* Lease,
dated September
30, 2000,
between the
Registrant and
BCIA New
England
Holdings LLC
with respect to
property
located at 25
Porter Road,
Littleton,
Massachusetts.

10.10**
Agreement of
Sublease, dated
April 14, 2000,
between the
Registrant and
Unisphere
Solutions, Inc.
with respect to
property
located at 25
Porter Road,
Littleton,
Massachusetts.

10.11* Office
Lease
Agreement,
dated as of
November 14,
2000, between
telecom
technologies,
inc. and TR
Lookout
Partners, Ltd.
with respect to
property
located at 1301
East Lookout
Drive, Suite
3000,
Richardson,
Texas. 10.12*

First Amendment
to Office Lease
Agreement,
dated as of
January 8,
2001, between
telecom
technologies,
inc. and TR
Lookout
Partners, Ltd.
with respect to
property
located at 1300
East Lookout
Drive, Suite
3000,
Richardson,
Texas. 10.13

Office Lease

Agreement dated
April 4, 1997,
between telecom
technologies,
inc. and
Collins
Campbell Joint
Venture with
respect to
property
located at 1701
North Collins
Blvd., Suite
3000,
Richardson,
Texas.

EXHIBIT
NUMBER
DESCRIPTION

10.14 First
Amendment to
Office Lease
Agreement,
dated
November 1,
1997,
between
telecom
technologies,
inc. and
Collins
Campbell
Joint
Venture with
respect to
property
located at
1701 North
Collins
Blvd., Suite
3000,
Richardson,
Texas. 10.15

Second
Amendment to
Office Lease
Agreement,
dated July
1, 1998,
between
telecom
technologies,
inc. and
Collins
Campbell
Joint
Venture with
respect to
property
located at
1701 North
Collins
Blvd., Suite
3000,
Richardson,
Texas. 10.16

Third
Amendment to
Office Lease
Agreement,
dated July
1, 1998,
between
telecom
technologies,
inc. and
Collins
Campbell
Joint
Venture with
respect to
property

located at
1701 North
Collins
Blvd., Suite
3000,
Richardson,
Texas. 10.17
Fourth
Amendment to
Office Lease
Agreement,
dated
February 1,
1999,
between
telecom
technologies,
inc. and
Collins
Campbell
Joint
Venture with
respect to
property
located at
1701 North
Collins
Blvd., Suite
3000,
Richardson,
Texas. 10.18
Global
Agreement,
dated March
5, 2002, by
and between
TR Lookout
Partners,
Ltd.,
Collins
Campbell
Joint
Venture,
telecom
technologies,
inc. and
Registrant
related to
property
lease
agreements.
10.19**
Series A
Preferred
Stock
Purchase
Agreement,
dated as of
November 18,
1997, by and
among the
Registrant
and the
"Purchaser"
parties
thereto.
10.20**
Series B
Preferred
Stock
Purchase
Agreement,
dated as of
September
23, 1998, by
and among
the
Registrant
and the
"Purchaser"
parties
thereto.
10.21**
Series C
Preferred
Stock
Purchase
Agreement,
dated as of
September
10, 1999, by
and among
the
Registrant

and the
"Purchaser"
parties
thereto.
10.22**
Series D
Preferred
Stock
Purchase
Agreement,
dated as of
March 9,
2000, by and
among the
Registrant
and the
"Purchaser"
parties
thereto.
10.23**
Third
Amended and
Restated
Investor
Rights
Agreement,
dated as of
March 9,
2000, by and
among the
Registrant
and the
"Purchaser"
parties
thereto.
10.24**
Third
Amended and
Restated
Right of
First
Refusal and
Co-Sale
Agreement,
dated as of
March 9,
2000, among
the
Registrant
and the
persons and
entities
listed on
the
signature
pages
thereto.
10.25 Loan
and Security
Agreement,
dated as of
January 16,
2002, by and
between the
Registrant
and Silicon
Valley Bank.
21.1
Subsidiaries
of the
Registrant.
23.1 Consent
of Arthur
Andersen
LLP. 99.1
Letter to
Commission
Pursuant to
Temporary
Note 3T.

- -----
* Incorporated by reference to the Registrant's Registration Statement on Form S-4 (file No. 333-52682).

** Incorporated by reference to the Registrant's Registration Statement on Form S-1 (file No. 333-32206).

*** Incorporated by reference to the Registrant's Current Report on Form 8-K, filed June 21, 2001 with the Securities and Exchange Commission.

****Incorporated by reference to the Registrant's Current Report on Form 8-K,

(B) REPORTS ON FORM 8-K FILED DURING THE FOURTH QUARTER OF FISCAL 2001.

Sonus filed on October 11, 2001 a Current Report on Form 8-K dated September 26, 2001 with the SEC in connection with its revised business and financial outlook for the third and fourth quarters of fiscal 2001.

SIGNATURES

Pursuant to the requirements of Sections 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Westford, Commonwealth of Massachusetts, on this 27th day of March, 2002.

SONUS NETWORKS, INC.

By: /s/ HASSAN M. AHMED

Hassan M. Ahmed
PRESIDENT AND CHIEF EXECUTIVE OFFICER

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

SIGNATURE
TITLE DATE --

President,
Chief
Executive /s/
HASSAN M.
AHMED Officer
and Director

(Principal
Executive
March 27,
2002 Hassan
M. Ahmed
Officer)
Chief
Financial
Officer, Vice
President of
Finance /s/
STEPHEN J.
NILL and
Administration
and -----

Treasurer
(Principal
March 27,
2002 Stephen
J. Nill
Financial and
Accounting
Officer) /s/
RUBIN GRUBER

----- Chairman
of the Board
of March 27,
2002 Ruben
Gruber
Directors and
Director /s/
EDWARD T.
ANDERSON -----

----- Director
March 27,
2002 Edward
T. Anderson
/s/ PAUL J.
FERRI -----

Director
March 27,
2002 Paul J.
Ferri /s/
PAUL J.

SEVERINO ----

Director
March 27,
2002 Paul J.
Severino

38

SONUS NETWORKS, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

PAGE ---- Report of Independent Public
Accountants..... F-2
Consolidated Balance
Sheets.....
F-3 Consolidated Statements of
Operations..... F-4
Consolidated Statements of Redeemable
Convertible Preferred Stock and
Stockholders' Equity
(Deficit)..... F-5
Consolidated Statements of Cash
Flows..... F-6 Notes
to Consolidated Financial
Statements..... F-7

F-1

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Board of Directors and Stockholders of
Sonus Networks, Inc.:

We have audited the accompanying consolidated balance sheets of Sonus Networks, Inc. (a Delaware corporation) as of December 31, 2001 and 2000 and the related consolidated statements of operations, redeemable convertible preferred stock and stockholders' equity (deficit) and cash flows for the years ended December 31, 2001, 2000 and 1999. These consolidated financial statements are the responsibility of the Sonus Networks, Inc. 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 financial position of Sonus Networks, Inc. as of December 31, 2001 and 2000, and the results of its operations and its cash flows for the years ended December 31, 2001, 2000 and 1999 in conformity with accounting principles generally accepted in the United States.

Arthur Andersen LLP

Boston, Massachusetts
January 14, 2002 (except with respect
to the matters discussed in Note 17,
as to which the date is March 5, 2002)

F-2

SONUS NETWORKS, INC.

CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS, EXCEPT SHARE DATA)

DECEMBER 31, -----	2001	2000	-----
--- ASSETS			
CURRENT ASSETS: Cash and cash equivalents.....	\$ 49,123	\$	
87,108 Marketable securities.....		75,944	
54,957 Accounts receivable, net of allowances.....	9,440	14,100	
Inventories.....			

18,865 20,668 Other current
 assets..... 2,952 2,893
 ----- Total current
 assets..... 156,324 179,726
 PROPERTY AND EQUIPMENT, net of accumulated depreciation
 and
 amortization.....
 23,335 14,273 GOODWILL AND PURCHASED INTANGIBLES, net of
 accumulated
 amortization.....
 4,536 -- OTHER ASSETS, net of accumulated amortization of
 \$930 and \$585 at December 31, 2001 and 2000,
 respectively..... 689 836 ----- \$184,884
 \$194,835 ===== LIABILITIES AND STOCKHOLDERS'
 EQUITY CURRENT LIABILITIES: Accounts
 payable..... \$ 8,630
 \$ 13,439 Accrued
 expenses..... 27,671
 16,239 Accrued restructuring
 expenses..... 8,596 -- Deferred
 revenue..... 13,349
 14,451 Current portion of long-term
 obligations..... 1,055 -----
 Total current liabilities.....
 59,301 44,129 LONG-TERM OBLIGATIONS, less current
 portion..... 12,698 -- CONVERTIBLE
 SUBORDINATED NOTES..... 10,000 -
 - COMMITMENTS AND CONTINGENCIES (Note
 11)..... STOCKHOLDERS' EQUITY: Preferred
 stock, \$0.01 par value; 5,000,000 shares authorized, none
 issued and outstanding..... -- -- Common
 stock, \$0.001 par value; 600,000,000 shares authorized,
 205,181,085 and 184,244,474 shares issued and 204,167,335
 and 183,471,974 shares outstanding at December 31, 2001
 and 2000, respectively..... 205 184 Capital in
 excess of par value..... 860,883
 266,488 Accumulated
 deficit..... (729,398)
 (83,966) Stock subscriptions
 receivable..... -- (238) Deferred
 compensation.....
 (28,721) (31,697) Treasury stock, at cost; 1,013,750 and
 772,500 common shares at December 31, 2001 and 2000,
 respectively..... (84) (65) ----- Total
 stockholders' equity..... 102,885
 150,706 ----- \$184,884 \$194,835 =====
 =====

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS.

F-3

SONUS NETWORKS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(IN THOUSANDS, EXCEPT PER SHARE DATA)

YEAR ENDED DECEMBER 31, -----
 2001 2000 1999 -----
 REVENUES.....
 \$ 173,199 \$ 51,770 \$ -- Cost of revenues
 (1)..... 75,698 27,848
 1,861 ----- GROSS PROFIT
 (LOSS)..... 97,501
 23,922 (1,861) OPERATING EXPENSES: Research and development
 (1)..... 65,004 26,430 10,780
 Sales and marketing (1).....
 42,267 21,569 5,606 General and administrative
 (1)..... 13,068 5,477 1,723 Stock-
 based compensation..... 75,500
 26,729 4,404 Amortization of goodwill and purchased
 intangibles..... 107,759 -- -- Write-off of goodwill and
 purchased intangibles..... 374,735 -- --
 Restructuring charges.....
 25,807 -- -- In-process research and
 development..... 43,800 -- --
 ----- Total operating
 expenses..... 747,940 80,205
 22,513 ----- LOSS FROM
 OPERATIONS.....
 (650,439) (56,283) (24,374) Interest
 expense..... (567)
 (209) (224) Interest
 income..... 5,574
 6,454 711 ----- NET
 LOSS.....
 (645,432) (50,038) (23,887) Beneficial conversion feature
 of Series C preferred stock... -- -- (2,500) -----
 ----- NET LOSS APPLICABLE TO COMMON
 STOCKHOLDERS..... \$(645,432) \$(50,038)
 \$(26,387) ===== NET LOSS PER SHARE

(NOTE 1 (0)): Basic and

diluted.....	\$ (3.74)	\$
(0.52) \$ (1.84) =====	=====	Pro forma basic
and diluted.....	\$ (0.37)	\$
(0.25) =====	=====	SHARES USED IN COMPUTING NET LOSS
PER SHARE (NOTE 1 (0)): Basic and		
diluted.....	172,382	
95,877 14,324 =====	=====	Pro forma basic
and diluted.....	135,057 96,188	
=====	-----	(1) Excludes
non-cash, stock-based compensation expense as follows: Cost		
of revenues.....	\$ 1,328	
	\$ 404 \$ 92	Research and
development.....	43,553 11,428	
	1,537	Sales and
marketing.....	18,300	
	12,051 2,104	General and
administrative.....	12,319 2,846	
671 -----	\$ 75,500 \$ 26,729 \$ 4,404	
	=====	=====

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS.

F-4

SONUS NETWORKS, INC.

CONSOLIDATED STATEMENTS OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)

(IN THOUSANDS, EXCEPT SHARE DATA)

	REDEEMABLE CONVERTIBLE PREFERRED STOCK		COMMON STOCK		CAPITAL IN EXCESS OF PAR VALUE
	SHARES	REDEMPTION VALUE	SHARES	PAR VALUE	
BALANCE, DECEMBER 31, 1998.....	10,334,287	\$22,951	49,570,059	\$ 50	\$ 556
Issuance of Series B preferred stock and issuance costs of \$9.....	50,000	250	--	--	--
Issuance of Series C preferred stock and issuance costs of \$40.....	1,939,681	22,908	--	--	--
Beneficial conversion feature of Series C preferred stock.....	--	--	--	--	2,500
Payments on subscriptions receivable.....	--	--	--	--	--
Issuance of common stock to employees, officers and a director.....	--	--	15,230,612	15	1,488
Exercise of stock options.....	--	--	710,250	1	15
Compensation associated with the grant of stock options and sale of restricted stock to non-employees.....	--	--	--	--	149
Deferred compensation related to stock option grants and sale of restricted common stock.....	--	--	--	--	20,859
Amortization of deferred compensation.....	--	--	--	--	--
Net loss.....	--	--	--	--	--
BALANCE, DECEMBER 31, 1999.....	12,323,968	46,109	65,510,921	66	25,567
Issuance of Series D preferred stock and issuance costs of \$46.....	1,509,154	24,750	--	--	--
Issuance of common stock to public, net of issuance costs of \$10,545.....	--	--	17,250,000	17	121,688
Payments on subscriptions receivable.....	--	--	--	--	--
Issuance of common stock to employees.....	--	--	3,870,676	4	6,421
Conversion of preferred stock to common stock.....	(13,833,122)	(70,859)	96,957,222	97	70,762
Exercise of stock options.....	--	--	655,655	--	228
Repurchase of common stock.....	--	--	--	--	--
Compensation associated with the grant of stock options and sale of restricted stock to non-employees.....	--	--	--	--	2,389
Deferred compensation related to stock option grants and sale of restricted common stock.....	--	--	--	--	39,433
Amortization of deferred compensation.....	--	--	--	--	--
Net loss.....	--	--	--	--	--
BALANCE, DECEMBER 31, 2000.....	--	--	184,244,474	184	266,488
Issuance of common stock in connection with employee stock purchase program.....	--	--	1,021,333	1	7,865
Issuance of common stock in connection with acquisition of TELECOM TECHNOLOGIES, INC. (TTI) (Note 3).....	--	--	15,000,000	15	504,998
Issuance of common stock in connection with acquisition of certain assets of LINGUATEQ, INC. (Note 4).....	--	--	221,753	--	4,995
Issuance of restricted stock awards in connection with acquisition of TTI (Note 3).....	--	--	3,000,000	3	55,193
Deferred compensation related to unvested stock options assumed in connection with acquisition of TTI (Note 3).....	--	--	--	--	22,600
Exercise of stock options.....	--	--	1,693,525	2	4,016
Amortization of deferred compensation.....	--	--	--	--	--
Deferred compensation for terminated employees (Note 2).....	--	--	--	--	(5,272)
Payment on subscriptions receivable.....	--	--	--	--	--
Repurchase of common stock.....	--	--	--	--	--

Net loss.....	--	--	--	--	--
BALANCE, DECEMBER 31, 2001.....	--	\$ --	205,181,085	\$205	\$860,883

	ACCUMULATED DEFICIT	STOCK SUBSCRIPTIONS RECEIVABLE	DEFERRED COMPENSATION	TREASURY STOCK SHARES	TREASURY STOCK COST
BALANCE, DECEMBER 31, 1998.....	\$ (7,446)	\$ (257)	\$ --	--	\$ --
Issuance of Series B preferred stock and issuance costs of \$9.....	(9)	--	--	--	--
Issuance of Series C preferred stock and issuance costs of \$40.....	(40)	--	--	--	--
Beneficial conversion feature of Series C preferred stock.....	(2,500)	--	--	--	--
Payments on subscriptions receivable.....	--	21	--	--	--
Issuance of common stock to employees, officers and a director.....	--	(110)	--	--	--
Exercise of stock options.....	--	--	--	--	--
Compensation associated with the grant of stock options and sale of restricted stock to non-employees.....	--	--	--	--	--
Deferred compensation related to stock option grants and sale of restricted common stock.....	--	--	(20,859)	--	--
Amortization of deferred compensation.....	--	--	4,255	--	--
Net loss.....	(23,887)	--	--	--	--
BALANCE, DECEMBER 31, 1999.....	(33,882)	(346)	(16,604)	--	--
Issuance of Series D preferred stock and issuance costs of \$46.....	(46)	--	--	--	--
Issuance of common stock to public, net of issuance costs of \$10,545.....	--	--	--	--	--
Payments on subscriptions receivable.....	--	108	--	--	--
Issuance of common stock to employees.....	--	--	--	--	--
Conversion of preferred stock to common stock.....	--	--	--	--	--
Exercise of stock options.....	--	--	--	--	--
Repurchase of common stock.....	--	--	--	772,500	(65)
Compensation associated with the grant of stock options and sale of restricted stock to non-employees.....	--	--	--	--	--
Deferred compensation related to stock option grants and sale of restricted common stock.....	--	--	(39,433)	--	--
Amortization of deferred compensation.....	--	--	24,340	--	--
Net loss.....	(50,038)	--	--	--	--
BALANCE, DECEMBER 31, 2000.....	(83,966)	(238)	(31,697)	772,500	(65)
Issuance of common stock in connection with employee stock purchase program.....	--	--	--	--	--
Issuance of common stock in connection with acquisition of TELECOM TECHNOLOGIES, INC. (TTI) (Note 3).....	--	--	--	--	--
Issuance of common stock in connection with acquisition of certain assets of LINGUATEQ, INC. (Note 4).....	--	--	--	--	--
Issuance of restricted stock awards in connection with acquisition of TTI (Note 3).....	--	--	(55,196)	--	--
Deferred compensation related to unvested stock options assumed in connection with acquisition of TTI (Note 3).....	--	--	(22,600)	--	--
Exercise of stock options.....	--	--	--	--	--
Amortization of deferred compensation.....	--	--	50,071	--	--
Deferred compensation for terminated employees (Note 2).....	--	--	30,701	--	--
Payment on subscriptions receivable.....	--	238	--	--	--
Repurchase of common stock.....	--	--	--	241,250	(19)
Net loss.....	(645,432)	--	--	--	--
BALANCE, DECEMBER 31, 2001.....	\$(729,398)	\$ --	\$(28,721)	1,013,750	\$(84)

	TOTAL STOCKHOLDERS' EQUITY (DEFICIT)
BALANCE, DECEMBER 31, 1998.....	\$ (7,097)
Issuance of Series B preferred stock and issuance costs of \$9.....	(9)
Issuance of Series C preferred stock and issuance costs of \$40.....	(40)
Beneficial conversion feature of Series C preferred stock.....	--
Payments on subscriptions receivable.....	21
Issuance of common stock to employees, officers and a director.....	1,393
Exercise of stock options.....	16
Compensation associated with the grant of stock options and sale of restricted stock to non-employees.....	149
Deferred compensation related to stock option grants and sale of restricted common stock.....	--
Amortization of deferred compensation.....	4,255
Net loss.....	(23,887)
BALANCE, DECEMBER 31, 1999.....	(25,199)
Issuance of Series D preferred stock and issuance costs	

of \$46.....	(46)
Issuance of common stock to public, net of issuance costs of \$10,545.....	121,705
Payments on subscriptions receivable.....	108
Issuance of common stock to employees.....	6,425
Conversion of preferred stock to common stock.....	70,859
Exercise of stock options.....	228
Repurchase of common stock.....	(65)
Compensation associated with the grant of stock options and sale of restricted stock to non-employees.....	2,389
Deferred compensation related to stock option grants and sale of restricted common stock.....	--
Amortization of deferred compensation.....	24,340
Net loss.....	(50,038)

BALANCE, DECEMBER 31, 2000.....	150,706
Issuance of common stock in connection with employee stock purchase program.....	7,866
Issuance of common stock in connection with acquisition of TELECOM TECHNOLOGIES, INC. (TTI) (Note 3).....	505,013
Issuance of common stock in connection with acquisition of certain assets of LINGUATEQ, INC. (Note 4).....	4,995
Issuance of restricted stock awards in connection with acquisition of TTI (Note 3).....	--
Deferred compensation related to unvested stock options assumed in connection with acquisition of TTI (Note 3).....	--
Exercise of stock options.....	4,018
Amortization of deferred compensation.....	50,071
Deferred compensation for terminated employees (Note 2).....	25,429
Payment on subscriptions receivable.....	238
Repurchase of common stock.....	(19)
Net loss.....	(645,432)

BALANCE, DECEMBER 31, 2001.....	\$102,885
	=====

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS.

F-5

SONUS NETWORKS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(IN THOUSANDS)

YEAR ENDED DECEMBER 31, -----			
- 2001 2000 1999 -----			CASH
FLOWS FROM OPERATING ACTIVITIES: Net			
loss.....	\$ (645,432)	\$ (50,038)	\$ (23,887)
Adjustments to reconcile net loss to net cash used in operating activities: Depreciation and amortization.....	15,189	5,112	
1,632 Stock-based			
compensation.....	75,500		
26,729 4,404 Amortization of goodwill and purchased intangibles.....	107,759	--	--
and purchased intangibles.....	374,735	--	--
43,800 -- -- Changes in current assets and liabilities: Accounts receivable.....	8,666	(14,100)	--
Inventories.....	2,284	(18,458)	(2,210)
Other current assets.....	1,081	(2,595)	
(136) Accounts payable.....	(5,665)		
12,027 990 Accrued expenses.....	27,659		
13,548 2,201 Deferred revenue.....	(6,781)		
13,420 1,031 ----- Net cash used in operating activities.....	(1,205)	(14,355)	
(15,975) ----- CASH FLOWS FROM INVESTING ACTIVITIES: Purchases of property and equipment.....	(23,050)	(14,832)	
(4,151) Maturities of marketable securities.....	42,416	32,262	22,020
Purchases of marketable securities.....	(63,403)	(72,538)	
(23,784) Other assets.....			
(194) (681) (436) Acquisitions, net of cash acquired.....	(6,125)	--	--
----- Net cash used in investing activities.....	(50,356)	(55,789)	(6,351)
----- CASH FLOWS FROM FINANCING ACTIVITIES: Net proceeds from sale of common stock.....	7,866	128,130	1,393
Proceeds			

from exercise of stock options.....	4,018
228 16 Net proceeds from issuance of redeemable convertible preferred stock.....	--
24,704 23,109 Payment of stock subscriptions receivable.....	238 108 21
Proceeds from long-term obligations.....	-- 405
3,609 Payments of long-term obligations.....	(527) (5,143)
(521) Payment of note payable to bank.....	(8,000) -- --
Proceeds from issuance of convertible subordinated notes.....	10,000 -- --
Repurchase of common stock.....	(19) (65) --
----- Net cash provided by financing activities.....	13,576 148,367 27,627
----- NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS.....	(37,985) 78,223 5,301
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR.....	87,108 8,885 3,584
----- CASH AND CASH EQUIVALENTS, END OF YEAR.....	\$ 49,123 \$ 87,108 \$ 8,885

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS.

F-6

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES

Sonus Networks, Inc. (Sonus) was incorporated on August 7, 1997 and is a leading provider of voice infrastructure products for the new public network. Sonus offers a new generation of carrier-class switching equipment and software that enable voice services to be delivered over packet-based networks.

Sonus is subject to risks common to technology-based companies including, but not limited to, the development of new technology, development of markets and distribution channels, dependence on key personnel and the ability to obtain additional capital as needed to meet its business plan. Sonus has a limited operating history and has incurred significant operating losses since inception.

The accompanying consolidated financial statements reflect the application of certain significant accounting policies as described in this note and elsewhere in the accompanying consolidated financial statements and notes.

(A) PRINCIPLES OF CONSOLIDATION

The accompanying consolidated financial statements include the accounts of Sonus and its wholly owned subsidiaries. All material intercompany transactions and balances have been eliminated.

(B) CASH EQUIVALENTS AND MARKETABLE SECURITIES

Cash equivalents are stated at cost plus accrued interest, which approximates market value, and have maturities of three months or less at the date of purchase.

Marketable securities are classified as held-to-maturity, as Sonus has the intent and ability to hold to maturity. Marketable securities are reported at amortized cost. Cash equivalents and marketable securities are invested in high quality credit instruments, primarily U.S. Government obligations and corporate obligations with contractual maturities of less than one year. There have been no gains or losses to date.

(C) CONCENTRATIONS OF CREDIT AND OFF-BALANCE SHEET RISK, SIGNIFICANT CUSTOMERS AND LIMITED SUPPLIERS

The financial instruments that potentially subject Sonus to concentrations of credit risk are cash, cash equivalents, marketable securities and receivables. Sonus has no off-balance-sheet concentrations such as foreign exchange contracts, options contracts or other foreign hedging arrangements. Sonus' cash and cash equivalent holdings are diversified between four financial institutions.

For the years ended December 31, 2001 and 2000, four and three customers, each of whom contributed more than 10% of revenues, accounted for an aggregate of 67% and 70% of revenues. As of December 31, 2001 and 2000, four and two customers each accounted for an aggregate of 69% and 80% of Sonus' accounts receivable balance. International revenues, primarily to Asia and Europe, were 18% and 11% of revenues for the year ended December 31, 2001 and 2000. Certain components and software licenses from third-parties used in Sonus' products are procured from a single source. The failure of a supplier, including a subcontractor, to deliver on schedule could delay or interrupt Sonus' delivery of products and thereby adversely affect Sonus' revenues and operating results.

(D) INVENTORIES

Inventories are stated at the lower of cost (first-in, first-out basis) or

market. Sonus provides inventory allowances based on excess and obsolete inventories.

F-7

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(E) PROPERTY AND EQUIPMENT

Property and equipment are stated at cost, net of accumulated depreciation and amortization. Expenditures for maintenance and repairs are charged to expense as incurred, whereas major betterments are capitalized as additions to property and equipment. Sonus provides for depreciation and amortization using the straight-line method and charges to operations amounts estimated to allocate the cost of the assets over their estimated useful lives.

(F) GOODWILL AND PURCHASED INTANGIBLES

Goodwill and purchased intangibles are being amortized over two and three year periods (Notes 1(p), 3 and 4). Statement of Financial Accounting Standards (SFAS) No. 121, ACCOUNTING FOR THE IMPAIRMENT OF LONG-LIVED ASSETS AND FOR LONG-LIVED ASSETS TO BE DISPOSED OF, requires that long-lived assets, goodwill and other intangibles be reviewed for impairment whenever circumstances indicate that the carrying value of an asset may not be recoverable. The carrying value of long-lived assets, goodwill and other intangibles are considered impaired when the estimated undiscounted future cash flow from such assets is less than the carrying value (Note 2).

(G) OTHER ASSETS

Other assets include licenses for certain technology embedded in Sonus' products. These licenses are amortized over the lesser of their useful lives or the term of the license.

(H) REVENUE RECOGNITION

Sonus recognizes revenue from product sales to end users, resellers and distributors upon shipment, provided there are no uncertainties regarding acceptance, persuasive evidence of an arrangement exists, the sales price is fixed or determinable and collection of the related receivable is probable. If uncertainties exist, Sonus recognizes revenue when those uncertainties are resolved. In multiple element arrangements, in accordance with Statement of Position 97-2 and 98-9, Sonus uses the residual method when vendor-specific objective evidence does not exist for one of the delivered elements in the arrangement. Service revenue is recognized as the services are provided. Revenue from maintenance and support arrangements is recognized ratably over the term of the contract. Amounts collected prior to satisfying the revenue recognition criteria are reflected as deferred revenue. Warranty costs are estimated and recorded by Sonus at the time of product revenue recognition.

In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101, REVENUE RECOGNITION IN FINANCIAL STATEMENTS. This bulletin established guidelines for revenue recognition. Sonus' revenue recognition policy complies with this pronouncement.

(I) SOFTWARE DEVELOPMENT COSTS

Sonus accounts for its software development costs in accordance with SFAS No. 86, ACCOUNTING FOR THE COSTS OF COMPUTER SOFTWARE TO BE SOLD, LEASED OR OTHERWISE MARKETED. Accordingly, the costs for the development of new software and substantial enhancements to existing software are expensed as incurred until technological feasibility has been established, at which time any additional costs would be capitalized. Sonus has determined that technological feasibility is established at the time a working model of the software is completed. Because Sonus believes its current process for developing software is essentially completed concurrently with the establishment of technological feasibility, no costs have been capitalized to date.

F-8

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(J) STOCK-BASED COMPENSATION

Sonus uses the intrinsic value-based method of Accounting Principles Board (APB) Opinion No. 25, ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES, to account for all of its employee stock-based compensation plans and uses the fair value method to account for all non-employee stock-based compensation.

(K) COMPREHENSIVE LOSS

Sonus applies Financial Accounting Standards Board (FASB) SFAS No. 130, REPORTING COMPREHENSIVE INCOME. The comprehensive loss for the years ended December 31, 2001, 2000 and 1999 does not differ from the reported loss.

(L) FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying amounts of Sonus' financial instruments, which include cash equivalents, marketable securities, accounts payable, accrued expenses, long-term obligations and the convertible subordinated note, approximate their

fair value.

(M) USE OF ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

(N) DISCLOSURES ABOUT SEGMENTS OF AN ENTERPRISE

SFAS No. 131, DISCLOSURES ABOUT SEGMENTS OF AN ENTERPRISE AND RELATED INFORMATION, established standards for reporting information regarding operating segments and established standards for related disclosures about products and services and geographic areas. Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision making group, in making decisions regarding resource allocation and assessing performance. To date, Sonus has viewed its operations and manages its business as principally one operating segment.

(O) NET LOSS PER SHARE

Basic net loss per share is computed by dividing the net loss for the year by the weighted average number of shares of unrestricted common stock outstanding during the year. Diluted net loss per share is computed by dividing the net loss for the year by the weighted average number of shares of unrestricted common stock and potential common stock outstanding during the year, if dilutive. Potential common stock consists of restricted shares of common stock, shares of common stock issuable upon the exercise of stock options, conversion of convertible subordinated notes and shares of common stock issued in connection with our acquisition of telecom technologies, inc. (TTI) subject to the achievement of milestones and employee retention (Notes 3 and 13(g)). For both basic and diluted net loss per share, shares of common stock issuable upon the conversion of Sonus' redeemable convertible preferred stock have been excluded from the date of issuance until conversion into common stock. There were no dilutive shares of potential common stock for the years ended December 31, 2001, 2000 and 1999 as Sonus incurred a net loss in each year.

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Pro forma basic and diluted net loss per share for the years ended December 31, 2000 and 1999 is computed using the weighted average number of unrestricted common shares outstanding, including the pro forma effects of the automatic conversion of Sonus' Series A, B, C and D redeemable convertible preferred stock into shares of Sonus' common stock which occurred upon the closing of Sonus' initial public offering (IPO), as if such conversion occurred at the date of original issuance.

The following table sets forth the computation of basic and diluted net loss per share and pro forma basic and diluted net loss per share:

YEAR ENDED DECEMBER 31, -----				
----- 2001 2000 1999 -----				
(IN THOUSANDS, EXCEPT PER SHARE DATA) HISTORICAL-- Net				
loss applicable to common stockholders.....				
\$ (645,432) \$ (50,038) \$ (26,387) =====				
===== Weighted average common shares				
outstanding.....	198,068	135,364	57,460	Less
weighted average restricted common shares				
outstanding.....	(25,686)	(39,487)	(43,136)	-----
Shares used in computing basic and diluted net loss per				
share.....	172,382	95,877	14,324	=====
Basic				
and diluted net loss per share..... \$	(3.74)	\$ (0.52)	\$ (1.84)	=====
PRO FORMA-- Net				
loss.....	\$ (50,038)	\$ (23,887)		=====
Shares used in				
computing historical basic and diluted net loss per				
share.....	95,877			
14,324 Weighted average number of common shares assumed				
to be issued upon conversion of redeemable convertible				
preferred				
stock.....	39,180			
81,864 -----				
Shares used in computing pro				
forma basic and diluted net loss per				
share.....	135,057			
96,188 =====				
Pro forma basic and diluted				
net loss per share..... \$ (0.37) \$ (0.25)				
=====				

Excluded from the computation of diluted net loss per share in the above table are options to purchase shares of common stock and shares of common stock issuable upon conversion of convertible subordinated notes representing an aggregate of 20,615,955, 17,725,526, and 3,052,743, for the years ended

December 31, 2001, 2000 and 1999, as their effects would have been anti-dilutive. Had Sonus recorded net income for the year ended December 31, 2001 and used the treasury stock method in accordance with SFAS No. 128, EARNINGS PER SHARE, approximately 210,000,000 weighted average shares of common stock would have been used in the computation of diluted earnings per share.

(P) RECENT ACCOUNTING PRONOUNCEMENTS

In June 2001, the FASB issued SFAS No. 141, BUSINESS COMBINATIONS, and SFAS No. 142, GOODWILL AND OTHER INTANGIBLE ASSETS. SFAS No. 141 requires that all business combinations initiated after June 30, 2001 be accounted for using the purchase method of accounting and prohibits the use of the pooling of interest method. SFAS No. 142 eliminates the amortization of goodwill and certain other intangibles with indefinite lives and instead subjects these assets to periodic impairment assessments. SFAS No. 142 is effective immediately for all goodwill and certain other intangible assets acquired after June 30, 2001 and shall commence on January 1, 2002 for all goodwill and certain other intangibles existing on June 30, 2001. Sonus has adopted SFAS No. 141 and is currently assessing the potential impact SFAS No. 142 will have on its consolidated financial statements.

F-10

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

In August 2001, the FASB issued SFAS No. 144, ACCOUNTING FOR THE IMPAIRMENT OR DISPOSAL OF LONG-LIVED ASSETS, which supersedes SFAS No. 121, and the accounting and reporting provisions of APB No. 30, REPORTING THE RESULTS OF OPERATIONS--REPORTING THE EFFECTS OF DISPOSAL OF A SEGMENT OF A BUSINESS, AND EXTRAORDINARY, UNUSUAL AND INFREQUENTLY OCCURRING EVENTS AND TRANSACTIONS. SFAS No. 144 addresses financial accounting and reporting for the impairment or disposal of long-lived assets and is effective for fiscal years beginning after December 15, 2001, and interim periods within those fiscal years. Sonus is currently reviewing this statement to determine the effect on its consolidated financial statements.

(2) RESTRUCTURING CHARGES AND WRITE-OFF OF GOODWILL AND PURCHASED INTANGIBLES

In September 2001, in response to unfavorable business conditions primarily caused by declines in capital spending by telecommunications service providers, Sonus announced a restructuring plan designed to reduce expenses and align its cost structure with its revised business outlook. The restructuring plan includes a worldwide workforce reduction, consolidation of excess facilities and other charges. Additionally, Sonus recorded a write-off of goodwill and purchased intangibles related to the acquisition of TTI (Note 3). Sonus' restructuring related reserves as of December 31, 2001 are summarized as follows, in thousands:

INITIAL RESTRUCTURING ACCRUAL	CURRENT	LONG-TERM	CHARGES	PAYMENTS	BALANCE	LONG-TERM PORTION
PORTION						
						Workforce
reduction.....					\$ 4,506	
\$3,635	\$ 871	\$ 871	\$ --			Consolidation of facilities and other charges.....
21,301	1,116	20,185	7,725	12,460		
Total.....					\$25,807	\$4,751
					\$21,056	\$8,596
					\$12,460	

Remaining cash expenditures relating to the workforce reductions are expected to be substantially paid in the first quarter of fiscal 2002. In March 2002, Sonus completed a lease renegotiation for certain excess space and expects to record a restructuring benefit in the first quarter of fiscal 2002 (Note 17(b)). The remaining amounts related to the net lease expense due to the consolidation of excess facilities and other miscellaneous charges will be paid through May 2004.

(A) WORKFORCE REDUCTION

The restructuring actions in September 2001 resulted in the reduction of Sonus' workforce by approximately 150 employees, or 21%. The affected employees were entitled to severance and other benefits for which Sonus recorded a charge of \$4,506,000 in fiscal 2001. In addition in fiscal 2001, Sonus recorded non-cash stock-based compensation expense of \$25,429,000 related to the write-off of deferred compensation associated with shares and options held by terminated employees.

(B) CONSOLIDATION OF EXCESS FACILITIES AND OTHER CHARGES

The Company recorded a restructuring charge in fiscal 2001 of \$21,301,000 for the consolidation of excess facilities and other miscellaneous charges, which are included on the balance sheet in accrued restructuring expenses and long-term obligations. The accrual for the consolidation of excess facilities was determined assuming no sub-lease income.

(C) WRITE-OFF OF GOODWILL AND PURCHASED INTANGIBLES

In light of negative industry and economic conditions, a general decline in

technology valuations and our decision to discontinue the development and use of certain acquired technology, we performed an assessment of the carrying value of the goodwill and purchased intangibles recorded in connection with our acquisition of TTI. In accordance with SFAS No. 121, Sonus recorded a non-cash impairment charge of \$374,735,000 in fiscal 2001 for the write-off of goodwill and certain purchased intangibles because the estimated undiscounted future cash flows of these assets was less than the carrying value.

F-11

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(3) ACQUISITION OF TELECOM TECHNOLOGIES, INC.

In January 2001, Sonus acquired privately-held TTI. Upon the closing of this acquisition, an aggregate of 10,800,000 shares of Sonus common stock (Merger Shares) were exchanged for all outstanding shares of TTI common stock. Of the 10,800,000 shares issued to the TTI stockholders, 1,200,000 shares were placed into escrow as security for indemnity obligations which were released to TTI stockholders on January 18, 2002. In addition to the Merger Shares, the TTI stockholders received in fiscal 2001, 4,200,000 additional shares of Sonus common stock upon the achievement of certain specified business expansion and product development milestones. Sonus has also issued contingent awards of 3,000,000 shares of common stock under the 2000 Retention Plan to certain former TTI employees (Note 13 (g)).

The acquisition of TTI was accounted for using the purchase method of accounting in accordance with APB Opinion No. 16, BUSINESS COMBINATIONS. Accordingly, the total purchase price was allocated to the assets acquired and liabilities assumed based upon their estimated fair values. The purchase price was determined by using the average market value of Sonus common stock for the period from two days before to two days after the announcement of the TTI acquisition (\$41.61 per share) to value the 10,800,000 Sonus common shares issued to the TTI stockholders at the closing date and adding the fair value of liabilities assumed and expenses of the acquisition. Additionally, since the closing date, the purchase price has been increased as the 4,200,000 shares of common stock which were subject to milestone conditions were earned. As of December 31, 2001, the purchase price has been computed as follows, in thousands:

Fair market value of shares issued.....	\$527,613
Liabilities assumed.....	21,184
Acquisition expenses.....	5,833

	\$554,630
	=====

In accordance with APB Opinion No. 16 and with the assistance of valuation experts, the purchase price was allocated to the tangible and intangible assets acquired based upon their fair values as follows, in thousands:

Tangible assets.....	\$ 8,296
Intangible assets:	
Workforce, developed technology and customer list.....	32,300
In-process research and development.....	40,000
Deferred compensation related to unvested stock options...	22,600
Goodwill.....	451,434

	\$554,630
	=====

Sonus engaged third-party appraisers to conduct a valuation of the tangible and intangible assets and to assist in the determination of the useful lives for such assets. Based on the results of the appraisal, \$40,000,000 was allocated to in-process research and development, which was expensed in fiscal 2001. The amounts allocated to developed technology, customer list, assembled workforce and goodwill have been amortized over their estimated useful lives of three years. During the year ended December 31, 2001, amortization of goodwill and purchased intangibles for the TTI acquisition was \$107,592,000. In fiscal 2001, Sonus recorded a non-cash impairment charge of \$374,735,000 for the write-off of TTI goodwill and certain purchased intangibles (Note 2). Deferred compensation was computed based on the intrinsic value of the unvested TTI stock options assumed by Sonus and is being expensed over the remaining vesting period of up to four years.

F-12

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The valuation of in-process research and development was determined using the income method. Revenue and expense projections for the in-process development project were prepared by the management of Sonus through 2008 and the present value was computed using a discount rate of 22.5%. In the event that the project is not completed and technological feasibility is not achieved,

there is no alternative future use for the in-process technology. The assumptions used for the valuation of in-process research and development are the responsibility of management.

PRO FORMA INFORMATION

The following unaudited pro forma information presents a summary of the consolidated results of operations of Sonus and TTI as if the acquisition had occurred on January 1, 2001 and 2000. The pro forma adjustments exclude the one-time write-off of TTI in-process research and development.

YEAR ENDED DECEMBER 31, -----	2001	2000
-----	-----	-----
(IN THOUSANDS, EXCEPT PER SHARE DATA)		
Revenues.....	\$ 173,533	\$ 80,401
loss.....	(607,011)	(255,420)
loss per share.....	\$ (3.51)	\$ (2.34)
Pro forma basic and diluted net loss per share.....	(1.72)	

The pro forma results are not necessarily indicative of what would have occurred if the acquisition had been in effect for the years presented. In addition, they are not intended to be a projection of future results and do not reflect any synergies from combining operations.

(4) ACQUISITION OF CERTAIN ASSETS OF LINGUATEQ, INC.

In July 2001, Sonus completed the acquisition of certain intellectual property and other assets of privately-held Linguateq Incorporated. Linguateq was a provider of data distribution and billing application software for both next generation and legacy networks. The acquisition of certain intellectual property and other assets was accounted for using the purchase method of accounting in accordance with SFAS No. 141. The purchase price has been determined by using the average market value of Sonus common stock for the period from two days before to two days after the terms were agreed upon for the acquisition (\$22.53 per share) to value the 221,753 Sonus common shares issued to the Linguateq stockholders at the closing date and adding payments to employees and vendors and expenses of the acquisition. As of December 31, 2001, the purchase price has been computed as follows, in thousands:

Fair market value of shares issued.....	\$4,995
Payments to employees and vendors.....	241
Acquisition expenses.....	141

	\$5,377
	=====

In accordance with SFAS No. 142, and with the assistance of valuation experts, the purchase price was allocated to the intangible assets acquired based upon their fair values as follows, in thousands:

Intangible assets:	
Developed technology and customer list.....	\$ 700
In-process research and development.....	3,800
Goodwill.....	877

	\$5,377
	=====

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Sonus engaged third-party appraisers to conduct a valuation of the intangible assets and to assist in the determination of useful lives for such assets. Based on the results of the appraisal, \$3,800,000 was allocated to in-process research and development, which was expensed in fiscal 2001. The amounts allocated to developed technology and customer list are being amortized over their estimated useful lives of up to two years. During the year ended December 31, 2001, amortization of purchased intangibles for Linguateq was \$167,000.

The valuation of in-process research and development was determined using the income method. Revenue and expense projections for the in-process development project were prepared by the management of Sonus through 2007 and the present value was computed using a discount rate of 25.0%. In the event that the project is not completed and technological feasibility is not achieved, there is no alternative future use for the in-process technology. The assumptions used for the valuation of in-process research and development are the responsibility of management.

Pro forma information related to the consolidated results of operations of Sonus and LinguatEQ were not material for 2001 and 2000.

(5) INVENTORIES

Inventories consist of the following, in thousands:

DECEMBER 31, -----	2001	2000	-----	---
	----- Raw			
materials.....	\$ 4,899	\$ 3,082	Work in	
progress.....	525	3,021	Finished	
goods.....				
13,441	14,565	-----	\$18,865	\$20,668
		=====		=====

(6) PROPERTY AND EQUIPMENT

Property and equipment consist of the following, in thousands:

DECEMBER 31, ESTIMATED -----	
USEFUL LIFE 2001 2000 -----	
----- Equipment and	
software.....	2-3 years
\$ 41,723	\$19,805
fixtures.....	3-5 years
579	342
improvements.....	Life
of lease 2,514	760
20,907	Less accumulated depreciation and
amortization.....	
(21,481)	(6,634)
\$14,273	=====
	=====

F-14

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(7) OTHER BALANCE SHEET DATA

(A) ACCRUED EXPENSES

Accrued expenses consist of the following, in thousands:

DECEMBER 31, -----	2001	2000	-----	-----
	----- Employee compensation and related			
costs.....	\$ 5,830	\$ 3,121	Employee stock	
purchase plan.....			3,351	3,108
	Professional			
fees.....	2,094	817		
Royalties.....	3,582	3,613		
Warranty.....	4,478	1,543		
Other.....				
8,336	4,037	-----	\$27,671	\$16,239
		=====		=====

(B) ALLOWANCE FOR DOUBTFUL ACCOUNTS

The following table sets forth activity in Sonus' allowance for doubtful accounts, in thousands:

BALANCE AT	CHARGED TO	
CHARGED TO	BALANCE AT	
BEGINNING	COSTS AND OTHER	
END OF YEAR	ENDED DECEMBER	
31:	OF YEAR EXPENSES	
ACCOUNTS	DEDUCTIONS	YEAR -
-----	-----	-----
-----	-----	-----
2001.....		
\$1,000	\$1,622	\$ -- \$ --
	\$2,622	
2000.....		
--	1,000	-- -- 1,000

(8) INCOME TAXES

Sonus provides for income taxes in accordance with SFAS No. 109, ACCOUNTING FOR INCOME TAXES. Deferred tax assets and liabilities are determined based on differences between the financial statement and tax bases of assets and liabilities using enacted tax rates.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts for income tax purposes. A valuation allowance has been

recorded for the net deferred tax asset due to the uncertainty of realizing the benefit of this asset.

The following is a summary of the significant components of Sonus' deferred tax assets and liabilities, in thousands:

DECEMBER 31, -----	2001	2000	-----
--	-----	-----	
carryforwards.....	\$		
37,077	\$	15,924	Tax credit
carryforwards.....			
5,867		1,779	Other temporary
differences.....			
23,179		5,032	Valuation
allowance.....			
(66,123)	(22,735)		\$ -- \$ --
	=====	=====	

As of December 31, 2001, Sonus has net operating loss carryforwards for federal income tax purposes of approximately \$92,800,000, which expire through 2021. Sonus also has available research and development credit carryforwards of approximately \$5,867,000 that expire through 2021. The Internal Revenue Code contains provisions that limit the net operating loss and tax credit carryforwards available to be used in any given year in the event of certain circumstances, including significant changes in ownership interests. Sonus has completed several financings since inception and has incurred ownership changes. Sonus does not believe that these changes will have a material impact on its ability to use its net operating loss and tax credit carryforwards.

F-15

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(9) LONG-TERM OBLIGATIONS

Long-term obligations consist of capital leases and restructuring expenses (Notes 2 and 17(b)). Sonus assumed certain capital leases as part of the acquisition of TTI. The capital leases are due in monthly installments expiring at various dates through March 2005 and accrue interest at annual rates ranging from 4.62% to 14.39%. The future minimum annual payments under capital leases and amounts due for long-term obligations, as of December 31, 2001, are as follows, in thousands:

CAPITAL LEASES:	
2002.....	\$ 640
2003.....	539
2004.....	193
2005.....	30

Total minimum lease payments.....	1,402
Less amount representing interest.....	(109)

Present value of minimum payments.....	1,293
Less current portion of capital leases.....	(1,055)

Long-term portion of capital leases.....	238
RESTRUCTURING EXPENSES:	
Long-term portion of restructuring expenses.....	12,460

Total long-term obligations.....	\$12,698
	=====

(10) CONVERTIBLE SUBORDINATED NOTES

In May 2001, Sonus completed a private placement of an aggregate principal amount of \$10,000,000 of 4.75% convertible subordinated notes, due May 1, 2006, with a customer. Interest payments are due semi-annually on May 1 and November 1 of each year through May 2006. The notes may be converted by the holder into shares of Sonus' common stock at any time before their maturity or prior to their redemption or repurchase by Sonus. The conversion rate is 33.314 shares per each \$1,000 principal amount of notes, subject to adjustment in certain circumstances. After May 1, 2004, Sonus has the option to redeem all or a portion of the notes at 100% of the principal amount. Also, at any time if the market price of Sonus' common stock exceeds \$60.04 per share for twenty trading days in any thirty trading-day period, Sonus may redeem these notes through the issuance of shares of common stock or for cash. In the event of a change of control in Sonus, the holder at its option may require Sonus to redeem the notes through the issuance of common stock or cash. Interest expense related to our convertible subordinated notes was \$317,000 for the year ended December 31, 2001.

(11) COMMITMENTS AND CONTINGENCIES

(A) LEASES

Sonus leases its facilities under operating leases, which expire through December 2008. Rent expense was approximately \$4,146,000, \$1,310,000 and \$537,000 the years ended December 31, 2001, 2000 and 1999. Sonus is responsible

1,509,154
16.40
24,750 ---

14,206,295
13,833,122
\$70,859
=====
=====
=====

The rights, preferences and privileges of the Series A, B, C and D redeemable convertible preferred stock are as follows:

CONVERSION

Each share of Series A, B and C preferred stock was convertible into 7.5 shares of common stock and each share of Series D preferred stock was convertible into three shares of common stock, each adjustable for certain dilutive events. Conversion was at the option of the holder, but became automatic upon the closing of an IPO for the Series A, B and C preferred stock in which at least \$10,000,000 of net proceeds shall be received by Sonus at a price of at least \$2.67 per share and for the Series D preferred stock with at least \$25,000,000 of net proceeds at a price of at least \$6.56 per share.

REDEMPTION

If requested prior to specified redemption dates, by the holders of 66 2/3% of the then outstanding Series A, B, C and D preferred stock, Sonus was required to redeem such stock at \$1.00, \$5.00, \$11.81 and \$16.40 per share, as adjusted in the event of future dilution, plus declared but unpaid dividends.

DIVIDENDS

Series A, B, C and D preferred stockholders were entitled to receive any cash dividend declared on common stock equal to the amount they would be entitled to if such preferred stock had been converted into common stock. In 1999, in connection with the sale of an aggregate of 211,688 shares of Series C preferred stock in the fourth quarter of fiscal 1999, Sonus recorded a charge to accumulated deficit of \$2,500,000. This amount represents the beneficial conversion feature of the Series C preferred stock. This amount has been accounted for as a dividend to preferred stockholders and as a result, increased Sonus' capital in excess of par value, net loss applicable to common stockholders and the related net loss per share.

F-17

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

LIQUIDATION PREFERENCE

In the event of liquidation of Sonus and before any distribution to common stockholders, the Series A, B, C and D preferred stockholders were entitled to share pro rata, \$1.00, \$5.00, \$11.81 and \$16.40 per share, plus all declared but unpaid dividends.

VOTING RIGHTS

Series A, B, C and D preferred stockholders were entitled to one vote per common share equivalent on all matters voted on by holders of common stock.

(13) STOCKHOLDERS' EQUITY (DEFICIT)

(A) AUTHORIZED CAPITAL STOCK

In May 2001, Sonus' stockholders approved an increase in the authorized common stock from 300,000,000 to 600,000,000 shares.

(B) STOCK SPLIT

On October 6, 2000, Sonus effected a three-for-one stock split in the form of a stock dividend. All common shares, common stock options and per share amounts in the accompanying financial statements and footnotes have been retroactively adjusted to reflect the stock split.

(C) INITIAL PUBLIC OFFERING

On May 31, 2000, Sonus completed its IPO of 17,250,000 shares of common stock, which included the exercise of the underwriters' over allotment option of 2,250,000 shares, at \$7.67 per share. The proceeds from the IPO were \$121,705,000, after deducting the underwriting discount and commissions and offering expenses of \$10,545,000.

(D) RESTRICTED COMMON STOCK

Sonus issued 24,615,693 and 262,500 shares of restricted common stock outside of the 1997 Stock Incentive Plan (the Plan) in the period ended December 31, 1997 and in the year ended December 31, 1999, respectively. These shares are subject to repurchase agreements which expire over a five-year

period. Sonus may repurchase any remaining restricted shares of common stock held by these individuals upon termination of employment at their original purchase price ranging from \$0.0001 to \$0.001 per share. All shares of common stock subject to repurchase restrictions contain the same rights and privileges as unrestricted shares of common stock and are presented as outstanding as of the date of issuance. As of December 31, 2001, 1,259,274 of these common shares were restricted and subject to Sonus' repurchase.

(E) 1997 STOCK INCENTIVE PLAN

The Plan, which is administered by the Board of Directors, permits Sonus to sell or award restricted common stock or to grant incentive and non-qualified stock options for the purchase of common stock to employees, directors and consultants. On January 1 of each year, commencing with January 2001, the aggregate number of shares of common stock available for purchase under the Plan shall increase by the lesser of (i) 5% of the outstanding shares on December 31 of the preceding year or (ii) an amount determined by the Board of Directors. At December 31, 2001, 90,173,599 shares were authorized and 24,051,950 shares were available under the Plan for future issuance.

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Sonus issued shares of restricted common stock to employees and consultants which are subject to repurchase agreements and generally vest over a four or five-year period. If the employee leaves or if the services are not performed, Sonus may repurchase any restricted shares of common stock held by these individuals at their original purchase price ranging from \$0.01 to \$4.67 per share. All shares of common stock subject to repurchase restrictions contain the same rights and privileges as unrestricted shares of common stock and are presented as outstanding as of the date of issuance. As of December 31, 2001, 16,275,097 shares of the outstanding common stock issued under the Plan were restricted and subject to Sonus' repurchase.

A summary of activity under the Plan for the years ended December 31, 1999, 2000 and 2001, is as follows:

RESTRICTED COMMON STOCK ISSUANCES

WEIGHTED AVERAGE NUMBER OF PURCHASE PRICE	PURCHASE PRICE	SHARES	PRICE	Outstanding,
December 31, 1998.....	-----			Outstanding,
24,954,366	\$0.01-0.07		\$0.02	
Issued.....				
14,968,116	0.07-0.22	0.10	-----	Outstanding,
December 31, 1999.....				
39,922,482	0.01-0.22	0.05		
Issued.....				
3,870,672	0.22-4.67	1.88		
Repurchased.....				
(772,500)	0.07-0.22	0.08	-----	Outstanding, December
31, 2000.....				43,020,654
	4.67	0.21		
Repurchased.....				
(241,250)	0.07-0.22	0.08	-----	Outstanding, December
31, 2001.....				42,779,404
	\$0.01-4.67	\$0.20	=====	Unrestricted
				common stock, December 31, 2001.....
26,504,307	\$0.01-4.67	\$0.05	=====	=====

As of December 31, 2000 and 1999, 17,319,885 and 7,438,965 shares of unrestricted common stock were outstanding with a weighted average purchase price of \$0.04 and \$0.02 per share.

COMMON STOCK OPTION GRANTS

WEIGHTED AVERAGE NUMBER OF EXERCISE PRICE	EXERCISE PRICE	SHARES	Outstanding,
December 31, 1998.....	-----		1,672,500
	\$0.001-0.07	\$ 0.04	
Granted.....			
2,090,493	0.07-0.22	0.13	
Exercised.....			
(710,250)	0.001-0.07	0.02	-----
December 31, 1999.....			3,052,743
	0.01-0.22	0.11	
Granted.....			
15,531,937	0.67-22.25	10.39	
Canceled.....			
(203,499)	0.01-3.33	1.75	
Exercised.....			
(655,655)	0.07-7.67	0.31	-----
December 31, 2000.....			17,725,526
	0.01-22.25	9.07	
Granted.....			
6,466,196	2.60-29.00	12.95	
Canceled.....			
(2,215,382)	0.07-22.25	15.68	
Exercised.....			
(1,693,525)	0.07-7.67	2.36	-----
			Outstanding,

January 2001, the aggregate number of shares of common stock available for purchase under the ESPP shall increase by the lesser of (i) 2% of the outstanding shares on December 31 of the preceding year or (ii) an amount determined by the Board of Directors. As of December 31, 2001, 7,269,439 shares of common stock were authorized and 1,021,333 shares have been issued under the ESPP.

(G) 2000 RETENTION PLAN

In January 2001 in conjunction with the acquisition of TTI, Sonus established the 2000 Retention Plan (the Retention Plan) and issued contingent awards of 3,000,000 shares of common stock to certain employees of TTI who became employees of Sonus. Pursuant to the Retention Plan, these awards will vest in equal installments on each of October 31, 2002, November 30, 2002, January 31, 2003 and February 28, 2003, if (i) the recipients do not voluntarily terminate employment with TTI or Sonus prior to such vesting dates and (ii) the business expansion and product development escrow release conditions are satisfied in whole or in part. Generally, any awards forfeited by employees who terminate employment with TTI, other than a termination by Sonus or TTI without cause, prior to the date on which they would otherwise vest, may be reallocated to remaining TTI employees, awarded to replacement hires or returned to Sonus as provided by the terms of the Retention Plan. Due to the termination of certain former TTI employees in connection with the restructuring plan announced in September 2001, restrictions associated with approximately 860,000 shares of common stock awarded under the Retention Plan have been removed.

F-20

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(H) 1998 EQUITY INCENTIVE PLAN

In January 2001 in connection with the completion of the TTI acquisition, Sonus assumed TTI's 1998 Equity Incentive Plan and all grants of options under this plan. Each outstanding option to purchase shares of Class B common stock granted under the 1998 Equity Incentive Plan immediately prior to the effective time of the acquisition was converted into an option to purchase Sonus common stock based on the merger consideration, with the exercise price of the options being proportionately adjusted.

In continuation of a 1997 agreement entered into by the TTI founders and other than TTI shareholders, the founders agreed, in exchange for the option exercise proceeds, to transfer to Sonus a number of shares of Sonus' common stock received by them in the acquisition equal to the number of shares of Sonus' common stock issued upon exercise by former TTI employees of the stock options granted under the TTI 1998 Equity Incentive Plan. As a result of this agreement, the aggregate number of outstanding shares of Sonus' common stock that will be issued upon exercise of these stock options will not increase.

(I) STOCK-BASED COMPENSATION

Stock-based compensation expenses includes the amortization of deferred employee compensation and other equity related expenses for non-employees.

In connection with certain employee stock option grants and the issuance of employee restricted common stock during the years ended December 31, 2000 and 1999, Sonus recorded deferred stock-based compensation of \$39,433,000 and \$20,859,000. This represents the aggregate difference between the exercise price or purchase price and the fair value of the common stock on the date of grant or sale for accounting purposes. The deferred compensation is recognized as an expense over the vesting period of the underlying stock options and restricted common stock.

In connection with the TTI acquisition, Sonus recorded deferred stock-based compensation of \$22,600,000 for the year ended December 31, 2001, related to the intrinsic value of unvested TTI stock options assumed by Sonus. This deferred compensation is recognized as an expense over the remaining vesting period of the underlying stock options of up to four years. Additionally, Sonus recorded \$55,196,000 of deferred stock-based compensation on 3,000,000 shares awarded to TTI employees under the Retention Plan, based on the fair value of the Sonus common stock on the closing date of the acquisition. This deferred compensation is being expensed ratably over the approximate two-year vesting period of the retention shares and was adjusted for changes in the fair value of Sonus common stock on the date the specific escrow release conditions were satisfied. Upon termination of an employee, the remaining value of the retention shares held to which such employee is entitled, if any, will be expensed (See Note 13 (g)).

Sonus has valued the stock options and the issuances of restricted common stock to non-employees based upon the fair market value of the services rendered where Sonus believes the value of these services is more readily determinable than the value of the options or restricted stock. All other grants of options and issuances of restricted stock to non-employees are valued based upon the Black-Scholes option pricing model. As of December 31, 2001, Sonus has 135,000 stock options and 120,000 shares of restricted common stock outstanding to non-employees. In accordance with Emerging Issues Task Force 96-18, Sonus will record the value at the time the services are provided.

Sonus recorded stock-based compensation of \$75,500,000, \$26,729,000 and \$4,404,000 for the years ended December 31, 2001, 2000, and 1999. Stock-based compensation expense for the year ended December 31, 2001 includes \$25,429,000 related to the write-off of deferred compensation with respect to shares held by terminated employees impacted by the restructuring plan (Note 2). Sonus expects

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

record up to approximately \$21,000,000, \$6,500,000 and \$1,200,000 in employee stock-based compensation expense in the years ending December 31, 2002, 2003 and 2004.

Sonus has computed the pro forma disclosures required under SFAS No. 123 for stock options granted to employees and shares purchased under the ESPP using the Black-Scholes option pricing model with an assumed 4.5% risk-free interest rate in 2001, and 5% risk-free rate in 2000 and 1999, volatility of 150%, 80%, and 60% in 2001, 2000, and 1999 and an expected life ranging from 2-5 years for stock options and 6 months for the ESPP, with the assumption that no dividends will be paid. Had compensation expense for Sonus' stock option plan and ESPP been determined consistent with SFAS No. 123, the pro forma net loss and pro forma net loss per share would have been as follows:

YEAR ENDED DECEMBER 31, -----	2001	2000	1999	-----	Net loss
- 2001 2000 1999 -----					applicable to common stockholders, in thousands -- As reported.....
	\$ (645,432)	\$ (50,038)	\$ (26,387)	Pro	forma.....
(699,168) (55,980) (26,400)				Basic and diluted net loss per share -- As reported.....	
	\$ (3.74)	\$ (0.52)	\$ (1.84)	Pro	forma.....
	(4.06)	(0.58)	(1.84)		

The Black-Scholes option pricing model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option pricing models require the input of highly subjective assumptions including the expected stock price volatility. Because Sonus' employee stock options and ESPP shares have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of Sonus' options and ESPP shares.

(J) COMMON STOCK RESERVED

Common stock reserved for future issuance at December 31, 2001 consist of the following:

Stock incentive plan.....	44,334,765
Employee stock purchase plan.....	6,248,106
Conversion of convertible subordinated notes.....	333,140

	50,916,011
	=====

(14) EMPLOYEE BENEFIT PLAN

In 1998, Sonus adopted a savings plan for its employees, which has been qualified under Section 401(a) of the Internal Revenue Code. Eligible employees are permitted to contribute to the 401(k) plan through payroll deductions within statutory and plan limits. Contributions from Sonus are made at the discretion of the Board of Directors. Sonus has made no contributions to the 401(k) plan to date.

SONUS NETWORKS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(15) SUPPLEMENTAL CASH FLOW INFORMATION

YEAR ENDED DECEMBER 31, -----	2001	2000	1999	-----	SUPPLEMENTAL
DISCLOSURE OF CASH FLOW INFORMATION: Cash paid during the year for interest.....	\$ 503	\$ 225	\$ 208		
=====	=====	=====	=====		ACQUISITION OF TELECOM
					TECHNOLOGIES, INC: Tangible
assets.....	\$ 8,296				
	\$ --	\$ --			Liabilities
assumed.....	(21,184)				
					Goodwill and purchased
intangibles.....	523,734				
					Issuance of common stock in connection with the
acquisition.....	(505,013)				Cash
					acquired.....
(90)					Acquisition, net of cash

(52,751) (499,342) (14,134)
 (16,263) (16,443) (14,872)
 (8,705) Interest income
 (expense), net... 1,733 1,360
 1,181 733 228 1,089 2,495 2,433

 ----- NET

LOSS.....
 \$(82,479) \$(51,391) \$(498,161)
 \$(13,401) \$(16,035) \$(15,354)
 \$(12,377) \$(6,272) =====
 =====

===== NET LOSS PER SHARE (NOTE
 1 (0)): Basic and
 diluted..... \$ (0.51) \$
 (0.30) \$ (2.81) \$ (0.07) \$
 (0.69) \$ (0.24) \$ (0.09) \$
 (0.04) =====

===== Pro
 forma basic and diluted... \$
 (0.14) \$ (0.12) =====

===== SHARES USED IN
 COMPUTING NET LOSS PER SHARE
 (NOTE 1 (0)): Basic and
 diluted..... 162,091
 171,329 177,313 181,260 23,229
 64,278 144,836 148,912 =====

===== Pro forma basic and
 diluted... 116,765 129,273
 =====

(17) SUBSEQUENT EVENTS

(A) BANK FINANCING

As of January 16, 2002, Sonus established a \$10,000,000 equipment line of credit and a \$20,000,000 working capital line of credit with a bank, at the bank's prime rate, available through March 24, 2003. Amounts borrowed under the equipment line shall be repaid over a 36-month period. Amounts borrowed under the working capital line will be based on a percentage of eligible accounts receivable balances. Under the agreement, all of Sonus' assets, except intellectual property, have been pledged as collateral. Sonus must also maintain a certain minimum tangible stockholders' equity and quick ratio, as defined and maintain certain minimum investment balances with the bank.

(B) LEASE RENEGOTIATION

As of March 5, 2002, TTI reduced its lease commitments for excess space in its Texas facilities in exchange for a one-time payment of \$835,000 to a landlord and a guarantee by Sonus of TTI's rents owed through April 2003, the remainder of the revised lease term. As a result of this transaction, Sonus expects to record a restructuring benefit in the first quarter of fiscal 2002 (Note 2).

OFFICE LEASE AGREEMENT

STATE OF TEXAS
COUNTY OF DALLAS

THIS LEASE AGREEMENT, made and entered into as of the 4th day of April, 1997, by and between the Landlord and Tenant herein after named.

W I T N E S S E T H:

1. Definitions and Basic Provisions. The following definitions and basic provisions shall be used in conjunction with and limited by the reference thereto in the provisions of this lease:

- (a) "Landlord": Collins Campbell Joint Venture
- (b) "Tenant": Telecom Technologies, Inc.
- (c) "Premises": The Atrium on Collins Phase II
1701 N. Collins, Suite 3000
Richardson, Texas 75080

as generally outlined on the plan attached hereto as Exhibit "A." The term "rentable area" as used herein, shall refer to all floor areas within the outside surface of the outer walls and the common area side of walls separating lease space from common areas and measured to the midpoint of walls separating areas leased by or held for lease to other tenants, enclosing the tenant-occupied portion of the Building. Common areas are areas devoted to corridors, elevators, foyers, rest rooms (but only on multi-tenant floors), mechanical rooms, janitor closets, vending areas, atrium planting areas, and other similar facilities for the use of all tenants. No deductions from rentable area are made for columns or projections necessary to the Building. The rentable area in the leased Premises has been calculated on the basis of the foregoing definition and is hereby stipulated for all purposes hereof to be 20,153 square feet of rentable area, whether the same should be more or less as a result of a minor variation resulting from actual construction and completion of the leased Premises for occupancy so long as such work is done in accordance with the terms and provisions hereof. The Premises are divided into two portions, approximately 11,000 square feet of rentable area (the "First Portion") outlined on the plan attached hereto as Exhibit "A", and approximately 9,153 square feet of rentable area (the "Second Portion") also outlined on the plan attached hereto as Exhibit "A". Landlord and Tenant both agree to the following occupancy and takedown schedule: On October 1, 1997, Tenant will occupy the First Portion; on April 1, 1998, Tenant will occupy the Second Portion. The total rentable area of the Building is stipulated for all purposes herein to be 57,575 square feet. Landlord and Tenant will have the option to increase the size of the First Portion, thereby decreasing the size of the Second Portion, during the space planning process. Such a change in the sizes of the First and Second Portions will result in proportionate increases and decreases in the monthly rental installments described below.

- (d) "Lease term": A period of 60 months, commencing on October 1, 1997 (the "Commencement Date") and ending on September 30, 2002.
- (e) "Basic rental": \$ 1,827,581.68
- (f) "Monthly rental installment": Monthly from October 1, 1997 through March 31, 1998 \$17,416.67
Monthly from April 1, 1998 through September 30, 2002 \$31,908.92
- (g) "Security Deposit": \$ 17,416.67.
- (h) "Permitted use": Office
- (i) "Land": The real property upon which the Project is located, described more particularly on Exhibit "E" attached hereto and made a part hereof.
- (j) "Building": The Atrium on Collins Phase II located at 1701 N. Collins, Richardson, Texas 75080.
- (k) "Project": The Atrium on Collins Phase I and Phase II located at 1701 N. Collins, Richardson, Texas 75080.

2. Lease Grant. Before the Commencement Date. Landlord shall construct the Building and install in the First Portion of the Premises the items to be constructed or installed by Landlord pursuant to the provisions of the Work Letter Agreement attached as Exhibit "C" hereto. On or before April 1, 1998, Landlord shall construct and install in the Second Portion of the Premises the items to be constructed or installed by Landlord pursuant to the provisions of the Work Letter Agreement. If for any reason Landlord cannot deliver the First Portion of the Premises to Tenant by the Commencement Date, this lease shall not be void or voidable, and Landlord shall not be liable for any loss or damage resulting therefrom, except that the rent payable under Paragraph 1(f) hereof shall be waived for the period between the Commencement Date and the date on which Landlord can deliver possession. If for any reason Landlord cannot deliver the Second Portion of the Premises to Tenant on or before April 1, 1998, this lease shall not be void or voidable, and Landlord shall not be liable for any loss or damage resulting therefrom, except that the rent payable under Paragraph 1(f) hereof shall be reduced to \$17,416.67 for the period between April 1, 1998, and the date on which Landlord can deliver the Second Portion of the Premises. No delay in the delivery of possession shall extend the lease term. If for any reason the First Portion of the Premises are not ready for occupancy on or before October 1, 1998, Tenant may at its option cancel and terminate this Lease by written notice to Landlord delivered on or before November 1, 1998, in which event neither party shall have any further liabilities or obligations hereunder, except that Landlord will repay to Tenant any prepaid rent or security deposit. Tenant may not enter or occupy the pertinent portion of the Premises until such portion is tendered by Landlord, unless Tenant's entry relates to construction or other pre-occupancy work therein. Any entry of a pertinent portion of the Premises before the date specified in this Paragraph 2 may be made only with Landlord's written consent. The pertinent portion of the Premises shall be deemed completed and possession delivered upon completion of the items to be constructed and installed by Landlord pursuant to the provisions of the Work Letter Agreement attached as Exhibit "C", other than completion of minor finish items, if any, which do not materially interfere with Tenant's occupancy. Upon taking of possession of a pertinent portion of the Premises, Tenant shall be deemed to have accepted such portion as suitable for its purposes and shall be deemed to have waived any defects in the such portion of the Premises and in the Building, except for latent defects or the completion of any minor finish items which do not materially interfere with Tenant's occupancy.

3. Rent. In consideration of this lease, Tenant promises and agrees to pay Landlord the basic rental (as defined in Paragraph 1(e) hereof) in two lump sum payments and thereafter in monthly installments as set forth in Paragraph 1(f) hereof, and the additional rent as determined in accordance with Exhibit "B", without deduction, set off, notice or demand.

Sixteen and 79/100 months of basic rental, to be applied to the first seventeen monthly basic rental installments accruing hereunder, totaling \$ 448,927.50 ("Prepaid Rent"), together with the security deposit (as defined in Paragraph 1(g) hereof), shall be payable by Tenant to Landlord in two lump sum payments. \$241,880.42 will be due contemporaneously with the execution hereof. \$224,463.75 will be due upon the later of June 1, 1997, or commencement of construction by Landlord of the work described in the Work Letter Agreement. Landlord will deposit the Prepaid Rent in an escrow account with Plano Bank & Trust to be held until occupancy of the First Portion of the Premises by Tenant, at which time the Prepaid Rent will become the property of Landlord remaining in the escrow account, which escrow account shall be debited monthly as basic rental accrues. On the first day of the seventeenth month following the date on which basic rent begins to accrue under this lease, Tenant shall pay \$6,570.64. On the first day of the eighteenth month following the date on which basic rental begins to accrue under this lease. Tenant shall begin paying the scheduled monthly rental installment without demand and shall continue paying such monthly rental installments on or before the first day of each succeeding calendar month during the term hereof. The monthly rental installment for any fractional month at the beginning of the lease term shall be prorated at the nineteenth month when the payment of regularly scheduled installments commences, and for any fractional month at the end of the lease term shall be prorated at the end of the lease term.

If the monthly rental installment is not received by the Landlord on or before the 5th day of the month for which such monthly rental installment is due, a service charge of 2% of the monthly rental installment owed shall become due and payable in addition to the monthly rental installment owed. Such service charge is for the purpose of reimbursing Landlord for the extra costs and expenses incurred in connection with the handling and processing of late monthly rental installment payments.

The security deposit shall be held by Landlord without liability for interest and as security for the performance by Tenant of Tenant's covenants and obligations under this lease, it being expressly understood that such deposit shall not be considered an advance payment of rental or a measure of Landlord's damages in case of default by Tenant. Upon the occurrence of any event of default by Tenant, Landlord may, from time to time, without prejudice to any other remedy, use such deposit to the extent necessary to make good any arrearages of rent and other damage, injury expense of liability caused to Landlord by such event of default. Following any such application of the security deposit, Tenant shall pay to Landlord on demand the amount so applied in order to restore the security deposit to this original amount. If Tenant is not then in default hereunder, any remaining balance of such deposit shall be returned by Landlord to Tenant upon termination of this lease. If Landlord transfers its interest in the Premises during the lease term, Landlord will assign the security deposit to the transferee and thereafter shall have no further liability for the return of such security deposit. The obligation of Tenant to pay rent is an independent covenant, and no act or circumstance whatsoever, whether such act or circumstance constitutes a breach of covenant by Landlord or not shall release Tenant of the obligation to pay rent.

4. Rental Escalation. See Exhibit "B" attached hereto and incorporated as a part hereof.

5. Services.

(a) Landlord agrees to furnish Tenant while occupying the Premises, at Landlord's sole cost and expense: (i) hot and cold water at those points of supply provided for general use of tenantry; (ii) electrical current for Tenant's use and occupancy of the Premises to the extent reasonably deemed to be standard in comparable suburban "Class A" low rise office buildings in Richardson, Texas, provided however, that all costs for extraordinary or unusual demand for electrical service shall be borne by Tenant; (iii) heating and air conditioning at such times as Landlord normally furnishes such services to all tenants of the Project and at such temperatures and in such amounts as are reasonably provided in comparable suburban "Class A" low rise office buildings in Richardson, Texas; (iv) janitor service on a daily basis excluding holidays and weekends and elevator service; (v) replacement of Building standard light bulbs and tubes.

(b) Landlord does not warrant that any of such specified services will be free from interruption or stoppage, but nevertheless Landlord shall use reasonable diligence to resume any such interrupted or stopped service. Anything to the contrary notwithstanding, no failure, to any extent, to furnish such services or any stoppage or interruption of these defined services shall render Landlord liable in any respect for damages to either person, property or business, nor shall any such failure, interruption or stoppage of such services be deemed or construed as an eviction, actual or constructive, of Tenant nor work an abatement of rent nor relieve Tenant from the obligation to fulfill any covenant or agreement contained in this lease.

6. Leasehold Improvements. Landlord agrees to install at Landlord's cost and expense, except as otherwise stated therein, the improvements described in Exhibit "C" attached hereto. Landlord has made no representations as to the condition of the Premises or the Building, or Landlord's undertaking to remodel, repair or decorate, except as expressly set forth herein and in Exhibit "C".

7. Use. Tenant shall use the Premises only for the permitted use (as defined in Paragraph 1(h) hereof). Tenant will not occupy or use the Premises, or permit any portion of the Premises to be occupied or used for any business or purpose other than the permitted use or for any use or purpose which is unlawful in part or in whole or deemed to be disreputable in any manner or extrahazardous on account of fire, nor permit anything to be done which will in any way increase the rate of fire insurance on the Building or contents; and in the event that, by reason of acts of Tenant, there shall be any increase in the rate of Insurance on the Building or contents created by Tenant's acts or conduct of business than Tenant hereby agrees to pay to Landlord the amount of such increase promptly. Tenant will conduct its business and control its agents, employees and invitees in such a manner as not to create any nuisance, nor interfere with, annoy or disturb other tenants or Landlord in management of the Building. Tenant will maintain the Premises in a clean, healthful and safe condition and will comply with all laws, ordinances, orders, rules and regulations (state, federal, municipal and other agencies or bodies having any jurisdiction thereof) with reference to use, condition or occupancy of Premises. Tenant's obligation to comply with all laws specifically includes any and all laws applicable to Tenant and relating to environmental hazards and to accessibility by persons with disabilities. Tenant will not, without the prior written consent of Landlord, such consent not to be unreasonably withheld, paint, install lighting, window coverings or decoration, or install any signs, window or door lettering or advertising media of any type on or about the Premises or any part thereof. Should Landlord agree in writing to any of the

foregoing items in the preceding sentence, Tenant will maintain such permitted items in good condition and repair at all times.

8. Repairs and Maintenance And Compliance with Accessibility Laws

(a) By Landlord: Landlord shall maintain only the roof, foundation, heating and air conditioning systems, common areas, plumbing, elevators, fire protection sprinkler system, the structural soundness and appearance of the exterior walls, the paving outside the Building, and the landscaping in good repair and condition, except for reasonable wear and tear. Landlord shall be responsible for pest eradication. If such pests result from Tenant's use and occupancy of the Premises, Tenant shall pay to Landlord on demand the cost for such eradication. Tenant shall give written notice to Landlord of the need for repairs or corrections and Landlord shall proceed promptly to make such repairs or corrections. Landlord's liability hereunder shall be limited to the cost of such repairs or corrections.

(b) By Tenant: Tenant shall at its expense and risk maintain the Premises and related facilities in good repair and condition. Tenant will not in any manner deface or injure the Building, the Premises or related facilities and will pay the cost of repairing any damage or injury done by Tenant or Tenant's agents, employees or invitees. Tenant shall throughout the term of this lease take good care of the Building, the Premises and related facilities and keep them free from waste and nuisance of any kind. If Tenant shall fail to make any repair required hereunder (including all necessary replacements) within fifteen (15) days after written notification to do so, Landlord may at its option make such repair and Tenant shall, upon demand therefor, pay Landlord for the cost thereof together with interest on any such cost which remains unpaid following such demand at the rate of 10% per annum until paid.

(c) By Landlord and Tenant: Tenant shall at its expense and risk cause the Premises and related facilities to be in compliance with the requirements of the Americans With Disabilities Act and all other pertinent laws relating to public access ("Accessibility Laws"). Landlord shall at its expense and risk cause the common areas of the Building to comply with Accessibility Laws. Any extraordinary or atypical requirements imposed by Accessibility Laws relating to the nature of Tenant's business shall be Tenant's responsibility and Tenant shall bear the risk and expense of compliance with such extraordinary or atypical requirements. Tenant acknowledges that Landlord's responsibility is to insure that common areas of the Building comply with Accessibility Laws assuming the imposition of requirements typical for a suburban office building.

9. Alterations and improvements. Tenant will not make or allow to be made any alterations or physical additions in or to the Premises without the prior written consent of Landlord, which consent shall not be unreasonably withheld as to nonstructural alterations. Landlord may require, as a condition to granting its consent to any such alterations or physical additions, that Tenant agree to remove such alterations or physical additions at the end of the lease term and restore the Premises to the condition in which the same existed before such alterations or physical additions were made. At the end or other termination of this lease, Tenant shall deliver up the Premises with all improvements located thereon (except as otherwise herein provided) in good repair and condition, reasonable wear and tear excepted, and shall deliver to Landlord all keys to the Premises. The cost and expense of any repairs necessary to restore the condition of the Premises to such condition in which they are to be delivered to Landlord shall be borne by Tenant. All permanent alterations, additions or Improvements made in or upon the Premises, either by Landlord or Tenant, shall be Landlord's property on termination of this lease and shall remain on the Premises without compensation to Tenant. All temporary alterations, furniture, movable trade fixtures and equipment installed and paid for by Tenant may be removed by Tenant at the termination of this lease if Tenant so elects, and shall be so removed if required by Landlord, or if not so removed shall at the option of Landlord, become the property of Landlord. All such installations, removals and restoration shall be accomplished in good workmanlike manner so as not to damage the Premises or the primary structure or structural qualities of the Building or the plumbing, electrical lines or other utilities.

10. Common Areas. The use and occupation by Tenant of the Premises shall include the use in common with others entitled thereto of the common areas, parking areas, service roads, loading facilities, sidewalks, and other facilities as may be designated from time to time by Landlord, subject, however, to the terms and conditions of this agreement and to reasonable rules and regulations for the use thereof as prescribed from time to time by Landlord.

All common areas described above shall at all times be subject to the exclusive control and management of Landlord, and Landlord shall have the right from time to time to establish, modify and enforce reasonable rules and regulations with respect to all facilities and areas mentioned in this Article. Landlord shall have the right to construct, maintain, and operate lighting facilities on all such areas and improvements; to police same; from time to time to change the area, level, location and arrangement of parking areas and other facilities hereinabove referred to; and to restrict parking by tenants, their officers, agents, and employees to employee parking areas. If Landlord ever assigns non-covered parking spaces to other tenants, Tenant will be assigned a fair number of parking spaces at no charge. The number of parking spaces assigned to Tenant will be determined by looking at the rentable area of the Premises versus the rentable area let by the other tenants.

All common areas and facilities not within the Premises, which Tenant may be permitted to use and occupy, are to be used and occupied under a revocable license, and if the amount of such areas be diminished, Landlord shall not be subject to liability nor shall Tenant be entitled to any compensation or diminution or abatement of rent, nor shall such diminution of such areas be deemed constructive or actual eviction.

11. Assignment and Subletting. If Tenant desires to assign this lease or sublet the Premises or any part thereof, Tenant shall give Landlord written notice of such desire together with the name of the proposed assignee or sublessee, a detailed description of its business, and current financial information about it in sufficient detail to allow Landlord to assess the financial condition of such proposed assignee or sublessee. Tenant shall give such notice and information to Landlord at least 60 days prior to the date on which Tenant desires to make such assignment or sublease. For the purposes hereof, transfer of more than half of the stock or other voting control of Tenant shall be deemed to constitute an assignment of this Lease. Landlord shall, within 30 days following receipt of such notice, notify Tenant in writing that Landlord elects either (i) to terminate this lease as to the space so affected as of the date so specified by Tenant, in which event Tenant will be relieved of all further obligation hereunder as to such space, (ii) to permit Tenant to assign this lease or sublet such space, or (iii) refuse to permit Tenant to assign this lease or sublet such space. If Landlord should fail to notify Tenant in writing of such election within such thirty-day period, Landlord shall be deemed to have elected (iii) above. Consent by Landlord to one or more assignments or sublettings shall not operate as a waiver of Landlord's rights as to any subsequent assignments and sublettings. Tenant shall pay all costs incurred by Landlord in connection with the foregoing provisions including without limitation legal fees, construction costs to reconfigure the Premises, and credit checks. Notwithstanding any assignment or subletting, Tenant and any guarantor of Tenant's obligations under this lease shall at all times remain fully responsible and liable for the payment of the rent herein specified and for compliance with all of Tenant's other obligations under this lease. Moreover, if the rental or other consideration (or a combination of the rental and any bonus or other consideration therefor or incident thereto) due and payable to Tenant by an assignee or sublessee exceeds the rental payable under this lease (appropriately prorated in the case of a sublease of less than all of the Premises), then Tenant shall be bound and obligated to pay Landlord fifty percent (50%) of all such excess rental and other excess consideration within ten (10) days after receipt thereof by Tenant. Notwithstanding the foregoing immediately preceding sentence, in the event that Tenant fails to occupy or vacates the Premises prior to consummating an approved sublease or assignment, Tenant shall be bound and obligated to pay to Landlord one hundred percent (100%) of all excess rental and other excess consideration. Finally, upon any assignment or subletting all rentals paid to Tenant by an assignee or sublessee shall be received by Tenant in trust for Landlord, to be forwarded immediately to Landlord. If Landlord transfers and assigns its interest in this lease and the Building containing the Premises, Landlord shall thereby be released from any further obligations hereunder, and Tenant agrees to look solely to such successor in interest of the Landlord for performance of such obligations. Tenant shall not mortgage, pledge or otherwise encumber its interest in this lease or in the Premises.

Landlord's permission to assign this lease or sublet Tenant's space will not be denied in the event the proposed assignee or sublessee is at the time of the proposed assignment or subletting a "Fortune 1000" company and the proposed assignee or sublessee will use the Premises for purely office purposes.

12. Indemnity. Landlord shall not be liable for and Tenant will indemnify and save harmless Landlord of and from all fines, suits, claims, demands, losses and actions (including attorney's fees) for any injury to person or damage to or loss of property on or about the Premises caused by the negligence or misconduct or breach of this lease by Tenant, its agents, employees, sublessees, invitees or by any other person entering the Building, the Premises, or related facilities under express or implied invitation of Tenant, or arising out of Tenant's use of the Building, the Premises, or related facilities. Landlord shall not be liable or responsible for any loss or damage to any property or death or injury to any person occasioned by theft, fire, Act of God, public enemy, injunction, riot, strike, insurrection, war, court order,

requisition of any governmental body or authority, by other tenants of the Building or related facilities or any other matter beyond control of Landlord, or for any injury or damage or inconvenience which may arise through repair or alteration of any part of the Building, the Premises or related facilities, or failure to make repairs or from any cause whatsoever except Landlord's gross negligence. Tenant shall, at all times during the term of this lease, maintain a policy or policies of insurance with the premiums thereon fully paid in advance, in amounts and with insurance companies approved by Landlord Insuring Tenant's obligations to Landlord under Paragraph 12 of this lease.

Tenant shall not be liable for and Landlord will indemnify and save harmless Tenant of and from all fines, suits, claims, demands, losses and actions (including attorney's fees) for any injury to person or damage to or loss of property on or about the common areas of the Building caused by the gross negligence or willfull misconduct or breach of this lease by Landlord, its agents or employees.

13. Mortgages. Tenant accepts this lease subject to any deeds of trust, security interests or mortgages which might now or hereafter constitute a lien upon the Building or improvements therein, the Premises, or related facilities, and to zoning ordinances and other building and fire ordinances and governmental regulations relating to the use of the property Tenant shall at any time hereafter, on demand, execute any instruments, releases or other documents that may be required by any mortgagee for the purpose of subjecting and subordinating this lease to the lien of any such deed of trust, security interest or mortgage. With respect to any deed of trust, security interest or mortgage hereafter constituting a lien on the Building or improvements therein, the Premises, or related facilities. Landlord, at its sole options, shall have the right to waive the applicability of this Paragraph 13 so that this lease will not be subject and subordinate to any such deed of trust, security interest or mortgage.

14. Insurance. Landlord shall, at all times during the term of this lease maintain a policy or policies of insurance with the premiums thereon fully paid in advance, issued by and binding upon some solvent insurance company, insuring the Building against loss or damage by fire, explosion, or other hazards and contingencies for the full insurable value thereof; provided that Landlord shall not be obligated to insure any furniture, equipment, machinery, goods or supplies not covered by this lease which Tenant may bring or obtain upon the Premises, or any additional improvements which Tenant may construct thereon.

Tenant shall, at all times during the term of this lease, maintain a policy or policies of insurance, with the premiums thereon fully paid in advance, issued by and binding upon insurance companies approved by Landlord, such approval not to be unreasonably withheld, insuring any furniture, equipment, machinery, goods or supplies which Tenant may bring or obtain upon the Premises, and any additional improvements which Tenant may construct on the Premises against loss or damage by fire, explosion or other hazards and contingencies for the full insurable value thereof. Tenant shall also, at all times during the term of this lease, maintain a policy or policies of insurance, with the premiums thereon fully paid in advance, for comprehensive general and contractual liability insurance against claims for personal injury, death and property damage occurring in or about the Premises, such insurance to afford protection to the limits of (i) not less than \$1,000,000.00 in respect of injury to or death of any number of persons arising out of any one occurrence and (ii) \$1,000,000.00 in respect of any instance of property damage. Such policy or policies shall be issued by and binding upon insurance companies approved by Landlord, such approval not to be unreasonably withheld.

Tenant shall deliver to Landlord, prior to the Commencement Date, certificates of such insurance and shall, at all times during the term of this lease, deliver to Landlord upon request true and correct copies of such insurance policies. The comprehensive general and contractual liability policy described above shall (i) name Landlord as an additional Insured, (ii) insure performance of the indemnities of Tenant contained in this lease, and (iii) be primary coverage, so that any insurance coverage obtained by Landlord shall be in excess thereof. Each insurance policy obtained by Tenant shall provide that it will not be canceled or reduced in coverage without 30 days' prior written notice to Landlord. Tenant shall deliver to Landlord certificates of renewal at least 30 days prior to the expiration date of each such policy and copies of new policies at least 5 days prior to terminating any such policies.

15. Inspection. Landlord or representatives shall have the right to enter into and upon any and all parts of the Premises at any time I and without notice in the event of an emergency and with prior notice at reasonable hours to (i) inspect same or clean or make repairs or alterations or additions as Landlord may deem necessary (but without any obligation to do so, except as expressly provided for herein), or (ii) show the Premises to prospective tenants, purchasers or lenders; and Tenant shall not be entitled to any abatement or reduction of rent by reason thereof, nor shall such be deemed to be an actual or constructive eviction.

16. Condemnation. If, during the term of this lease, or any extension or renewal thereof, all of the Premises should be taken for any public or quasi-public use under any governmental law, ordinance or regulation or by right of eminent domain or by private purchase in lieu thereof, this lease shall terminate and the rent shall be abated during the unexpired portion of this lease, effective on the date physical possession is taken by the condemning authority, and Tenant shall have no claim against Landlord for the value of any unexpired term of this lease.

In the event a portion but not all of the Premises shall be taken for any public or quasi-public use under any governmental law, ordinance or regulation, or by right of eminent domain or by private sale in lieu thereof and the partial taking or condemnation shall render the Premises unsuitable for Tenant's business, then Landlord shall have the option, in its sole discretion, of terminating this lease, or, at Landlord's sole risk and expense, restoring and reconstructing the Premises to the extent necessary to make same reasonably tenantable. Should Landlord elect to restore, the lease shall continue in full force and effect with the rent payable during the unexpired portion of this lease adjusted to such an extent as may be fair and reasonable under the circumstances, and Tenant shall have no claim against Landlord for the value of any interrupted portion of this lease.

In the event of any condemnation or taking, total or partial, Tenant shall not be entitled to any part of the award or price paid in lieu thereof, and Landlord shall receive the full amount of such award or price, Tenant hereby expressly waiving any right or claim to any part thereof.

17. Fire or Other Casualty. In the event that the Premises should be totally destroyed by fire, tornado or other casualty or in the event the Premises or the Building should be so damaged that rebuilding or repairs cannot be completed within 180 days after the date of such damage, either Landlord or Tenant may at its option terminate this lease by delivering written notice thereof to the other party within twenty (20) days following such damage, in which event the rent shall be abated during the unexpired portion of this lease effective with the date of such damage. In the event the Premises should be damaged by fire, tornado or other casualty covered by Landlord's insurance, but only to such extent that rebuilding or repairs can be completed within 180 days after the date of such damage, or if the damage should be more serious but neither Landlord nor Tenant elects to terminate this lease, in either such event Landlord shall within thirty (30) days after the date of such damage commence to rebuild or repair the Premises and shall proceed with reasonable diligence to restore the Premises to substantially the same condition in which they were immediately prior to the happening of the casualty, except that Landlord shall not be required to rebuild, repair or replace any part of the furniture, equipment, fixtures and other improvements which may have been placed by Tenant or other tenants within the Building or the Premises, or related facilities. In the event that the Premises are totally untenable, Landlord shall abate the rent during the time Premises are unfit for occupancy. If the Premises are not totally untenable, Landlord shall allow Tenant a fair diminution of rent during the time the Premises are partially unfit for occupancy. In the event any mortgagee under a deed of trust, security agreement or insurance proceeds be used to retire the mortgage debt, Landlord shall have no obligation to rebuild and this lease shall terminate upon notice to Tenant. Any insurance which may be carried by Landlord or Tenant against loss or damage to the Project or to the Premises shall be for the sole benefit of the party carrying such insurance and under its sole control.

Notwithstanding anything to the contrary contained herein in the event that either Landlord or Tenant terminates this lease, pursuant to a right granted in this Paragraph 17, any unapplied Prepaid Rent shall be refunded to Tenant.

18. Holding Over. Should Tenant, or any of its successors in interest, hold over the Premises, or any part thereof, after the expiration of the term of this lease, unless otherwise agreed in writing, such holding over shall constitute and be construed as tenancy at sufferance only. Such tenancy shall be at a daily rental equal to 1/30th of the higher of (i) 150% of the sum of the monthly rental installment plus the most current rental adjustment which may have been made thereto pursuant to Paragraph 4 hereof, or (ii) 150% of the current rate for the Premises being quoted by Landlord to prospective tenants. The inclusion of the preceding sentence shall not be construed as Landlord's consent for the Tenant to hold over. In the event of any unauthorized holding over, Tenant shall also indemnify Landlord against all claims for damages by any other tenant to whom Landlord may have leased all or any part of the Leased Premises effective upon the termination of this lease Notwithstanding the foregoing during the first month of any holdover, and only during that first month, the daily rental rate shall be equal to 1/30 th of 110% of the sum of the monthly rental installment plus the most current rental adjustment which may have been made thereto pursuant to Paragraph 4 hereof.

19. Taxes on Tenant's Property. Tenant shall be liable for all taxes

levied or assessed against personal property, furniture or fixtures placed by Tenant in the Premises. If any such taxes for which Tenant is liable are levied or assessed against Landlord or Landlord's property and if Landlord elects to pay the same or if the assessed value of Landlord's property is increased by inclusion of personal property, furniture or fixtures placed by Tenant in the Premises, and Landlord elects to pay the taxes based on such increase, Tenant shall pay to Landlord promptly that part of such taxes for which Tenant is primarily liable hereunder.

20. Events of Default. The following events shall be deemed to be events of default by Tenant under this lease:

(a) Tenant shall fail to pay any monthly rental installment or any portion of the basic rental hereby reserved when due and such failure shall continue for more than 10 days after I Landlord notifies Tenant in writing of such failure to pay;

(b) Tenant shall fail to comply with any term, provision or covenant of this lease, other than the payment of rent or shall fail to comply with any term, provision or covenant in any other agreement with Landlord affecting the Premises, and shall not cure such failure within t thirty (30) days after written notice there of to tenant;

(c) Tenant shall make an assignment for the benefit of creditors;

(d) Tenant shall file a petition under any section or chapter of the Federal Bankruptcy Code, as amended, or under any similar law or statute of the United States or any State thereof, or Tenant shall be adjudged bankrupt or insolvent in any proceeding filed against Tenant thereunder and such adjudication shall not be vacated or set aside within thirty (30) days;

(e) A receiver or Trustee shall be appointed for all or substantially all of the assets of Tenant and such receivership shall not be terminated or stayed within thirty (30) days;

(f) Intentionally deleted;

(g) Intentionally deleted.; or

(h) Tenant shall assign this lease or sublet the Premises without Landlord's consent, where Landlord's consent is required under Section 11.

21. Remedies. Upon the occurrence of any event of default specified in Paragraph 20 hereof, Landlord shall have the option to pursue any one or more of the following remedies without any notice or demand whatsoever;

(a) Terminate this lease in which event Tenant shall immediately surrender the Premises to Landlord, and if Tenant fails to do so, Landlord may, without prejudice to any other remedy which it may have for possession or arrearages in rent, enter upon and take possession and expel or remove Tenant and any other person who may be occupying such Premises or any part thereof, without being liable for prosecution or any claim of damages therefor. Tenant agrees to pay to Landlord on demand the amount of all loss and damage which Landlord may suffer by reason of such termination, including (i) the cost of recovering the Premises (including attorneys' fees and costs of suit), (ii) the cost of removing and storing any personal property, (iii) the unpaid rent earned at the time of termination, plus interest thereon at the rate described in Paragraph 35, (iv) the present value (discounted at the rate of six percent (6%) per annum) of the balance of the basic rental and additional rental

for the remainder of the lease term less the present value (discounted at the same rate) of the fair market rental value of the Premises for such period, taking into account the period of time the Premises will remain vacant until a new tenant is obtained, and the cost to prepare the Premises for occupancy and the other costs (such as costs of repairs or remodeling, leasing commissions and attorneys' fees) to be incurred by Landlord in connection therewith, and (v) any other sum of money and damages owed by Tenant to Landlord under this lease;

(b) Enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, without being liable for prosecution or any claim for damages therefor, and if Landlord so elects, relet the Premises on such terms as Landlord shall deem advisable and receive the rent thereof. Tenant agrees to pay to Landlord on demand any deficiency in basic rental that may arise by reason of such reletting;

(c) Enter upon the Premises, without being liable for prosecution or any claim for damages therefor, and do whatever Tenant is obligated to do under the terms of this lease, and tenant agrees to reimburse Landlord on demand for any expenses which Landlord may incur in thus effecting compliance with Tenant's obligations under this lease, and Tenant further agrees that Landlord shall not be liable for any damages resulting to the Tenant from such action; and

(d) Landlord may, and is hereby entitled and authorized, without any notice to Tenant whatsoever, to enter upon the Premises by use of a master key, a duplicate key, or other peaceable means, and to change, alter, and/or modify the door locks on all entry doors of the Premises, thereby permanently excluding Tenant, and its officers, principals, agents, employees, and representatives therefrom. If Landlord has either permanently repossessed the Premises pursuant to the foregoing provisions of this Lease, or has terminated this lease by reason of Tenant's default, Landlord shall not thereafter be obligated to provide Tenant with a key to the Premises at any time; provided, however, that in any such instance, during Landlord's regular business hours and at the convenience of Landlord, and upon the written request of Tenant accompanied by such written waivers and releases as Landlord may require, Landlord will escort Tenant or its authorized personnel to the Premises to retrieve any personal belongings or other property of Tenant not subject to the lien or security interest described herein. If Landlord elects to exclude Tenant from the Premises without permanently repossessing or terminating pursuant to the foregoing provisions of this lease, then Landlord (at any time prior to actual repossession or termination) shall not be obligated to provide Tenant a key to re-enter the Premises until such time as all delinquent rental and other amounts due under this lease have been paid in full (and all other defaults, if any, have been completely cured to Landlord's satisfaction), and Landlord has been given assurance reasonably satisfactory to Landlord evidencing Tenant's ability to satisfy its remaining obligations under this lease. During any such temporary period of exclusion, Landlord will, during Landlord's regular business hours and at Landlord's convenience, upon written request by Tenant, escort Tenant or its authorized personnel to the Premises to retrieve personal belongings of Tenant or its employees, and such other property of Tenant as is not subject to the Landlord's lien and security interest described herein. This remedy of Landlord shall override and control any conflicting provisions of the Texas Property Code.

No re-entry or taxing possession of the Premises by Landlord shall be construed as an election on its part to terminate this lease, unless a written notice of such intention be given to Tenant. Notwithstanding any such reletting or re-entry or taking possession, Landlord may at any time thereafter elect to terminate this lease for a previous default. Pursuit of any of the foregoing remedies shall not preclude pursuit of any of the other remedies herein provided or any other remedies provided by law, nor shall pursuit of any remedy herein provided constitute a forfeiture or waiver of any rent due to Landlord hereunder or of any damages accruing to Landlord by reason of the violation of any of the terms, provisions and covenants herein contained. Landlord's acceptance of rent following an event of default hereunder shall not be construed as Landlord's waiver of such event of default. No waiver by Landlord of any violation or breach of any of the terms, provisions, and covenants herein contained shall be deemed or construed to constitute a waiver of any other violation or breach of any of the terms, provisions, and covenants herein contained. Forbearance by Landlord to enforce one or more of the remedies herein provided upon an event of default shall not be deemed or construed to constitute a waiver of any other violation or default.

22. Surrender of Premises. No act or thing done by the Landlord or its agents during the term hereby granted shall be deemed as acceptance of a surrender of the Premises, and no agreement to accept a surrender of the Premises shall be valid unless the same be made in writing and subscribed by the Landlord.

23. Attorneys' Fees. In case it should be necessary or proper for Landlord or Tenant to bring any action under this lease or to consult or place such lease, or any amount payable by Landlord or Tenant thereunder, with an attorney concerning or for the enforcement of any of Landlord's or Tenant's rights hereunder, then the non-prevailing party agrees in each and any such case to pay the prevailing party on demand a reasonable attorney's fee.

24. Landlord's Lien. In addition to the statutory Landlord's lien,

Landlord shall have, at all times, a valid security interest to secure payment of all rentals and other sums of money becoming due hereunder from Tenant, and to secure payment of any damages or loss which Landlord may suffer by reason of the breach by Tenant of any covenant, agreement or condition contained herein, upon all goods, wares, equipment, fixtures, furniture, improvements and other personal property of Tenant presently or which may hereafter be situated on the Premises and all proceeds therefrom, and such property shall not be removed therefrom without the consent of Landlord until all arrearages in rent as well as any and all other sums of money then due to Landlord hereunder shall first have been paid and discharged and all the covenants, agreements and conditions hereof have been fully complied with and performed by Tenant, upon the occurrence of an event of default by Tenant, Landlord may, in addition to any other remedies provided herein, enter upon the Premises and take possession of any and all goods, wares, equipment, fixtures, furniture, improvements and other personal property of Tenant situated on the Premises without liability for trespass or conversion, and sell the same at public or private sale, with or without having such property at the sale, after giving Tenant reasonable notice of the time and place of any public sale or of the time after which any private sale is to be made, at which sales the Landlord or its assigns may purchase unless otherwise prohibited by law. Unless otherwise provided by law, and without intending to exclude any other manner of giving Tenant reasonable notice, the requirement of reasonable notice shall be met if such notice is given in the manner prescribed in Paragraph 27 of this lease at least five (5) days before the time of sale. The proceeds from any such disposition, less any and all expenses connected with the taking of possession, holding and selling of the property (including reasonable attorneys' fees and other expenses), shall be applied as a credit against the indebtedness secured by the security interest granted in this Paragraph 24. Any surplus shall be paid to Tenant or as otherwise required by law; and the Tenant shall pay any deficiencies forthwith. The statutory lien for rent is not hereby waived.

25. Mechanic's Lien. Tenant will not permit any mechanic's lien or liens to be placed upon the Premises or the Project or improvements thereon during the term hereof caused by or resulting from any work performed, materials furnished or obligation incurred by or at the request of Tenant, and in the case of the filing of any such lien Tenant will promptly pay same. If default in payment thereof shall continue for twenty (20) days after written notice thereof from Landlord to the Tenant, the Landlord shall have the right and privilege at Landlord's option of paying the same or any portion thereof without inquiry as to the validity thereof, and any amounts so paid, including expenses and interest, shall be so much additional rent hereunder due from Tenant to Landlord and shall be repaid to Landlord immediately on rendition of bill therefor, together with interest until repaid as provided in Paragraph 35. Tenant will have the option to "bond around" any mechanics's lien or liens, provided such bonding around is in accordance with, and permitted by, deeds of trust or mortgages affecting the Building.

26. Waiver of Subrogation. Anything in this lease to the contrary notwithstanding, the parties hereto hereby waive any and all rights of recovery, claim action or cause of action, against each other, their agents, officers, and employees, for any loss or damage that may occur to the Premises hereby demised, or any improvements thereof, or such Project of which the Premises are a part, any improvements thereto, or related facilities, by reason of fire, the elements, or any other cause which could be insured against under the terms of standard fire and extended coverage insurance policies, regardless of cause or origin, including negligence of the parties hereto, their agents, officers and employees.

No insurer of one party hereunder shall hold any right of subrogation against the other party. If the respective insurer of Landlord and Tenant does not permit the foregoing waiver without an appropriate endorsement to such party's insurance policy, then Landlord and Tenant each covenant and agree to notify its insurer of the waiver set forth herein and to secure from such insurer an appropriate endorsement to its respective insurance policy with respect to such waiver.

27. Notices. Each provision of the Agreement, or of any applicable governmental laws, ordinances, regulations, and other requirements with reference to the sending, mailing or delivery of any notice, or with reference to the making of any payment by Tenant to Landlord, shall be deemed to be complied with when and if the following steps are taken:

(a) All rent and other payment required to be made by Tenant to Landlord hereunder shall be payable to Landlord in Dallas County, Texas, at the address herein below set forth, or at such other address as Landlord may specify from time to time by written notice delivered in accordance herewith:

(b) Any notice or document required to be delivered hereunder shall be deemed to be delivered if actually received and whether or not received when deposited in the United States mail, postage prepaid, certified or registered mail (with or without return receipt requested) addressed to the parties hereto at the respective addresses set out opposite their names below, or at such other address as they have heretofore specified by written notice delivered in accordance herewith:

LANDLORD: Collins Campbell Joint Venture
c/o Thompson Realty Corporation
1701 N. Collins, Suite 120
Richardson, Texas 75080

TENANT: Telecom Technologies, Inc.
1701 N. Collins, Suite 3000
Richardson, Texas 75080

28. Force Majeure. Whenever a period of time is herein prescribed for action to be taken by either party, specifically excluding Tenant's obligation to pay rental and other monetary obligations of Tenant hereunder, such party shall not be liable or responsible for, and there shall be excluded from the computation of any such period of time, any delays due to strikes, riots, Acts of God, shortages of labor or materials, war, governmental laws, regulations or restrictions or any other causes of any kind whatsoever which are beyond the control of such party.

29. Separability. If any clause or provision of this lease is illegal, invalid or unenforceable under present or future laws effective during the term of this lease, then and in that event, it is the intention of the parties hereto that the remainder of this lease shall not be affected thereby, and it is also the intention of the parties to this that in lieu of each clause or provision of this lease that is illegal, invalid, or unenforceable, there be added as part of this lease a clause or provision as similar in terms to such illegal, invalid or unenforceable clause or provision as may be possible and be legal, valid and enforceable.

30. Entire Agreement: Amendments: Binding Effect. This lease contains the entire agreement between the parties and may not be altered, changed or amended, except by instrument in writing signed by both parties hereto. No provision of this lease shall be deemed to have been waived by Landlord unless such waiver be in writing signed by Landlord and addressed to Tenant, nor shall any custom or practice which may grow up between the parties in the administration of the terms hereof be construed to waive or lessen the right of Landlord to insist upon the performance by Tenant in strict accordance with the terms hereof. The terms, provisions, covenants and conditions contained in this lease shall apply to, inure to the benefit of, and binding upon the parties hereto, and upon their respective successors in interest and legal representatives, except as otherwise herein expressly provided.

31. Quiet Enjoyment. Provided Tenant has performed all of the terms, covenants, agreements and conditions of this lease, including the payment of rent, to be performed by Tenant, Tenant shall peaceably and quietly hold and enjoy the Premises for the term hereof, without hindrance from landlord, subject to the terms and conditions of this lease.

32. Rules and Regulations. Tenant and Tenant's agents, employees, and invitees will comply fully with all requirements of the rules and regulations of the Project and related facilities which are attached hereto as Exhibit "D", and made a part hereof as though fully set out herein. Landlord shall at all times have the right to change such rules and regulations or to promulgate other rules and regulations in such reasonable manner as may be deemed advisable for safety, care, or cleanliness of the Project, the Premises, or related facilities, and for preservation of good order therein, all of which rules and regulations, changes and amendments will be forwarded to Tenant in writing and shall be carried out and observed by Tenant. Tenant shall further be responsible for the compliance with such rules and regulations by the employees, servants, agents, visitors and invitees of Tenant.

33. Broker's or Agent's Commission. Tenant represents and warrants that there are no claims for brokerage commissions or finder's fees in connection with the execution of this lease, except as listed below, and Tenant agrees to indemnify and hold harmless Landlord against all liabilities and costs arising from such claims, including without limitation attorneys' fees in connection therewith. Broker for Tenant is Partners National Real Estate Group, Inc. Broker for Landlord is Thompson Realty Corporation.

34. Guaranty, Joint and Several Liability. If there be more than one Tenant, the obligations hereunder imposed upon Tenant shall be joint and several. If there be a guarantor of Tenant's obligations hereunder, the obligations hereunder imposed upon Tenant shall be the joint and several obligations of Tenant and such guarantor and Landlord need not first proceed against the Tenant hereunder before proceeding against such guarantor, nor shall any such guarantor be released from its guaranty for any reason whatsoever, including without limitation, in case of any amendments hereto, waivers hereof or failure to give such guarantor any notices hereunder.

35. Interest. Any rent or other amount which becomes owing by Tenant to Landlord under this lease (including unpaid service charges) shall bear interest from the date of demand at the lesser of the highest lawful rate or ten percent (10%) per annum.

36. Estoppel Certificate. Tenant will, at any time and from time to time, upon not less than ten (10) days' prior request by Landlord, execute, acknowledge and deliver to Landlord a statement in writing executed by Tenant certifying that this lease is unmodified and in full effect (or, if there have been modifications, that this lease is in full effect as modified, and setting forth such modifications) and the dates to which the rent has been paid, and either stating that to the knowledge of the signer of such certificate no default exists hereunder or specifying each such default of which the signer may have knowledge; it being intended that any such statement by Tenant may be relied upon by any prospective purchaser or mortgagee of the Project. I.

37. Landlord's Liability. The liability of Landlord to Tenant for any default by Landlord under the terms of this lease shall be limited to the proceeds of sale on execution of the interest of Landlord in the Building and Landlord shall not be personally liable for any deficiency. This clause shall not be deemed to limit or deny any remedies which Tenant may have in the event of default by Landlord hereunder, which do not involve the personal liability of Landlord.

38. Captions. The captions contained in this lease are for convenience of reference only, and in no way limit or enlarge the terms and conditions of this lease.

39. Gender. Words of any gender used in this lease shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires.

40. Place of Performance. Tenant shall perform all covenants, conditions and agreements contained herein, including but not limited to payment of rent, in Dallas County, Texas. Any suit arising from or relating to this agreement shall be brought in Dallas County, Texas.

41. I Relocation. Upon request by Landlord during the term of this lease, but only at a point in time that Tenant falls to occupy seventy-five percent (75%) of an entire floor in the Building, Tenant agrees to relocate to other space in the Building designated by Landlord, provided such other space is as large or larger than the Premises (the "Substitution Space"). If Landlord desires to exercise such right to relocate Tenant, it shall give Tenant at least sixty (60) days prior written notice thereof specifying the effective date of such substitution and the location of the Substitution Space (including any new expansion areas or right of first refusal areas if this lease contains any options for same). As of such effective date; (i) the description of the Premises set forth in this lease shall, without further act on the part of Landlord or Tenant, be deemed amended so that the Substitution Space shall, for all intents and purposes, be deemed to be the Premises hereunder and all of the terms, covenants, conditions, provisions and agreements of this lease shall continue in full force and effect and shall apply to the Substitution Space; and (ii) Tenant shall move from the existing Premises into the Substitution Space and shall vacate and surrender possession to Landlord of the existing Premises. Tenant shall have the option either to accept possession of the Substitution Space in its "as is" condition as of such effective date or to require Landlord to alter the Substitution Space in the same manner as the existing Premises were altered pursuant to the Work Letter Agreement attached hereto as Exhibit "C". Such

option shall be exercised by notice from Tenant to Landlord within ten (10) days after the aforesaid notice from Landlord to Tenant of such proposed relocation. If Tenant fails to deliver to Landlord within such ten (10) day period notice of its election, or if Tenant is in default under any of the terms, covenants, conditions, provisions or agreements of this lease as of the date of such notice by Landlord, Tenant shall be deemed to have elected to accept possession of the Substitution Space in its "as is" condition. If Landlord exercises this relocation right, Landlord shall, after receipt of paid invoices, promptly reimburse Tenant for Tenant's reasonable out-of-pocket expenses for (i) printing a reasonable supply of new business stationery, and (ii) moving Tenant's furniture, equipment, supplies and telephones from the existing Premises to the Substitution Space.

42. Moving Allowance. Upon Tenant's occupancy of the First Portion of the Premises and if no uncured event of default exists under this lease, Landlord agrees to pay Tenant a moving allowance equal to \$8,250.00. Upon Tenant's occupancy of the Second Portion of the Premises and if no uncured event of default exists under this lease, Landlord agrees to pay Tenant a moving allowance equal to \$6,864.75.

43. Building Signage. After Tenant occupies the First Portion of the Premises, Tenant may, after having obtained any necessary governmental approvals and the written approval of Landlord, at Tenant's sole cost and expense, install a sign on the Building. Landlord will have the right to approve all aspects of such sign, in its reasonable discretion, including location, manner of installation, size, color, lettering, lighting, and content. Tenant agrees to remove such sign immediately at its sole cost and expense if Tenant is no longer occupying an entire floor in the Building, or if for any reason the lease is terminated or expires. In connection with the installation or removal of such sign, Tenant will repair any and all damage to the Building at Tenant's sole cost and expense.

44. Intentionally deleted.

45. Intentionally deleted.

46. Lender Approval. This lease is subject to the approval of existing lienholders on the Building. If Landlord is unable to obtain any and all necessary lender approvals on or before April 15, 1997, this lease shall thereafter be null and void, any prepaid rent shall be returned to Tenant, and neither party shall have any liability to the other by reason of such cancellation.

47. Special Provisions. Exhibits A, B, C, D, E, Rider No. 101 and Rider No. 201.

LANDLORD: Collins Campbell Joint Venture,
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.,
a Texas corporation

By: /s/ W. T. Field

W. T. Field, President

TENANT: Telecom Technologies, Inc.

By: /s/ ANOUSHEH ANSARI

Printed Name: ANOUSHEH ANSARI

Title: PRESIDENT

EXHIBIT "A"
SITE PLAN

TELECOM TECHNOLOGIES, INC.

PREMISES: 20,153 SQUARE FEET OF RENTABLE AREA

[Diagram of 3rd Level Floorplan]

EXHIBIT "A"
SITE PLAN

TELECOM TECHNOLOGIES, INC.
RIGHT OF FIRST REFUSAL SPACE

GROWTH AREA: 18,880 SQUARE FEET OF RENTABLE AREA

[Diagram of 2nd Level Floorplan]

EXHIBIT "B"

RENTAL ESCALATION - OPERATING EXPENSES

In addition to the basic rental payable by Tenant in accordance with Paragraph 1(e) of this lease, Tenant shall pay additional rent determined as follows:

(a) For the purposes of this provision, the term "Basic Cost" shall mean any and all costs, expenses and disbursements of every kind and character (subject to the limitations set forth below) (specifically excluding leasing commissions, attorney's fees, costs and disbursements and other expenses incurred in connection with leasing, renovating or improving space for tenants, and costs incurred in lease disputes) which Landlord shall incur, pay or become obligated to pay in connection with the ownership of any estate or interest in, operation, maintenance, repair, replacement, and security of the Building, determined in accordance with generally accepted accounting principles consistently applied, including but not limited to the following:

(i) Wages and salaries (including management fees) of all employees engaged in the operation, repair, replacement, maintenance, and security of the Building, including taxes, insurance, and benefits relating thereto.

(ii) All supplies and materials used in the operation, maintenance, repair, replacement, and security of the Building.

(iii) Annual cost of all capital improvements made to the Building which although capital in nature can reasonably be expected to reduce the normal operating costs of the Building, as well as all capital improvements made in order to comply with any statutes, rules, regulations or directives hereafter promulgated by a governmental authority relating to energy, conservation, public safety or security, as amortized over the useful life of such improvements by Landlord for federal income tax purposes.

(iv) Cost of all utilities.

(v) Cost of all maintenance and service agreements on equipment, including alarm service, window cleaning and elevator maintenance.

(vi) Cost of casualty and liability insurance applicable to the Building and Landlord's personal property used in connection therewith.

(vii) All taxes, assessments and governmental charges, whether federal, state, county or municipal, and whether they be by taxing districts or authorities presently taxing or by other, subsequently created or otherwise, and any other taxes, assessments or other governmental charges attributable to the Building or its operation, excluding, however, federal and state taxes on income.

(viii) Cost of repairs, replacements, and general maintenance of the Building.

(ix) Cost of service or maintenance contract with independent contractors for the operation, maintenance, repair, replacement, or security of the Building.

If Landlord incurs any such costs and expenses that are applicable to both The Atrium on Collins Phase I and Phase II, Landlord will apportion such costs and expenses between Phase I and Phase II as the Landlord, in the exercise of its reasonable judgment, deems appropriate.

There are specifically excluded from the definition of the term "Basic Cost" expenses for capital improvements made to the Building, other than capital improvements described in subparagraph (iii) above and except for items which, though capital for accounting purposes, are properly considered maintenance and repair items, such as painting of common areas, replacement of carpet in elevator lobbies, and the like; expenses for repair, replacements and general maintenance paid by proceeds of insurance or by Tenant or other third parties, and alterations attributable solely to tenants of the Building other than Tenant; interest, amortization or other payments on loans to Landlord, whether secured or unsecured; depreciation of the Building; legal expenses; and income, excess profits or franchise taxes or other such taxes imposed on or measured by the income of the Landlord from the operation of the Building.

(b) Tenant shall during the term of this lease pay as additional rent an amount (the "Excess") equal to (i) the total amount of Basic Costs for a calendar year, divided by the rentable area of the Building, and multiplied by the rentable area of the Premises minus (ii) the product of the "Basic Costs Stop" (herein after defined) multiplied by the rentable area of the Premises. Basic Cost Stop is herein defined to be the quotient of the Basic Cost applicable to the Premises per calendar year 1998 divided by the number of square feet of rentable area in the Premises. Landlord may collect such additional rent in arrears on a calendar year basis. Beginning with January 1, 1999, and on each January 1 thereafter, Landlord shall also have the option to make a good faith estimate of the Excess for each upcoming calendar year and upon thirty (30) days' written notice to Tenant may require the monthly payment of such additional rent equal to 1/12 of such estimate. Any amounts paid based on such an estimate shall be subject to adjustment pursuant to subparagraph (c) when actual Basic Cost is available for each calendar year. For the purposes of calculating the additional rental payable hereunder with respect to any fractional calendar year during the term of this lease, Landlord may either (i)

estimate Basic Cost for the portion of the lease term during such partial year, or (ii) estimate Basic Cost for the entire calendar year and reduce the same to an amount bearing the same proportion to the full amount of estimated Basic Cost for such year as the number of days in such fractional calendar year bears to the total number of days in such full calendar year.

(c) By April 1 of each calendar year during Tenant's occupancy, or as soon thereafter as practical, Landlord shall furnish to Tenant a statement of Landlord's actual Basic Cost for the previous year adjusted as provided in subparagraph (d). If for any calendar year additional rent collected for the prior year as a result of Landlord's estimate of Basic Cost is in excess of the additional rent actually due during such prior year, then Landlord shall refund to Tenant any overpayment. Likewise, Tenant shall pay to Landlord, on demand, any underpayment with respect to the prior year.

(d) With respect to any calendar year or partial calendar year during the term of this lease in which the Building is not occupied to the extent of ninety-five percent (95%) of the rentable area thereof, the Basic Cost for such period shall, for the purposes hereof, be increased to the amount which would have been incurred had the Building been occupied to the extent of ninety-five percent (95%) of the rentable area thereof.

(e) If any amounts which become due by reason hereof are not paid by the 5th day following the day on which they are due, a service charge of 2% of such rental escalation amount shall become due and payable in addition to such rental escalation. Such service charge is for the purpose of reimbursing Landlord for the extra costs and expenses incurred in connection with the handling and processing of late rental escalation payments.

EXHIBIT "C"
WORK LETTER AGREEMENT

Telecom Technologies, Inc.
2425 N. Central Expressway
Suite 910
Richardson, Texas 75080

Re: Suite 3000, 1701 N. Collins, The Atrium on Collins Phase II, Richardson,
Texas, Specifically divided into two portions, the First Portion and the
Second Portion

Ladies and Gentlemen:

You (herein after referred to as "Tenant") and we (herein after referred to as "Landlord") are executing, simultaneously with this "Work Letter Agreement" (herein so called), a written lease (the "Lease") covering the space referred to above (hereinafter called the "Premises").

To induce Tenant to enter into such Lease (which is hereby incorporated by reference) and in consideration of the mutual covenants hereinafter contained, Landlord and Tenant mutually agree as follows:

1. Final Plans. Landlord agrees to provide, by Landlord's designated space planner, architect and/or engineer, the following Building Standard (hereinafter defined) space plans and architectural and mechanical drawings and specifications (hereinafter collectively referred to as the "Final Plans"), to be drawn for the First Portion and the Second Portion of the Premises on Tenant's behalf:

(a) Complete Building Standard "Space Plans" (herein so called) for the layout of the Premises;

(b) Complete, finished and detailed 1/8 inch scale architectural drawings and specifications for Tenant's partition layout, reflected ceiling, telephone and electrical outlets, and finish schedule for the work to be done by Landlord under Paragraph 3 hereof (the "Construction Plans"); and

(c) Complete Building Standard mechanical plans and specifications where necessary for installation of normal air conditioning system and duct work and heating and electrical facilities for the work to be done by Landlord under Paragraph 3 hereof (the "MP & E Plans").

Tenant shall pay all costs of preparing the Final Plans, subject, however, to the reimbursement provisions of Paragraph 7 below.

2. Preparation of Final Plans: Changes to Final Plans. Tenant covenants and agrees to furnish to Landlord all information necessary for the preparation of each of the Space Plans, the Construction Plans and the M P & E Plans on or before January 31, 1997. Landlord will cause the Space Plans, the Construction Plans, and the M P & E Plans to be prepared from such information and will submit such plans to Tenant. Within ten (10) days after receipt thereof, Tenant shall approve the Space Plans, Construction Plans and M P & E Plans or indicate what changes, if any, that it desires to make. Such proposed changes, if any, shall be submitted to Landlord in writing for Landlord's written approval. If within ten (10) days after receipt thereof, Tenant fails to approve any of the Space Plans, Construction Plans and M P & E Plans or if Tenant fails to propose in writing any changes to be made to such Space Plans, Construction Plans and M P & E Plans, then Tenant shall be deemed to have approved each of same. Any redrawing of all or any of the Final Plans occasioned by Tenant after Tenant's approval (or deemed approval) thereof as well as any changes requested by Tenant in connection with its initial review of the Final Plans which are agreed to by Landlord shall be at Tenant's sole cost and expense and no portion of the Credit (as defined in Paragraph 7 below) shall be applicable to such costs.

3. Construction of Improvements. Subject to each of Paragraph 2 and Paragraph 28 of the Lease, provided that Tenant has not committed an event of default pursuant to Paragraph 20 of the Lease, Landlord agrees to cause the improvements to the Premises to be constructed pursuant to and in substantial accordance with the Final Plans. The construction of such improvements in the Premises shall be at Tenant's sole cost and expense, subject, however, to the reimbursement provisions of Paragraph 7 below. Tenant acknowledges that commencement of construction of the work in the First Portion of the Premises will take place before commencement of construction of the work in the Second Portion of the Premises and the timing of such construction will be structured to achieve delivery of space in accordance with Paragraph 2 of the Lease. Tenant acknowledges that all work done in the Premises pursuant to this Work Letter Agreement shall be performed by a contractor (and such subcontractors, suppliers and laborers) designated by Landlord and approved by Tenant.

4. Condition of Premises. Landlord will, at Landlord's sole cost and expense, construct all improvements to the Premises necessary to characterize the Premises as being in Shell Condition (hereinafter defined). As used herein the term "Shell Condition" means:

(a) The sprinkler system and sprinkler heads have been installed.

(b) The main ducting for the HVAC system has been installed.

(c) Electric lines have been run to junction boxes in the Premises.

(d) Semi-finished ceiling.

(e) Smooth concrete floor slab.

5. Modifications to Shell Condition. To the extent that the Final Plans call for any modifications (herein "Shell Modifications") to the Shell Condition, the costs of such Shell Modifications shall be borne solely by Tenant, subject, however, to the reimbursement provisions of Paragraph 7 below. By way of example, and not by way of limitation, the following shall each be examples of Shell Modifications:

(a) Any modifications to the existing sprinkler system, or the moving of existing sprinkler heads, or the installation of additional sprinkler heads.

(b) Any modifications to the existing HVAC system, the moving of the existing duct work and/or diffusers, or the installation of additional duct work and/or diffusers.

(c) Any rewiring of existing junction boxes, relocation of existing junction boxes, or installation of additional junction boxes.

6. Building Standard. Tenant shall be required to use, and the Final Plans shall specify Building Standard (a) light fixtures, (b) doors, (c) ceiling tiles, and (d) hardware throughout the Premises and the costs of purchasing, transporting and installing each of the foregoing Building Standard items shall be borne solely by Tenant, subject, however, to the reimbursement provisions of Paragraph 7 below. Whenever the term "Building Standard" is used in this Work Letter Agreement, it shall mean the exclusive type, brand, quality, and/or quantity of materials Landlord designates from time to time to be the quality or quantity to be used in the Building.

7. Payment of Costs: Credit. Tenant agrees to pay Landlord, promptly upon being billed therefor, the actual cost (labor, materials, architectural, space planning, engineering and other costs) of all work performed pursuant to this Work Letter Agreement plus a fee of four percent (4%) of such cost for Landlord's review, supervision and management of such work; Landlord shall have the right to submit interim statements of cost incurred which shall be promptly paid by Tenant to Landlord. Tenant agrees that all payments due to Landlord pursuant hereto shall constitute payments of additional rent and that in the event of default of payment thereof, Landlord shall (in addition to all other remedies) have the same rights as in the event of default of payment of rent under the Lease. Notwithstanding the above, so long as no event of default, as defined in Paragraph 20 of the Lease, shall have occurred, Landlord shall credit Tenant in an amount not to exceed \$18.50 per square foot of Rentable Area in the Premises (the "Credit"), such Credit to be applied only against sums due from Tenant to Landlord pursuant to this Work Letter Agreement (exclusive of those sums which, pursuant to Paragraph 2 above are not eligible to be offset by the Credit).

8. Delays. It is agreed that, notwithstanding the provisions of Paragraph 2 of the Lease, waiving Tenant's obligation for the payment of rental under Paragraph 1(f) of the Lease until the date on which Landlord can deliver possession of the Premises, if Landlord shall be delayed in substantially completing the work to be performed by Landlord pursuant to this Work Letter Agreement as a result of:

(a) Tenant's failure to timely furnish information or specifications in accordance with Paragraph 2 above; or

(b) Tenant's request for materials, finishes or installations other than Landlord's Building Standard; or

(c) Tenant's changes in or modifications to any plans and specifications or any of the Final Plans; or

(d) The performance of any work in the Premises by a person, firm or corporation employed by Tenant; (all such persons, firms or corporations being subject to the approval of Landlord);

Tenant's obligation for payment of rental under the Lease (as affected by such waiver) shall be accelerated by the number of days of such delay.

9. Entry by Tenant's Agents. Landlord will permit Tenant and its agents to enter the Premises prior to the date specified for the commencement of Tenant's occupancy under the Lease, in order that Tenant may perform through its own contractors (to be first approved by Landlord) such other work and decorations as Landlord may approve at the same time that Landlord's contractors are working in the Premises. The foregoing license to enter prior to the commencement of the lease term, however, is conditioned upon Tenant's workmen and mechanics working in harmony and not interfering with the labor employed by Landlord, Landlord's mechanics or contractors or by any other tenant or their contractors. Such license is further conditioned upon workers' compensation and public liability insurance for bodily injury and property damage, all in amounts and with companies and on forms satisfactory to Landlord, being provided and at all times maintained by Tenant's contractors engaged in the performance of the work, and certificates of such insurance being furnished to Landlord prior to proceeding with the work. If at any time such entry shall cause disharmony or interference therewith, this license may be withdrawn by Landlord upon forty-eight (48) hours written notice to Tenant. Such entry conditions shall be deemed to be under all of the terms, covenants, provisions and conditions of the Lease except as to the covenant to pay rent. Landlord shall not be liable in any way for any injury, loss or damage which may occur to any of Tenant's decorations or installations so made prior to commencement of the lease term, the same being solely at Tenant's risk, and Tenant shall hold Landlord harmless from any claim, demand or action arising from activities of Tenant's contractors, workmen or mechanics.

If the foregoing correctly sets forth our understanding, kindly acknowledge your approval in the space provided below whereupon this work letter shall become a binding agreement between us.

Yours very truly,

COLLINS CAMPBELL JOINT VENTURE
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.,
a Texas corporation

By: /s/ W. T. Field

W. T. Field, President

AGREED TO AND ACCEPTED
as of the 4th day of April, 1997.

TELECOM TECHNOLOGIES, INC.,
a Texas corporation

By: /s/ ANOUSHEH ANSARI

Name: ANOUSHEH ANSARI

Title: PRESIDENT

EXHIBIT "D"

BUILDING RULES AND REGULATIONS

1. Landlord agrees to furnish Tenant two keys to Tenant door at no charge and two keys to entry doors requiring a \$10.00 refundable deposit. Additional keys will be furnished at a nominal charge.
2. Tenant will refer all contractors, contractor's representatives and installation technicians, rendering any service on or to the Premises for Tenant, to Landlord for Landlord's approval and supervision before performance of any contractual service. This provision shall apply to all work performed in the Building including installation of telephones, telegraph equipment, electrical devices and attachments and installations of any nature affecting floors, walls, woodwork, trim, windows, ceiling, equipment or any other physical portion of the Building.
3. No Tenant shall at any time occupy any part of the Project as sleeping or lodging quarters.
4. Tenant shall not place, install or operate on Premises or in any part of the Project, any engine, stove or machinery or conduct mechanical operations or cook thereon or therein, or place or use in or about Premises any explosives, gasoline, kerosene, oil, acids, caustics, or any other inflammable, explosive, or hazardous material without prior written consent of Landlord.
5. Landlord will not be responsible for lost or stolen personal property, equipment, money or jewelry from Tenant's area or public rooms regardless of whether such loss occurs when area is locked against entry or not.
6. No birds, fowl, dogs, animals or pets of any kind shall be brought into or kept in or about the Project.
7. Landlord will not permit entrance to Tenant's offices by use of pass key controlled by Landlord, to any person at any time without permission by Tenant, except employees, contractors, or service directly supervised or employed by Landlord.
8. None of the entries, passages, doors, elevators, hallways or stairways shall be blocked or obstructed, or any rubbish, litter, trash, or material of any nature placed, emptied or thrown into these areas, or shall such areas be used at any time except for ingress or egress by Tenant, Tenant's agents, employees or invitees.
9. The water closets and other water fixtures shall not be used for any purpose other than those for which they were constructed. No person shall waste water by interfering with the faucets or otherwise.
10. No person shall disturb the occupants of the Building by the use of any musical instruments, the making of raucous noises, or other unreasonable use.
11. Nothing shall be thrown out of the windows of the Building, or down the stairways or other passages.
12. Tenant shall not store any materials, equipment, products, etc., outside the Premises as shown on the plats attached hereto.
13. Tenant shall not erect any sign or other insignia upon or in any part of the Project or other portion of the Premises without the prior written consent of the Landlord.
14. Tenant shall comply with all local and federal codes and ordinances. In the event of fire or code problems, Tenant shall comply with such requirements.
15. Tenant and its agents, employees and invitees shall observe and comply with the driving and parking signs and markers on the Project grounds and surrounding areas.
16. Corridor and passage doors when not in use shall be kept closed.
17. Movement in or out of the Building of furniture, office equipment, or any other bulky or heavy materials shall be controlled by the Landlord. Landlord will determine the method of routing of such items so as to ensure the safety of all concerned.

18. Directories will be placed by the Landlord, at Landlord's expense, in the building and no other directories shall be permitted.

19. No signs, draperies, shutters, window coverings, decorations, hangings or obstructions of any type shall be placed on any skylights or on any doors or windows which are visible from outside the leased premises without the prior written consent of the Landlord.

20. All locks for doors in each tenant's leased area shall be building standard and no tenant shall place any additional lock or locks on any door in its leased area without Building Management's written consent.

21. Building Management shall have the authority to prescribe the weight and manner that safes and other heavy equipment are positioned.

22. Tenant space that is visible from public areas must be kept neat and clean.

23. Standard climate control hours are 7 a.m. to 6 p.m., Monday through Friday, and 8 a.m. to 12 noon on Saturday. Landlord shall adjust thermostats to maintain building standard temperature. Tenant shall not attempt to adjust temperature control thermostats. Window blinds should remain down and lifted at a 45-degree angle toward the street to maintain temperatures and conserve energy.

24. Tenant will comply with all requirements necessary for the security of the Premises both during business hours and after hours and on weekends.

25. Tenants are to lock all office doors leading to corridors and to turn out all lights at the close of their working day.

26. The work of the janitor or cleaning personnel shall not be hindered by Tenant after 6:30 p.m. The windows, doors and fixtures may be cleaned at any time. Tenant shall provide adequate waste and rubbish receptacles, cabinets, bookcases, map cases, etc., necessary to prevent unreasonable hardship to Landlord in discharging its obligation regarding cleaning service.

27. Employees of Landlord shall not receive or carry messages for or to any tenant or other person nor contact with or render free or paid services to any tenant or tenant's agent, employees or invitees.

28. Landlord desires to maintain standards of environment, comfort and convenience for its tenants. It will be appreciated if any undesirable conditions or lack of courtesy or attention by its employees are reported directly to Landlord.

29. All tenant modifications resulting from remodeling in or to the leased Premises must conform to the City of Richardson Building and Fire Codes and approved by Property Management in writing prior to performance of the work.

30. The Landlord reserves the right to rescind any of these rules and make such other and further rules and regulations as in the judgment of Landlord shall from time to time be needed for the safety, protection, care and cleanliness of the Project, the operation thereof, the preservation of good order therein, and the protection and comfort of its tenants, their agents, employees and invitees, including but not limited to rules and regulations regarding hours of access to the Project, which rules when made and notice thereof given to a tenant shall be binding upon him in like manner as if originally prescribed. In the event of any conflict, inconsistency, or other difference between the terms and provisions of these rules and regulations and any lease now or hereafter in effect between Landlord and any tenant in the Building, Landlord shall have the right to rely on the term or provision in either such lease or such Rules and Regulations which is most restrictive on such tenant and most favorable to Landlord.

EXHIBIT "E"
DESCRIPTION OF LAND

STATE OF TEXAS
COUNTY OF DALLAS
CITY OF RICHARDSON

WHEREAS, Collins Campbell Joint Venture, a Texas Joint Venture, is the owner of a tract of land situated in the WILLIAM HUGHES SURVEY, Abstract No. 573 in Dallas County, Texas and all of COLLINS ATRIUM ADDITION, on addition to the City of Richardson as recorded in Volume 85032, Page 3368 of the Deed Records of Dallas County, Texas (DRDCT) and being more particularly described as follows:

COMMENCING at the Intersection of the southerly right-of-way MUNICIPAL DRIVE (80 foot right-of-way) and the westerly right-of-way of NORTH COLLINS BOULEVARD (100 foot right-of-way);

THENCE departing the southerly right-of-way of said MUNICIPAL DRIVE and along the westerly right-of-way of NORTH COLLINS BOULEVARD South 00'06'07'' West, a distance of 450.00 feet to a 1/2 inch iron rod found for the POINT OF BEGINNING, said point being the most southeasterly corner of Lot 1, Block 1, COLLINS PLAZA recorded in Volume 83215, Page 2473 (DRDCT);

THENCE continuing along the westerly right-of-way of said NORTH COLLINS BOULEVARD South 00'06'07'' West, a distance of 387.48 feet to a 1/2 Inch Iron rod set for corner, said point being the most northeasterly corner of the UNIVERSITY PLACE TWO recorded in Volume 84114, Page 2132 (DRDCT);

THENCE departing the westerly right-of-way of said NORTH COLLINS BOULEVARD and along the northerly line of said UNIVERSITY PLACE TWO as follows:

North 89'53'53'' West, a distance of 503.31 feet to a 1/2 inch iron rod found for corner;

South 51'59'00'' West, a distance of 17.53 feet to a 1/2 inch Iron rod set for corner. in the northeasterly right-of-way of the G.C. & S.F. RAILROAD (150 foot right-of-way);

THENCE departing the northerly line of said UNIVERSITY PLACE TWO and along the northeasterly right-of-way of said RAILROAD North 38'01'00'' West, a distance of 221.82 feet to a 1/2 inch Iron rod. set for corner, said point being the most southwesterly corner of the RICHARDSON MEDICAL PARK recorded in Volume 79020, Page 5 (DRDCT);

THENCE departing the northeasterly right-of-way of said RAILROAD and along the southerly line of said RICHARDSON MEDICAL PARK North 51'54'32'' East, a distance of 408.39 feet to a 1/2 inch Iron rod found for corner, said point being found in the westerly line of said Lot 1, Block 1, COLLINS PLAZA;

THENCE departing the southerly line of said RICHARDSON MEDICAL PARK and along the westerly line of said Lot 1, Block 1 South 28'26'50'' East, a distance of 32.70 feet to a 1/2 inch Iron rod set for corner, said point being the most southwesterly corner of said Lot 1, Block 1;

THENCE departing the westerly line of said Lot 1, Block 1 and along the southerly line of said Lot 1, Block 1 South 89'53'53'' East, a distance of 317.43 feet to the POINT OF BEGINNING;

CONTAINING within these mates and bounds 4.866 acres or 211,952 square feet of land, more or less.

RIDER NO. 101

OPTION TO EXTEND

Tenant at its option may extend the term of this lease for up to one (1) extension term(s) of five (5) years (each) by serving written notice thereof upon Landlord at least six (6) months before the expiration of the initial lease term (or the prior extension term), provided that at the time of such notice and at the commencement of such extended term, no event of default, as defined in Paragraph 20 of this lease, shall have occurred. Upon the service of such notice and subject to the conditions set forth in the preceding sentence, this lease shall be extended without the necessity of the execution of any further Instrument or document. Such extended term shall commence upon the expiration date of the initial lease term (or the prior extension term), expire upon the annual anniversary of such date five (5) years thereafter, and be upon the same terms, covenants, and conditions as provided in this lease for the initial term, except that the basic rental payable during each extended term shall be at the prevailing rate (the "Market Rate") for comparable space in the Building and office/buildings comparable to the Building located in Richardson, Dallas County, Texas, taking into consideration factors including, but not limited to, the quality of construction and finish of the Building, the ease of accessibility to the Building and the visibility of the Building from major thoroughfares, and the availability of free parking associated with the Building, at the commencement of each such extended term, which new basic rental shall be adjusted as provided in and under this lease. Payment of all additional rent and other charges required to be made by Tenant as provided in this lease for the initial term shall continue to be made during each such extended term. Any termination of this lease during the initial term (or the prior extension term) shall terminate all rights of extension hereunder. Any assignment or subletting by Tenant pursuant to Paragraph 11 of this lease, except an assignment or subletting to a Fortune 1000 company specifically described under Paragraph 11, shall terminate the option(s) of Tenant contained herein, except for a permitted transfer described in Paragraph 11. Notwithstanding the foregoing, in no event shall the monthly rental installment for any extension term be less than the monthly rental installment during the last year of the initial term (or the prior extension term).

RIGHT OF FIRST REFUSAL

Provided this lease is then in full force and effect and no event of default, as defined in Paragraph 20 of this lease, shall have occurred, Tenant shall have the right of first refusal as hereinafter described to lease all (or any applicable part) of the space (the "Right of First Refusal Space") containing approximately 18,880 square feet of rentable area which is labelled on Exhibit "A" to this lease as the "Growth Area"; subject to the rights of the existing tenant, Thompson Realty Investment Corporation, on 9,847 square feet of rentable area comprising the northern portion of the Growth Area, at such time as Landlord engages in negotiations with a prospective tenant, exercisable at the following times and upon the following conditions:

1. If Landlord enters into negotiations with a prospective tenant to lease all or any part of the Right of First Refusal Space, Landlord shall notify Tenant of such fact and shall include in such notice the rent, term, and other terms (including finish out) at which Landlord is prepared to offer such Right of First Refusal Space to such prospective tenant. Tenant shall have a period of five (5) days from the date of delivery of the notice to notify Landlord whether Tenant elects to exercise the right granted hereby to lease the entire Right of First Refusal Space. If Tenant fails to give any notice to Landlord within the required five (5) day period, Tenant shall be deemed to have waived its right to lease the Right of First Refusal Space.
2. If Tenant so waives its right to lease the Right of First Refusal Space (either by giving written notice thereof or by failing to give any notice), Landlord shall have the right thereafter to lease all or the applicable portion of the Right of First Refusal Space to the prospective tenant and upon the execution of such lease between Landlord and the prospective Tenant this Right of First Refusal shall thereafter be null, void and of no further force or effect.
3. If Landlord does not enter into a lease with such prospective tenant covering all or the applicable portion of the Right of First Refusal Space, Landlord shall not thereafter engage in other lease negotiations with respect to the Right of First Refusal Space without first complying with the provisions of this Rider No. 201.
4. Upon the exercise by Tenant of its right of first refusal as provided in this Rider No. 201, Landlord and Tenant shall, within ten (10) days after Tenant delivers to Landlord notice of its election, enter into a lease covering the Right of First Refusal Space for the rent, for the term, and containing such other terms and conditions as Landlord notified Tenant pursuant to paragraph 1 above.
5. Any assignment or subletting by Tenant pursuant to Paragraph 11 of this lease, except for an assignment of subletting specifically permitted under Paragraph 11 without Landlord's consent, shall terminate the right of first refusal of Tenant contained herein. Notwithstanding anything to the contrary contained in this Rider No. 201, upon the second anniversary of the Commencement Date of this lease, the right of first refusal of Tenant contained herein shall terminate and be of no further force or effect.

[Diagram of Preliminary Signage]

[Diagram of Sign]

[Blueprint of East Elevation with signage detail]

FIRST AMENDMENT TO OFFICE LEASE AGREEMENT

STATE OF TEXAS
COUNTY OF DALLAS

THIS FIRST AMENDMENT TO OFFICE LEASE AGREEMENT (this "First Amendment") is made and entered into effective as of November 1, 1997, by and between Collins Campbell Joint Venture ("Landlord") and telecom technologies, inc. ("Tenant").

R E C I T A L S

WHEREAS, Landlord and Tenant entered into that certain Office Lease Agreement dated as of April 4, 1997 (the "Lease") concerning certain Premises defined therein and commonly known as Suite 3000 at 1701 North Collins Blvd., Richardson, Dallas County, Texas, which Lease is incorporated herein by reference; and

WHEREAS, Landlord and Tenant desire to amend the Lease to increase the size of the First Portion of the Premises and to decrease the size of the Second Portion of the Premises and to increase the Basic Rental.

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, the mutual agreements set forth in the Lease, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant have agreed, and do hereby agree, as follows:

1. All terms capitalized herein and not specifically defined shall have the same meaning herein as is ascribed to them in the Lease.
2. In Section 1. (c), "Premises", the rentable area in the leased Premises is increased to 20,227 square feet of rentable area. The First Portion of the Premises is increased in size to 14,277 square feet of rentable area (highlighted in yellow on Exhibit A) and the Second Portion of the Premises is decreased in size to 5,950 square feet of rentable area (highlighted in blue on Exhibit A) described on Exhibit A attached hereto and incorporated herein for all purposes. The total rentable area of the building is now stipulated for all purposes herein to be 56,991 square feet of rentable area.

3. In Section 1.(d), "Lease Term", is changed to sixty (60) months, commencing on November 1, 1997 (the "Commencement Date") and ending on October 31, 2002.

4. In Section 1.(e), "Basic Rental", is increased to \$2,026,933.47.

5. In Section 1.(f), "Monthly Rental Installment", is changed to:

Monthly from November 1, 1997 through March 31, 1998 - \$23,497.56;
then

Monthly from April 1, 1998 through October 31, 1998 - \$33,290.27;
then

Monthly from November 1, 1998 through October 31, 2002 - \$34,925.29;
then

6. In Section 3, "Rent", Paragraph 2 is changed to read as follows:

14.818 months of basic rental, to be applied to the first fifteen monthly basic rental installments accruing hereunder, totaling \$448,927.50 ("Prepaid Rent"), together with the security deposit (as defined in

Paragraph 1(g) hereof), shall be payable by Tenant to Landlord in two lump sum payments. \$241,880.42 will be due contemporaneously with the execution hereof. \$224,463.75 will be due upon the later of June 1, 1997, or commencement of construction by Landlord of the work described in the Work Letter Agreement. Landlord will deposit the Prepaid Rent and Security Deposit in an escrow account with State Bank & Trust to be held until occupancy of the First Portion of the Premises by Tenant, at which time the Prepaid Rent and Security Deposit will become the property of Landlord remaining in the escrow account, which escrow account shall be debited monthly as basic rental accrues. On the first day of the fifteenth month following the date on which basic rent begins to accrue under this lease, Tenant shall pay \$6,368.07. On the first day of the sixteenth month following the date on which basic rental begins to accrue under this lease, Tenant shall begin paying the scheduled monthly rental installment of \$34,925.29 without demand and shall continue paying such monthly rental installments on or before the first day of each succeeding calendar month during the term hereof.

7. Exhibit C, "Work Letter Agreement", Section 7, "Payment of Costs; Credit", line 7, the number \$18.50 is increased to \$23.75.

8. Except as herein provided to the contrary, Tenant's lease of the premises from Landlord pursuant hereto shall be on the same terms and conditions as those specified in the Lease.

9. The Lease (as amended by this First Amendment) remains in full force and effect and is hereby ratified and affirmed.

IN WITNESS WHEREOF, this First Amendment is hereby executed effective as of the day and year first set forth above.

LANDLORD:

COLLINS CAMPBELL JOINT VENTURE,
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.

/s/ W. T. Field

W. T. Field, President

TENANT:

telecom technologies, inc.,
a Texas corporation

By: /s/ Anousheh Ansari

Anousheh Ansari, President

[Floor Plan Third Floor]

SECOND AMENDMENT TO OFFICE LEASE AGREEMENT

THIS SECOND AMENDMENT TO OFFICE LEASE AGREEMENT (this "Second Amendment") is made and entered into effective as of July 1, 1998, by and between Collins Campbell Joint Venture, ("Landlord") and telecom technologies, inc. ("Tenant").

R E C I T A L S

WHEREAS, Landlord and Tenant entered into that certain Office Lease Agreement dated as of April 4, 1997 and amended as of November 1, 1997 (the "Lease"), with respect to certain Premises defined therein and commonly known as Suite 3000 at 1701 North Collins Blvd., Richardson, Dallas County, Texas, which Lease is incorporated herein by reference; and

WHEREAS, Landlord and Tenant desire to further amend the Lease to increase the size of the Premises and increase the Basic Rental;

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, the mutual agreements set forth in the Lease, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant have agreed, and do hereby agree, as follows:

1. All terms used herein and not specifically defined shall have the same meaning herein as is ascribed to them in the Lease.
2. The Premises are hereby increased to 31,944 square feet of rentable area by adding 11,717 square feet of rentable area on the second floor, the "Expansion Space" described on Exhibit "A", which is attached hereto and incorporated herein for all purposes.
3. Basic Rental is increased to \$3,061,979.54.
4. The monthly rental installment" is increased as set forth below:

Monthly from July 1, 1998 through October 31, 1998-\$44,286.10; then
Monthly from November 1, 1998 through October 31, 2002-\$54,746.55.
5. Landlord agrees to install, in accordance with the Work Letter Agreement attached hereto as Exhibit "C", the improvements described in Exhibit "C". Landlord has made no representations as to the condition of the Premises or the Building, or Landlord's undertaking to remodel, repair or decorate, except as expressly set forth herein and in Exhibit "C".

6. Except as herein provided to the contrary, Tenant's lease of the Premises from Landlord pursuant hereto shall be on the same terms and conditions as those specified in the Lease.
7. The Lease (as amended by this First Amendment) remains in full force and effect and is hereby ratified and affirmed.
8. All other terms and conditions of the Lease shall remain unchanged and in full force and effect.
9. Special Provisions: Exhibits "A" and "C". Exhibit "B" was intentionally omitted.

IN WITNESS WHEREOF, this Second Amendment is hereby executed effective as of the day and year first set forth above.

LANDLORD:

COLLINS CAMPBELL JOINT VENTURE
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.

By: /s/ W. T. Field

W. T. Field, President

TENANT:
telecom technologies, inc.,
a Texas corporation

By: /s/ Anousheh Ansari

Anousheh Ansari, President

Exhibit A

[Diagram of 2nd Level Floor Plan]

EXHIBIT "C"

WORK LETTER AGREEMENT

telecom technologies, inc.
1701 North Collins Blvd.
Suite 3000
Richardson, Texas 75080

Re: Suite 2000, 1701 North Collins Blvd., The Atrium on Collins Phase II,
Richardson, Texas.

Dear Anousheh:

You (hereinafter referred to as "Tenant") and we (hereinafter referred to as "Landlord") are executing, simultaneously with this "Work Letter Agreement" (herein so called), a written Second Amendment to Office Lease Agreement (the "Second Amendment") covering the space referred to above (herein after called the "Expansion Space").

To induce Tenant to enter into such Second Amendment (which is hereby incorporated by reference) and in consideration of the mutual covenants hereinafter contained, Landlord and Tenant mutually agree as follows:

1. Final Plans. Landlord agrees to provide, by Landlord's designated space planner, architect and/or engineer, the following Building Standard (hereinafter defined) space plans and architectural and mechanical drawings and specifications (hereinafter collectively referred to as the "Final Plans"), to be drawn for the Expansion Space on Tenant's behalf:

(a) Complete Building Standard "Space Plans" (herein so called) for the layout of the Expansion Space;

(b) Complete, finished and detailed 1/8 inch scale architectural drawings and specifications for Tenant's partition layout, reflected ceiling, telephone and electrical outlets, and finish schedule for the work to be done by Landlord under Paragraph 3 hereof (the "Construction Plans"); and

(c) Complete Building Standard mechanical plans and specifications where necessary for installation of normal air conditioning system and duct work and heating and electrical facilities for the work to be done by Landlord under Paragraph 3 hereof (the "MP & E Plans").

Tenant shall pay all costs of preparing the Final Plans, subject, however, to the reimbursement provisions of Paragraph 7 below.

2. Preparation of Final Plans; Changes to Final Plans. Tenant covenants and agrees to furnish to Landlord all information necessary for the preparation of each of the Space Plans, the Construction Plans and the M P & E Plans on or before May 5, 1998. Landlord will cause the Space Plans, the Construction Plans, and the M P & E Plans to be prepared from such information and will submit such plans to Tenant. Within ten (10) days after receipt thereof, Tenant shall approve the Space Plans, Construction Plans and M P & E Plans or indicate what changes, if any, that it desires to make. Such proposed changes, if any, shall be submitted to Landlord in writing for Landlord's written approval. If within ten (10) days after receipt thereof, Tenant fails to approve any of the Space Plans, Construction Plans and M P & E Plans or if Tenant fails to propose in writing any changes to be made to such Space Plans, Construction Plans and M P & E Plans, then Tenant shall be deemed to have approved each of same. Any redrawing of all or any of the Final Plans occasioned by Tenant after Tenant's approval (or deemed approval) thereof as well as any changes requested by Tenant in connection with its initial review of the Final Plans which are agreed to by Landlord shall be at Tenant's sole cost and expense and no portion of the Credit (as defined in Paragraph 7 below) shall be applicable to such costs.

3. Construction of Improvements. Subject to each of Paragraph 2 and Paragraph 28 of the Lease, provided that Tenant has not committed an event of default pursuant to Paragraph 20 of the Lease, Landlord agrees to cause the improvements to the Expansion Space to be constructed pursuant to and in substantial accordance with the Final Plans. The construction of such improvements in the Expansion Space shall be at Tenant's sole cost and expense, subject, however, to the reimbursement provisions of Paragraph 7 below. Tenant acknowledges that all work done in the Expansion Space pursuant to this Work Letter Agreement shall be performed by a contractor (and such subcontractors, suppliers and laborers) designated by Landlord and approved by Tenant.

4. Condition of Expansion Space. Landlord will, at Landlord's sole cost and expense, construct all improvements to the Expansion Space necessary to characterize the Expansion Space as being in Shell Condition (hereinafter defined). As used herein the term "Shell Condition" means:

- (a) The sprinkler system and sprinkler heads have been installed.
- (b) The main ducting for the HVAC system has been installed.
- (c) Electric lines have been run to junction boxes in the Expansion Space.
- (d) The ceiling grid has been installed. Building standard ceiling tile and lights stacked on the floor.
- (e) Smooth concrete floor slab.

5. Modifications to Shell Condition. To the extent that the Final Plans call for any modifications (herein "Shell Modifications") to the Shell Condition, the costs of such Shell Modifications shall be borne solely by Tenant, subject, however, to the reimbursement provisions of Paragraph 7 below. By way of example, and not by way of limitation, the following shall each be examples of Shell Modifications:

(a) Any modifications to the existing sprinkler system, or the moving of existing sprinkler heads, or the installation of additional sprinkler heads.

(b) Any modifications to the existing HVAC system, the moving of the existing ductwork and/or diffusers, or the installation of additional ductwork and/or diffusers.

(c) Any rewiring of existing junction boxes, relocation of existing junction boxes, or installation of additional junction boxes.

6. Building Standard. Tenant shall be required to use, and the Final Plans shall specify Building Standard (a) light fixtures, (b) doors, (c) ceiling tiles, and (d) hardware throughout the Expansion Space and the costs of purchasing, transporting and installing each of the foregoing Building Standard items shall be borne solely by Tenant, subject, however, to the reimbursement provisions of Paragraph 7 below. Whenever the term "Building Standard" is used in this Work Letter Agreement, it shall mean the exclusive type, brand, quality, and/or quantity of materials Landlord designates from time to time to be the quality or quantity to be used in the Building.

7. Payment of Costs: Credit. Tenant agrees to pay Landlord, promptly upon being billed therefor, the actual cost (labor, materials, architectural, space planning, engineering and other costs) of all work performed pursuant to this Work Letter Agreement; Landlord shall have the right to submit interim statements of cost incurred which shall be promptly paid by Tenant to Landlord. Tenant agrees that all payments due to Landlord pursuant hereto shall constitute payments of additional rent and that in the event of default of payment thereof, Landlord shall (in addition to all other remedies) have the same rights as in the event of default of payment of rent under the Lease. Notwithstanding the above, so long as no event of default, as defined in Paragraph 20 of the Lease, shall have occurred, Landlord shall credit Tenant in an amount not to exceed \$15.00 per square foot of Rentable Area in the Expansion Space (the "Credit"), such Credit to be applied only against sums due from Tenant to Landlord pursuant to this Work Letter Agreement (exclusive of those sums which, pursuant to Paragraph 2 above are not eligible to be offset by the Credit).

8. Delays. If Landlord shall be delayed in substantially completing the work to be performed by Landlord pursuant to this Work Letter Agreement as a result of:

(a) Tenant's failure to timely furnish information or specifications in accordance with Paragraph 2 above; or

(b) Tenant's request for materials, finishes or installations other than Landlord's Building Standard; or

(c) Tenant's changes in or modifications to any plans and specifications or any of the Final Plans; or

(d) The performance of any work in the Expansion Space by a person, firm or corporation employed by Tenant; (all such persons, firms or corporations being subject to the approval of Landlord);

Tenant's obligation for payment of rental under the Second Amendment (as affected by such waiver) shall be accelerated by the number of days of such delay.

9. Entry by Tenant's Agents. Landlord will permit Tenant and its agents to enter the Expansion Space prior to the date specified for the commencement of Tenant's occupancy under the Second Amendment, in order that Tenant may perform through its own contractors (to be first approved by Landlord) such other work and decorations as Landlord may approve at the same time that

Landlord's contractors are working in the Expansion Space. The foregoing license to enter, however, is conditioned upon Tenant's workmen and mechanics working in harmony and not interfering with the labor employed by Landlord, Landlord's mechanics or contractors or by any other tenant or their contractors. Such license is further conditioned upon workers' compensation and public liability insurance for bodily injury and property damage, all in amounts and with companies and on forms satisfactory to Landlord, being provided and at all times maintained by Tenant's contractors engaged in the performance of the work, and certificates of such insurance being furnished to Landlord prior to proceeding with the work. If at any time such entry shall cause disharmony or interference therewith, Landlord may withdraw this license upon forty-eight (48) hours written notice to Tenant. Such entry conditions shall be deemed to be under all of the terms, covenants, provisions and conditions of the Lease. Landlord shall not be liable in any way for any injury, loss or damage which may occur to any of Tenant's decorations or installations, the same being solely at Tenant's risk, and Tenant shall hold Landlord harmless from any claim, demand or action arising from activities of Tenant's contractors, workmen or mechanics.

If the foregoing correctly sets forth our understanding, kindly acknowledge your approval in the space provided below whereupon this work letter shall become a binding agreement between us.

Yours very truly,

COLLINS CAMPBELL JOINT VENTURE
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.,
a Texas corporation

By: /s/ W. T. Field

W. T. Field, President

AGREED TO AND ACCEPTED
as of the 8th day of May, 1998.

telecom technologies, inc.
a Texas corporation

By: /s/ Anousheh Ansari

Name: Anousheh Ansari

Title: President

THIRD AMENDMENT TO OFFICE LEASE AGREEMENT

THIS THIRD AMENDMENT TO OFFICE LEASE AGREEMENT (this "Third Amendment") is made and entered into effective as of July 1, 1998, by and between Collins Campbell Joint Venture ("Landlord") and telecom technologies, inc. ("Tenant").

RECITALS

WHEREAS, Landlord and Tenant entered into that certain Office Lease Agreement dated as of April 4, 1997, that certain First Amendment to Office Lease Agreement, dated November 1, 1997, and that certain Second Amendment to Office Lease Agreement dated July 1, 1998 collectively, (the "Lease"), with respect to certain Premises defined therein and commonly known as Suite 3000 at 1701 North Collins Blvd., Richardson, Dallas County, Texas, which Lease is incorporated herein by reference;

WHEREAS, Landlord and Tenant desire to further amend the Lease to adjust and clarify payment terms;

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, the mutual agreements set forth in the Lease, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant have agreed, and do hereby agree, as follows:

1. All terms used herein and not specifically defined shall have the same meaning herein as is ascribed to them in the Lease.
2. Basic Rental is recalculated to be \$3,009,171.04.
3. The Monthly Rental Installments are adjusted as set forth below for the period from and after July 1, 1998:

Monthly from July 1, 1998 through August 31, 1998	-\$33,290.27;
Monthly from September 1, 1998 through September 30, 1998	-\$44,286.10;
Monthly from October 1, 1998 through October 31, 1998	-\$53,111.53;
and	
Monthly from November 1, 1998 through October 31, 2002	-\$54,746.55

4. Prepaid Rent/Escrow Account: The Monthly Rental Installments shall be paid directly from the Escrow Account pursuant to the Escrow Agreement, Escrow No. 3488, as same has been amended from time to time until such time as funds in the Escrow Account are not sufficient to pay the required Monthly Rental Installment. At the time there are not sufficient funds in the Escrow Account to pay the Monthly Rental Installments, the Tenant shall begin paying the Monthly Rental Installments. The following schedule approximates when the Escrow Account will be depleted.

Escrow Account Balance as of July 1, 1998: \$250,137.27

Less: July 98 Rent	\$33,290.27	\$216,847.00
August 98 Rent	\$33,290.27	\$183,556.73
September 98 Rent	\$44,286.10	\$139,270.63
October 98 Rent	\$53,111.53	\$ 86,159.10
November 98 Rent	\$54,746.55	\$ 31,412.55
December 98 Rent	\$54,746.55	(\$ 23,334.00)

So, effective December 1, 1998, Tenant will pay Landlord \$23,334 for the balance of December 98 rent. Then beginning the January 1, 1999 and continuing through October 31, 2002, Tenant will pay the monthly rental installment of \$54,746.55 at the first of each month.

5. Except as herein provided to the contrary, Tenant's lease of the Premises from Landlord pursuant hereto shall be on the same terms and conditions as those specified in the Lease.
6. The Lease (as amended by this Third Amendment) remains in full force and effect and is hereby ratified and affirmed.
7. All other terms and conditions of the Lease shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, this Third Amendment is hereby executed effective as of the day and year first set forth above.

LANDLORD:

COLLINS CAMPBELL JOINT VENTURE
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.

By: /s/ W.T. Field

W.T. Field, President

TENANT:

telecom technologies, inc.,
a Texas corporation

By: /s/ Anousheh Ansari

Anousheh Ansari, President

[Letter head of THOMPSON REALTY CORPORATION]

August 26, 1998

Kevin R. Griffin
State Bank & Trust
8214 Westchester
Dallas, Texas 75225

RE: Escrow Agreement #3488 between Collins Campbell Joint Venture and
telecom technologies, inc. ("TTI") with State Bank & Trust Company,
as Escrow Agent

Dear Mr. Griffin:

Enclosed for your file is a copy of the Third Amendment to Office Lease Agreement effective July 1, 1998. TTI has leased an additional 11,717 rentable square feet on the second floor of the pertinent building. Accordingly, the lease payments have changed. Please let your records reflect that effective September 1, 1998, and continuing through September 30, 1998, the revised monthly rental payment to be paid out of escrow fund is \$44,286.10. Then beginning October 1, 1998, and continuing through October 31, 1998, the revised monthly rental payment to be paid out of the escrow fund will be \$53,111.53. Then beginning November 1, 1998, and continuing through the depletion of the escrow account, which we calculate to be on or around December 1, 1998, the revised monthly rental payment to be paid out of the escrow fund will be \$54,746.55.

Sincerely,

COLLINS CAMPBELL JOINT VENTURE,
a Texas joint venture

By: Jaytex Properties, Ltd., joint venturer

By: JRS Management, Inc., general partner

By: /s/ W.T. Field

W.T. Field, President

ACCEPTED AND AGREED TO, as of this 8th day of September, 1998.
TELECOM TECHNOLOGIES, INC., a Texas corporation

By: Anousheh Ansari

Anousheh Ansari, President

[Letter head of THOMPSON REALTY CORPORATION]

September 9, 1998

Ms. Anousheh Ansari
President
telecom technologies, inc.
1701 North Collins Blvd.
Suite 3000
Richardson, Texas 75080

RE: Right of First Refusal Challenge

Dear Anousheh:

Pursuant to Rider No. 201 of your Lease at 1701 North Collins Blvd., please be advised that we are considering entering into a lease with HPS America, Inc. The size of the lease is 1,601 rentable square feet ("RSF"). The entire 1,601 rentable square feet is located within the Growth Area (see Exhibit A attached) described in your Lease. The terms of the proposed lease would be as follows:

Commencement Date: November 1, 1998
Demised Premises: 1,601 RSF, Second Floor
Annual Rental Rate: Year One (1) - \$22.00/RSF
Year Two (2) - \$22.00/RSF
Year Three (3) - \$22.00/RSF
Year Four (4) - \$22.00/RSF
Year Five (5) - \$22.00/RSF
Expense Stop: 1998 Base Year
Space Planning and
Improvement Allowance: \$18.00/RSF

Please deliver a signed copy of this notice back to us at your earliest convenience.

Very truly yours,

/s/ Douglas Thompson

H. Douglas Thompson

HDT:sc

Ms. Anousheh Ansari
telecom technologies, inc.
September 9, 1998
Page 2 of 2

telecom technologies, inc. has reviewed this notice and by its signature below
Accept to take the 1,601 rentable square feet.

AGREED TO AND ACCEPTED THIS 14 DAY OF SEPTEMBER, 1998.

telecom technologies, inc.

/s/ Anousheh Ansari

- - - - -
Anousheh Ansari, President

A mutually agreeable start date will be negotiated

EXHIBIT "A"

SITE PLAN

RPS AMERICA, INC.

PREMISES : 1,601 RENTABLE SQUARE FEET

1701 : N. COLLINS

SUITE 2100

RICHARDSON, TX 75080

[Diagram of 2nd Level Floor Plan]

FOURTH AMENDMENT TO OFFICE LEASE AGREEMENT

THIS FOURTH AMENDMENT TO OFFICE LEASE AGREEMENT (this "Fourth Amendment") is made and entered into effective as of February 1, 1999, by and between Collins Campbell Joint Venture ("Landlord") and telecom technologies, inc. ("Tenant").

RECITALS

WHEREAS, Landlord and Tenant entered into that certain Office Lease Agreement dated as of April 4, 1997, as amended by that certain First Amendment to Office Lease Agreement dated as of November 1, 1997 and by that certain Second and Third Amendment to Office Lease Agreement dated as of July 1, 1998, collectively (the "Lease"), with respect to certain Premises defined therein and commonly known as Suite 3000 at 1701 North Collins Blvd., Richardson, Dallas County, Texas, which Lease is incorporated herein by reference; and

WHEREAS, Landlord and Tenant desire to further amend the Lease to extend the Lease Term, increase the size of the Premises, and increase the Basic Rental.

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, the mutual agreements set forth in the Lease, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant have agreed, and do hereby agree, as follows:

1. All terms used herein and not specifically defined shall have the same meaning herein as is ascribed to them in the Lease.
2. The Premises are hereby increased to 38,016 square feet of rentable area by adding 6,072 square feet of rentable area on the second floor, the "Expansion Space" described on Exhibit "A", which is attached hereto and incorporated herein for all purposes.
3. The Lease Term is hereby extended to end on April 30, 2003 in lieu of October 31, 2002.
4. Basic Rental is increased to \$3,909,279.04.
5. The "Monthly Rental Installment" is increased as set forth below:

Monthly from February 1, 1999 through October 31, 2002 - \$65,878.55;
then Monthly from November 1, 2002 through April 30, 2003 - \$66,528.00.

6. Landlord agrees to install, in accordance with the Work Letter Agreement attached hereto as Exhibit "C", the improvements described in Exhibit "C". Landlord has made no representations as to the condition of the Premises or the Building, or Landlord's undertaking to remodel, repair or decorate, except as expressly set forth herein and in Exhibit "C".
7. Except as herein provided to the contrary, Tenant's lease of the Premises from Landlord pursuant hereto shall be on the same terms and conditions as those specified in the Lease.
8. The Lease (as amended by this Fourth Amendment) remains in full force and effect and is hereby ratified and affirmed.
9. Special Provisions: Exhibits "A" and "C". Exhibit "B" was intentionally omitted.
10. The submission of this Lease to Tenant shall not be construed as an offer, nor shall Tenant have any rights with respect hereto unless and until Landlord shall execute a copy of this Lease and deliver the same to Tenant.

IN WITNESS WHEREOF, this Fourth Amendment is hereby executed effective as of the day and year first set forth above.

LANDLORD:

COLLINS CAMPBELL JOINT VENTURE
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.

By: /s/ W.T. Field

W.T. Field, President

TENANT:

telecom technologies, inc.,
a Texas corporation

By: /s/ Anousheh Ansari

Anousheh Ansari, President

Exhibit A

[Diagram of 2nd Level Floor Plan]

EXHIBIT "C"

WORK LETTER AGREEMENT

telecom technologies, inc.
1701 North Collins Blvd.
Suite 3000
Richardson, Texas 75080

RE: Suite 2200, 1701 North Collins Blvd., The Atrium on Collins Phase II,
Richardson, Texas.

Dear Anousheh:

You (hereinafter referred to as "Tenant") and we (hereinafter referred to as "Landlord") are executing, simultaneously with this "Work Letter Agreement" (herein so called), a written Fourth Amendment to Office Lease Agreement (the "Fourth Amendment") covering the space referred to above (hereinafter called the "Expansion Space").

To induce Tenant to enter into such Fourth Amendment (which is hereby incorporated by reference) and in consideration of the mutual covenants hereinafter contained, Landlord and Tenant mutually agree as follows:

1. Final Plans. Landlord agrees to provide, by Landlord's designated space planner, architect and/or engineer, the following Building Standard (hereinafter defined) space plans and architectural and mechanical drawings and specifications (hereinafter collectively referred to as the "Final Plans"), to be drawn for the Expansion Space on Tenant's behalf:

(a) Complete Building Standard "Space Plans" (herein so called) for the layout of the Expansion Space;

(b) Complete, finished and detailed 1/8 inch scale architectural drawings and specifications for Tenant's partition layout, reflected ceiling, telephone and electrical outlets, and finish schedule for the work to be done by Landlord under Paragraph 3 hereof (the "Construction Plans"); and

(c) Complete Building Standard mechanical plans and specifications where necessary for installation of normal air conditioning system and duct work and heating and electrical facilities for the work to be done by Landlord under Paragraph 3 hereof (the "MP & E Plans").

Tenant shall pay all costs of preparing the Final Plans, subject, however, to the reimbursement provisions of Paragraph 7 below.

2. Preparation of Final Plans; Changes to Final Plans. Tenant covenants and agrees to furnish to Landlord all information necessary for the preparation of each of the Space Plans, the Construction Plans and the M P & E Plans on or before October 30, 1998. Landlord will cause the Space Plans, the Construction Plans, and the M P & E Plans to be prepared from such information and will submit such plans to Tenant. Within ten (10) days after receipt thereof, Tenant shall approve the Space Plans, Construction Plans and M P & E Plans or indicate what changes, if any, that it desires to make. Such proposed changes, if any, shall be submitted to Landlord in writing for Landlord's written approval. If within ten (10) days after receipt thereof, Tenant fails to approve any of the Space Plans, Construction Plans and M P & E Plans or if Tenant fails to propose in writing any changes to be made to such Space Plans, Construction Plans and M P & E Plans, then Tenant shall be deemed to have approved each of same. Any redrawing of all or any of the Final Plans occasioned by Tenant after Tenant's approval (or deemed approval) thereof as well as any changes requested by Tenant in connection with its initial review of the Final Plans which are agreed to by Landlord shall be at Tenant's sole cost subject to credit in Paragraph 7.

3. Construction of Improvements. Subject to each of Paragraph 2 and Paragraph 28 of the Lease, provided that Tenant has not committed an event of default pursuant to Paragraph 20 of the Lease, Landlord agrees to cause the improvements to the Expansion Space to be constructed pursuant to and in substantial accordance with the Final Plans. The construction of such improvements in the Expansion Space shall be at Tenant's sole cost and expense, subject, however, to the reimbursement provisions of Paragraph 7 below. Tenant acknowledges that all work done in the Expansion Space pursuant to this Work Letter Agreement shall be performed by a contractor (and such subcontractors, suppliers and laborers) designated by Landlord and approved by Tenant.

4. Condition of Expansion Space. Landlord will, at Landlord's sole cost and expense, construct all improvements to the Expansion Space necessary to characterize the Expansion Space as being in Shell Condition (hereinafter defined). As used herein the term "Shell Condition" means:

- (a) The sprinkler system and sprinkler heads have been installed.
- (b) The main ducting for the HVAC system has been installed.
- (c) Electric lines have been run to junction boxes in the Expansion Space.
- (d) The Ceiling grid has been installed. Building standard ceiling tile and lights stacked on the floor.

(e) Smooth concrete floor slab.

5. Modifications to Shell Condition. To the extent that the Final Plans call for any modifications (herein "Shell Modifications") to the Shell Condition, the costs of such Shell Modifications shall be borne solely by Tenant, Subject, however, to the reimbursement provisions of Paragraph 7 below. By way of example, and not by way of limitation, the following shall each be examples of Shell Modifications:

(a) Any modifications to the existing sprinkler system, or the moving of existing sprinkler heads, or the installation of additional sprinkler heads.

(b) Any modifications to the existing HVAC system, the moving of the existing ductwork and/or diffusers, or the installation of additional ductwork and/or diffusers.

(c) Any rewiring of existing junction boxes, relocation of existing junction boxes, or installation of additional junction boxes.

6. Building Standard. Tenant shall be required to use, and the Final Plans shall specify Building Standard (a) light fixtures, (b) doors, (c) ceiling tiles, and (d) hardware throughout the Expansion Space and the costs of purchasing, transporting and installing each of the foregoing Building Standard items shall be borne solely by Tenant, subject, however, to the reimbursement provisions of Paragraph 7 below. Whenever the term "Building Standard" is used in this Work Letter Agreement, it shall mean the exclusive type, brand, quality, and/or quantity of materials Landlord designates from time to time to be the quality or quantity to be used in the Building.

7. Payment of Costs; Credit. Tenant agrees to pay Landlord, promptly upon being billed therefor, the actual cost (labor, materials, architectural, space planning, engineering and other costs) of all work performed pursuant to this Work Letter Agreement; Landlord shall have the right to submit interim statements of cost incurred which shall be promptly paid by Tenant to Landlord. Tenant agrees that all payments due to Landlord pursuant hereto shall constitute payments of additional rent and that in the event of default of payment thereof, Landlord shall (in addition to all other remedies) have the same rights as in the event of default of payment of rent under the Lease. Notwithstanding the above, so long as no event of default, as defined in Paragraph 20 of the Lease, shall have occurred, Landlord shall credit Tenant in an amount equal to \$15.10 per square foot of Rentable Area in the Expansion Space (the "Credit").

8. Delays. If Landlord shall be delayed in substantially completing the work to be performed by Landlord pursuant to this Work Letter Agreement as a result of:

(a) Tenant's failure to timely furnish information or specifications in accordance with Paragraph 2 above; or

(b) Tenant's request for materials, finishes or installations other than Landlord's Building Standard; or

(c) Tenant's changes in or modifications to any plans and specifications or any of the Final Plans; or

(d) The performance of any work in the Expansion Space by a person, firm or corporation employed by Tenant; (all such persons, firms or corporations being subject to the approval of Landlord);

Tenant's obligation for payment of rental under the Fourth Amendment (as affected by such waiver) shall be accelerated by the number of days of such delay.

9. Entry by Tenant's Agents. Landlord will permit Tenant and its agents to enter the Expansion Space prior to the date specified for the commencement of Tenant's occupancy under the Fourth Amendment, in order that Tenant may perform through its own contractors (to be first approved by Landlord) such other work and decorations as Landlord may approve at the same time that Landlord's contractors are working in the Expansion Space. The foregoing license to enter, however, is conditioned upon Tenant's workmen and mechanics working in harmony and not interfering with the labor employed by Landlord, Landlord's mechanics or contractors or by any other tenant or their contractors. Such license is further conditioned upon workers' compensation and public liability insurance for bodily injury and property damage, all in amounts and with companies and on forms satisfactory to Landlord, being provided and at all times maintained by Tenant's contractors engaged in the performance of the work, and certificates of such insurance being furnished to Landlord prior to proceeding with the work. If at any time such entry shall cause disharmony or interference therewith, Landlord may withdraw this license upon forty-eight (48) hours written notice to Tenant. Such entry conditions shall be deemed to be under all of the terms, covenants, provisions and conditions of the Lease. Landlord shall not be liable in any way for any injury, loss or damage which may occur to any of Tenant's decorations or installations, the same being solely at Tenant's risk, and Tenant shall hold Landlord harmless from any claim, demand or action arising from activities of Tenant's contractors, workmen or mechanics.

If the foregoing correctly sets forth our understanding, kindly acknowledge your approval in the space provided below whereupon this work letter shall become a binding agreement between us.

Yours very truly,

COLLINS CAMPBELL JOINT VENTURE,
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.,
a Texas corporation

By: /s/ W. T. Field

W. T. Field, President

AGREED TO AND ACCEPTED
as of the 2 day of October, 1998.

telecom technologies, inc.,
a Texas corporation

By: /s/ Anousheh Ansari

Anousheh Ansari,
President

GLOBAL AGREEMENT

This Global Agreement (this "AGREEMENT") is being entered into effective as of March 5, 2002 (the "EFFECTIVE DATE"), by and among TR Lookout Partners, Ltd. ("TRLP"), Collins Campbell Joint Venture ("CCJV"), telecom technologies, inc. ("TTI"), and Sonus Networks, Inc. ("SONUS"). TRLP, CCJV, TTI, and Sonus shall be collectively referred to as the "PARTIES".

RECITALS:

WHEREAS, TTI has entered into several leases (the "LEASES") with TRLP and CCJV, as landlords, and pursuant to the terms of the Leases, TTI is bound and obligated to perform all of its obligations under the Leases for the remaining terms of each of the Leases;

WHEREAS, TTI is a wholly owned subsidiary of Sonus and due to economic conditions, requires a reduction in its Richardson, Texas facilities under lease with TRLP and CCJV (collectively, the "LANDLORDS");

WHEREAS, the Landlords have agreed to certain lease terminations and/or modifications in exchange for the agreements set forth herein, the payments by Sonus to TRLP representing a reimbursement to CCJV of the cost of various tenant improvements, lease termination, capital expenses, and build out costs in connection with the premises covered by the lease terminated hereunder, all as more fully described below, and such other good and valuable consideration; and

NOW, THEREFORE, in consideration of the covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties have agreed to the above recitals and as follows:

1. Notwithstanding anything to the contrary in this Agreement (or any of the agreements including lease agreements referenced herein; hereafter such agreements, together with this Agreement, shall be collectively referred to as the "DOCUMENTS"), the Documents (inclusive of this Agreement) shall NOT be effective until the occurrence of each and every one of the following events: (A) the execution and delivery by the Parties to each other of (i) this Agreement; (ii) the Termination of Office Lease Agreement attached as EXHIBIT "A" hereto; (iii) the Termination of Office Lease Agreement, attached as EXHIBIT "B" hereto; (iv) the Fifth Amendment to Office Lease Agreement, attached as EXHIBIT "C" hereto; (v) the Guarantee, attached as EXHIBIT "D" hereto; (vi) the Bill of Sale, attached as EXHIBIT "E" hereto; (vii) the Storage Agreement with respect to the Personal Property, attached as EXHIBIT "F" hereto; (viii) the Guarantee of Sonus with respect to the obligations of TTI under the Bill of Sale and Storage Agreement, attached as EXHIBIT "G" hereto; (B) the indefeasible and irrevocable payment by Sonus of One Million Dollars (\$1,000,000) to TRLP, in care of Thompson Realty Investment Corporation ("THOMPSON REALTY"), contemporaneous with the payment by TRLP to TTI of such payment described in subsection (D) immediately below; (C) the indefeasible and irrevocable payment by Sonus to Thompson Realty of \$2,500.00, representing no less than fifty percent (50%) of all legal fees, costs and expenses incurred by counsel for Thompson Realty in connection with these matters; and (D) the wire transfer by TRLP at Closing to TTI of One Hundred Sixty Five Thousand Two Hundred Thirty-Six and 50/100 Dollars (\$165,236.50) as provided under EXHIBIT "A" to this Agreement, contemporaneous with the payment by Sonus to TRLP described in subsection (B) immediately above. At Closing, TRLP and CCJV shall deliver to Sonus and TTI consents from their respective lenders approving the termination, and amendments where applicable, of their respective Leases with TTI, as provided herein, which consents shall be in the form of EXHIBITS "H" and "I" hereto.

Page 1

2. On the Effective Date, that certain Office Lease Agreement, dated November 14, 2000, as amended by that certain First Amendment to Office Lease Agreement, dated as of January, 8, 2001, by and between TRLP and TTI, will be terminated and shall be of no further force and effect, in accordance with the terms set forth in the Termination of Office Lease Agreement, attached hereto as EXHIBIT "A" and incorporated herein for all purposes.
3. On the Effective Date, those certain Office Lease Agreements described below, by and between CCJV and TTI, will be modified and/or terminated in accordance with the agreements attached hereto as EXHIBIT "B", and EXHIBIT "C", each of which is incorporated herein for all purposes. These agreements generally provide for the following:
 - a. Suite 1050, Richardson, Texas 75080, approximately 6,618 square feet - terminated;
 - b. Suite 3000, Richardson, Texas 75080, approximately 38,016 square feet - modified to reduce the size of the premises ("LEASE 1");
 - c. Suite 339, Richardson, Texas 75080, approximately 2,281 square feet - no change in terms ("LEASE 2"); and
 - d. Suite 2400, Richardson, Texas 75080, approximately 2,055 square feet - no change in terms ("LEASE 3").

4. TTI hereby acknowledges and consents to all of the terms and conditions of Lease 1, Lease 2, and Lease 3 (collectively, the "OFFICE LEASES"), and TTI and Sonus each ratifies, reaffirms, and confirms the effectiveness of each of the Office Leases. TTI and Sonus each acknowledges that each such party has no claims, counterclaims, offsets, credits or defenses to the Leases, and each party's performance of its obligations thereunder (to the extent applicable), or if TTI or Sonus has any such claims, counterclaims, offsets, credits or defenses to the Leases or any transaction related to the Leases, the same are hereby waived, relinquished and released in consideration of the Parties' mutual agreements set forth in this Agreement.
5. On the Effective Date, Sonus will guarantee unconditionally all of the obligations and covenants of TTI to CCJV under the three (3) remaining leases at the "Atrium on Collins", in accordance with the terms of the Guarantee attached hereto as EXHIBIT "D" and incorporated herein for all purposes.
6. CCJV hereby agrees to exercise good faith efforts to reach a written agreement with Hamid Ansari and Anousheh Ansari (collectively, the "ANSARIS") providing for a release from the Ansaris in favor of CCJV, TTI, and Sonus, with respect to any obligations of such parties, if any (with respect to the payment of a profit fee), as provided in that certain letter agreement, dated April 4, 1997, executed by CCJV and the Ansaris, as amended by that certain letter agreement, dated November 1, 2000, executed by CCJV and the Ansaris, each of which letter agreements was consented to by TTI; PROVIDED, HOWEVER, that if CCJV is unable to provide such release to Sonus and TTI, on or prior to the Effective Date, then CCJV shall indemnify Sonus and TTI in accordance with the terms of the agreement in the form attached hereto as EXHIBIT "J".
7. On the Effective Date, TTI agrees that (i) TTI shall transfer to CCJV on the earlier of (the "TRANSFER DATE") (A) the date that TTI vacates the premises at Suite 3000, 1701 North Collins Boulevard, Richardson, Texas 75080, or (B) April 30, 2003 (or such later date, as may be extended pursuant to an amendment to the lease, with respect to such premises, entered into by TTI and CCJV, thereby extending the term of such lease), all of TTI's right, title, and interest in and to certain furniture, fixtures, and equipment owned by TTI, substantially in accordance with the terms of the bill of sale attached hereto as EXHIBIT "E" incorporated herein for all purposes (the "BILL OF SALE"), and (ii) TTI shall enter into with CCJV a storage agreement, thereby agreeing to store such furniture, fixtures, and equipment, at Suites 1050 and 2000, at 1701 North Collins Boulevard, Richardson, Texas 75080, for the period from and after the Effective Date and continuing through the earlier of (the "REMOVAL DATE")

Page 2

(A) April 30, 2003, or (B) twenty (20) calendar days after written notice from CCJV to TTI to remove such furniture, fixtures and equipment, and TTI and CCJV shall execute and deliver a storage agreement in the form attached hereto as EXHIBIT "F" and incorporated herein for all purposes (the "STORAGE AGREEMENT"). Such Bill of Sale and Storage Agreement shall be without recourse or liability to CCJV (or its assigns), and shall not constitute, nor be deemed to be, any assumption by CCJV (or its assigns) of any obligations, liabilities, or indebtedness of TTI (i) on or under such personal property leases or (ii) arising out of or in connection with the personal property to be transferred under the Bill of Sale. On the Effective Date, Sonus shall execute and deliver to CCJV a Guarantee in the form attached hereto as EXHIBIT "G", thereby guaranteeing all of TTI's obligations to CCJV (or its assigns) with respect to the Bill of Sale, the Storage Agreement, and TTI's obligations to CCJV (or its assigns) in this paragraph 7.

8. On the Effective Date, Sonus shall pay to Thompson Realty the sum of \$2,500 representing no less than fifty percent (50%) of the legal fees incurred by counsel for Thompson Realty in connection with these transactions and matters.
9. Each Party hereto hereby makes the following representations and warranties to each other Party, each of which is material, is being relied upon by each of the Parties hereto, and is true as of the date hereof: (i) this Agreement (and the Documents) has been duly and validly executed and delivered by such party; (ii) no further action of any kind or nature will be or is necessary on the part of such party, or any other person whomsoever, to make this Agreement (and the Documents) valid, binding and enforceable upon such party in accordance with the terms hereof; (iii) this Agreement (and the Documents) has been consented to by TRLP's and CCJV's lender and is thereby authorized by such lenders; and (iv) this Agreement (and the Documents) constitutes a legal, valid and binding obligation of such Party, enforceable in accordance with the terms hereof or as otherwise provided by law.
10. It is the mutual intent of all of the Parties hereto that the Documents are, and shall be, final, conclusive, binding, enforceable and non-terminable as of, and from and after, the Effective Date, subject to the conditions precedent to paragraph 1 of this Agreement.
11. Each of the Parties hereto hereby covenants and agrees to do such acts and things and, in connection therewith, to execute and deliver such documents and instruments as reasonably may be required for effecting

and otherwise carrying out the purposes of the transactions covered and contemplated hereby.

12. No Party hereto may assign any of its rights or delegate any of its duties hereunder without the prior written notice of the other Parties hereto, and any such assignment or delegation without the prior written notice shall be void ab initio.
13. All terms and provisions of the Documents shall be binding upon and inure to the benefit of the respective Parties to each of the Documents and their respective transferees.
14. The Documents may be executed in one or more counterparts, all of which taken together shall constitute one instrument. Signatures delivered by telecopy shall be binding, and the Parties hereto agree to send to the other originals of this Agreement (and the Documents) within twenty-four (24) hours of the closing of these transactions.
15. The Documents are made and entered into in the State of Texas, and the laws of said state shall govern the validity and interpretation hereof and the performance of the Parties hereto of their respective duties and obligations hereunder.
16. No breach of any provision hereof (or in the Documents) may be waived unless in writing executed by the affected Party(s) hereto and the waiver of any one breach shall not be deemed to be a waiver of any other breach of the same or any other provision hereof.

Page 3

17. The Documents may be amended only by a written agreement executed by the respective Parties to each of this Agreement and the applicable Parties to the other Documents.
18. The Documents are entered into for the express benefit of the Parties hereto, and it is not intended and shall not be deemed to create in any other person any rights or interest whatsoever, including without limitation, any rights to enforce the terms hereof.
19. This Agreement (together with the other Documents) embodies the entire understanding of the Parties with respect to the matters set forth herein (and therein); and there are no further or other agreements or understandings, written or oral, in effect between the Parties hereto relating to the subject matter hereof, unless expressly referred to by reference herein or executed concurrently herewith.
20. The Parties agree that the payments made, and obligations incurred, by Sonus to, or in favor of, TRLP constitutes reasonable equivalent value for the termination and modification of the lease agreements described herein, and agreements set forth herein (in accordance with the terms of this Agreement) and the restructuring of obligations provided for herein by TRLP and CCJV to Sonus and TTI. Sonus represents, warrants, and covenants that (i) the \$1 million payment to TRLP as provided herein shall be paid solely from the funds of Sonus, and not the funds of TTI; (ii) the \$1 million payment shall be wire-transferred by Sonus to TRLP, in care of Thompson Realty, on the Effective Date; and (iii) the \$1 million payment represents a reasonable calculation of the costs to reimburse TRLP for its tenant improvements, lease termination costs, capital expenses, and build-out costs in connection with the premises covered by the leases terminated under this Agreement. The Parties agree that Hughes & Luce, L.L.P., shall serve as the escrow agent at the Closing of the transactions contemplated hereunder, and the escrow agent shall make the contemporaneous wire transfers described in this paragraph to the respective Parties at the Closing. At the Closing, CCJV shall wire transfer to TTI the sum of \$165,236.50, as provided under EXHIBIT "A" of this Agreement, and Sonus shall wire transfer to TRLP, in care of Thompson Realty, the sum of \$1,000,000, as provided in this Agreement.
21. If the incurrence or payment of the obligations by either TTI or Sonus or the transfer to the Landlords of any property should for any reason subsequently be declared to be void or voidable under any state or federal law relating to creditors' rights, including provisions of the Bankruptcy Code relating to fraudulent conveyances, preferences, or other voidable or recoverable payments of money or transfers of property (collectively, a "VOIDABLE TRANSFER"), and if the Landlords are required to repay or restore, in whole or in part, any such Voidable Transfer, or elect to do so upon the reasonable advice of its or their counsel, then, as to any such Voidable Transfer, or the amount thereof that the Landlords are required or elect to repay or restore, and as to all reasonable costs, expenses, and attorneys fees of the Landlords related thereto, the liabilities and obligations of TTI and Sonus, arising out of or in any way related to the termination of lease obligations provided for above, or other releases granted in connection with this Agreement, automatically shall be revived, reinstated, and restored and shall exist as though such Voidable Transfer had never been made and this Agreement and the Documents had not been executed; provided, however, that notwithstanding the foregoing, (i) the payments made pursuant to paragraph 1 of this Agreement by the respective Parties hereto shall be returned or applied against any payments due or which became due after the Effective Date; (ii) all rights, titles, and interests of TTI in such leases terminated under the relevant Documents shall nonetheless be terminated and of no further force or effect upon

the Effective Date of this Agreement; (iii) the Fifth Amendment to Office Lease Agreement shall remain in full force and effect and binding upon the Parties (but the liabilities of TTI with respect to such Office Lease Agreement prior to such Fifth Amendment shall be reinstated); and (iv) the Bill of Sale and Storage Agreement shall remain effective and binding upon such Parties.

Page 4

22. TTI and Sonus each hereby acknowledges that as of the date hereof it has no defense, counterclaim, offset (except to the extent of payments made pursuant to this Agreement), cross-complaint, claim or demand of any kind or nature whatsoever that can be asserted to reduce or eliminate all or any part of its liability to repay the obligations or to seek affirmative relief or damages of any kind or nature from the Landlords or Thompson Realty, Thompson Realty Corporation, or each of the foregoing parties' respective affiliates, participants, partners, directors, officers, agents, employees, representatives or attorneys. TTI and Sonus each hereby voluntarily and knowingly releases and forever discharges the Landlords, Thompson Realty, Thompson Realty Corporation, and each of the foregoing parties' respective affiliates, participants, partners, agents, representatives, officers, directors, attorneys, employees, successors and assigns (collectively, the "LANDLORD RELEASEE GROUP"), from all possible claims, demands, actions, causes of action, damages, costs, expenses, and liabilities whatsoever, known or unknown, anticipated or unanticipated, suspected or unsuspected, fixed, contingent, or conditional, at law or in equity, originating in whole or in part on or before the date this Agreement becomes effective (collectively, the "LANDLORD CLAIMS"); PROVIDED, HOWEVER, that notwithstanding the foregoing, nothing herein shall release the Landlord Releasee Group from any obligations, representations, or covenants set forth in this Agreement, Leases 1, 2, and 3, or any of the other Documents, to the extent applicable to the particular member of the Landlord Releasee Group.
23. Each of TTI and Sonus hereby covenants and agrees never to institute any action or suit at law or in equity, nor institute, prosecute, or in any way aid in the institution or prosecution of any claim, action or cause of action, rights to recover debts or demands of any nature against the Landlord Releasee Group, or any one of them, arising out of or related to the Landlord Claims.
24. CCJV, TRLP, Thompson Realty, and Thompson Realty Corporation each hereby voluntarily and knowingly releases and forever discharges Sonus and TTI, and each of the foregoing parties' respective affiliates, participants, partners, agents, representatives, officers, directors, attorneys, employees, successors and assigns (collectively, the "TENANT RELEASEE GROUP"), from all possible claims, demands, actions, causes of action, damages, costs, expenses, and liabilities whatsoever, known or unknown, anticipated or unanticipated, suspected or unsuspected, fixed, contingent, or conditional, at law or in equity, originating in whole or in part on or before the date this Agreement becomes effective (collectively, the "TENANT CLAIMS"); PROVIDED, HOWEVER, that notwithstanding the foregoing, nothing herein shall release the Tenant Releasee Group from any obligations, representations, or covenants set forth in this Agreement, Lease 1, 2 and 3, the Guarantees, the Bill of Sale, the Storage Agreement, or any of the other Documents, to the extent applicable to the particular member of the Tenant Releasee Group.
25. Each of CCJV, TRLP, Thompson Realty, and Thompson Realty Corporation hereby covenants and agrees never to institute any action or suit at law or in equity, nor institute, prosecute, or in any way aid in the institution or prosecution of any claim, action or cause of action, rights to recover debts or demands of any nature against the Tenant Releasee Group, or any one of them, arising out of or related to the Tenant Claims.

This Agreement is executed as of March 5, 2002.

TR LOOKOUT PARTNERS, LTD.,
a Texas limited partnership

By: Thompson Realty Investment Corporation,
general partner

Page 5

By: /s/ W.T. Field

W.T. Field, President

COLLINS CAMPBELL JOINT VENTURE,
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.

By: /s/ W.T. Field

telecom technologies, inc.,
a Texas corporation

By: /s/ G.M. Eastep

Name: G.M. Eastep

Title: Vice President and Chief Operating Officer

SONUS NETWORKS, INC.,
a Delaware corporation

By: /s/ Peter S. Hemme

Name: Peter S. Hemme

Title: Vice President and Controller

AGREED AS TO PARAGRAPHS 24
AND 25 ONLY:

THOMPSON REALTY INVESTMENT
CORPORATION, a Texas
corporation

By: /s/ W.T. Field

Name: W.T. Field

Title: President

THOMPSON REALTY CORPORATION,
a Texas corporation

By: /s/ W.T. Field

Page 6

Name: W.T. Field

Title: President

Page 7

EXHIBIT "A"

TERMINATION OF OFFICE LEASE AGREEMENT

This Termination of Office Lease Agreement (this "Termination") is being entered into as of February 28, 2002, by and between TR Lookout Partners, Ltd. ("Landlord") and telecom technologies, inc. ("Tenant").

R E C I T A L S:

WHEREAS, Landlord and Tenant entered into that certain Office Lease Agreement dated November 14, 2000, as amended by that certain First Amendment to Office Lease Agreement dated as of January 8, 2001 (collectively, the "Lease") with respect to approximately 119,966 square feet of space plus the Basement Area (as defined and specified in the Lease) (the "Demised Premises") at 1301 E. Lookout Drive, Richardson, Texas 75080;

WHEREAS, Tenant has chosen not to occupy the Demised Premises;

WHEREAS, Landlord and Tenant, among others, have entered into the terms of a certain global agreement of even date herewith (the "Global Agreement"), and Landlord and Tenant acknowledge and agree that the terms of the Global Agreement shall be binding on the parties hereto;

WHEREAS, Landlord and Tenant have reached certain agreements with respect to the termination of the Lease; and

WHEREAS, Landlord and Tenant now desire to set forth these certain agreements with respect to the termination of the Lease and certain other related matters.

NOW, THEREFORE, in consideration of the covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Landlord and Tenant covenant and agree to the above recitals and as follows:

1. Subject to the occurrence of all of the events set forth in the Global Agreement in Paragraph 1 thereof, the Lease is terminated and Tenant shall no longer have any right to occupy and/or use the Demised Premises.

2. Subject to the occurrence of all of the events set forth in the Global

Agreement in Paragraph 1 thereof, the Landlord hereby releases Tenant, Tenant's parent company, Sonus Networks, Inc., and any and all guarantors of Tenant's obligations under the Lease and from each and every obligation contained in the Lease, including, but not limited to, the cost of various tenant improvements, capital expenses, lease termination costs, and build out costs, or any guaranty thereof. Subject to the occurrence of all of the events set forth in Paragraph 1 of the Global Agreement, Tenant hereby releases Landlord from any and all claims Tenant might assert against Landlord relating in any way to the Lease or to Tenant's occupancy of the Demised Premises. At closing, Landlord shall refund by wire transfer to Tenant the prepaid rent held by Landlord in the amount of \$165,236.50.

3. The Global Agreement, and all of the terms therein, shall be incorporated herein for all purposes.

EXHIBIT "A" Page 1 of 2

EXECUTED as of the date herein first written above.

LANDLORD:

TR Lookout Partners, Ltd.,
a Texas limited partnership

By: Thompson Realty Investment Corporation,
general partner

By: /s/ W.T. Field, President

W.T. Field, President

TENANT:

telecom technologies, inc.,
a Texas corporation

By: /s/ G.M. Eastep

Name: G.M. Eastep

Title: Vice President and Chief
Operating Officer

EXHIBIT "A" Page 2 of 2

EXHIBIT "B"

TERMINATION OF OFFICE LEASE AGREEMENT

This Termination of Office Lease Agreement (this "Termination") is being entered into as of February 28, 2002, by and between Collins Campbell Joint Venture ("Landlord") and telecom technologies, inc. ("Tenant").

R E C I T A L S:

WHEREAS, Landlord and Tenant entered into that certain Office Lease Agreement, dated January 25, 2000, as amended by that certain First Amendment to Office Lease Agreement dated July 10, 2000 (collectively, the "Lease"), concerning approximately 6,618 square feet of space (the "Premises") at 1701 N. Collins, Suite 1050, Richardson, Dallas County, Texas 75080;

WHEREAS, Tenant has chosen to vacate the Premises;

WHEREAS, Landlord and Tenant, among others, have entered into the terms of a certain global agreement of even date herewith (the "Global Agreement"), and Landlord and Tenant acknowledge and agree that the terms of the Global Agreement shall be binding on the parties hereto;

WHEREAS, Landlord and Tenant have reached certain agreements with respect to a termination of the Lease; and

WHEREAS, Landlord and Tenant now desire to set forth these certain agreements with respect to the termination of the Lease and certain other related matters.

NOW, THEREFORE, in consideration of the covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Landlord and Tenant covenant and agree to the above recitals, and as follows:

1. Subject to the occurrence of all of the events set forth in the Global Agreement in Paragraph 1 thereof, the Lease is terminated and Tenant shall no longer have any right to occupy and/or use the Premises.

2. Subject to the occurrence of all of the events set forth in the Global Agreement in Paragraph 1 thereof, Landlord hereby releases Tenant, Tenant's parent company, Sonus Networks, Inc., and any and all guarantors of Tenant's obligations under the Lease and from each and every obligation contained in the Lease, including, but not limited to, the cost of various tenant improvements, capital expenses, lease termination costs, and build out costs, or any guaranty thereof. Subject to the occurrence of all of the events set forth in the Global

Agreement in Paragraph 1 thereof, Tenant hereby releases Landlord from any and all claims Tenant might assert against Landlord relating in any way to the Lease or to Tenant's occupancy of the Premises.

3. The Global Agreement, and all of the terms therein, shall be incorporated herein for all purposes.

EXHIBIT "B" Page 1 of 2

EXECUTED as of the date herein first written above.

LANDLORD:

Collins Campbell Joint Venture,
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.,
a Texas corporation

By: /s/ W.T. Field

W.T. Field, President

TENANT:

telecom technologies, inc.,
a Texas corporation

By: /s/ G.M. Eastep

Name: G.M. Eastep

Title: Vice President and Chief Operating
Officer

EXHIBIT "B" Page 2 of 2

EXHIBIT "C"

FIFTH AMENDMENT TO OFFICE LEASE AGREEMENT

THIS FIFTH AMENDMENT TO OFFICE LEASE AGREEMENT (this "Fifth Amendment") is made and entered into effective as of February 28, 2002, by and between Collins Campbell Joint Venture ("Landlord") and telecom technologies, inc. ("Tenant").

R E C I T A L S

WHEREAS, Landlord and Tenant entered into that certain Office Lease Agreement, dated as of April 4, 1997, as amended by (i) that certain First Amendment to Office Lease Agreement, dated as of November 1, 1997; (ii) those certain Second and Third Amendments to Office Lease Agreement, each dated as of July 1, 1998; and (iii) that certain Fourth Amendment to Office Lease Agreement, dated February 1, 1999 (collectively, the "Lease"), with respect to certain Premises defined therein and commonly known as Suite 3000 at 1701 North Collins Blvd., Richardson, Dallas County, Texas 75080, which Lease is incorporated herein by reference;

WHEREAS, Landlord and Tenant, among others, have entered into the terms of a certain global agreement of even date herewith (the "GLOBAL AGREEMENT"), and Landlord and Tenant acknowledge and agree that the terms of the Global Agreement shall be binding on the parties hereto;

WHEREAS, Landlord and Tenant desire to further amend the Lease to reduce the size of the Premises.

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, the mutual agreements set forth in the Lease, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant have agreed, and do hereby agree, to the above Recitals, and as follows, subject to the occurrence of all of the events set forth in Paragraph 1 of the Global Agreement:

1. All terms used herein and not specifically defined shall have the same meanings herein as is ascribed to them in the Lease.
2. The Premises are hereby reduced to approximately 20,227 square feet of rentable area by deleting approximately 17,789 square feet of rentable area on the second floor, such "Give Back Space" being described on Exhibit "A", attached hereto and incorporated herein for all purposes.
3. Basic rental is decreased from \$3,909,279.04 to \$3,475,939.00.
4. The monthly rental installment is decreased as set forth below:

Monthly from March 1, 2002 through October 31, 2002 - \$35,043.28
Monthly from November 1, 2002 through April 30, 2003 - \$35,397.25
5. Tenant's option to extend the term of the Lease set forth in Rider 101

is hereby eliminated and of no further force or effect.

- 6. Except as herein provided to the contrary, Tenant's lease of the Premises from Landlord shall be on the same terms and conditions as those specified in the Lease.
- 7. The Lease (as amended by this Fifth Amendment) remains in full force and effect and is hereby ratified and affirmed.

EXHIBIT "C" Page 1 of 2

- 8. All notices required to be sent to the Tenant shall also be sent to Sonus Networks, Inc., 5 Carlisle Road, Westford, Massachusetts 01886; Attention: Chief Financial Officer.
- 9. The Global Agreement, and all of the terms therein, shall be incorporated herein for all purposes. To the extent that there is a conflict between the terms of this Fifth Amendment and the terms of the Global Agreement with respect to the relevant subject matter, the terms of this Fifth Amendment shall control.

IN WITNESS WHEREOF, this Fifth Amendment is hereby executed as of the day and year first set forth above.

LANDLORD:

COLLINS CAMPBELL JOINT VENTURE,
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.

By: /s/ W.T. Field

W.T. Field, President

TENANT:

telecom technologies, inc.,
a Texas corporation

By: /s/ G.M. Eastep

Name: G.M. Eastep

Title: Vice President and Chief Operating
Officer

EXHIBIT "C" Page 2 of 2

EXHIBIT "A" TO FIFTH AMENDMENT TO OFFICE LEASE AGREEMENT

[DESCRIPTION OF "GIVE BACK SPACE" TO BE PROVIDE BY LANDLORD]'

EXHIBIT "A" TO FIFTH AMENDMENT TO OFFICE LEASE AGREEMENT Page 1 of 2

EXHIBIT "D"

GUARANTEE

In connection with that certain Global Agreement, dated as of March 5, 2002, by and among TR Lookout Partners, Ltd., Collins Campbell Joint Venture, telecom technologies, inc., Sonus Networks, Inc., the undersigned hereby unconditionally guarantees the full payment and performance of and agrees to pay and perform as primary obligor all liabilities, obligations and duties (including, but not limited to, payment of rent) imposed upon telecom technologies, inc. ("Tenant") under the terms of those three (3) certain leases (collectively, the "Leases"), as more fully described below, as if the undersigned had executed the Leases, as Tenant thereunder:

GUARANTEED LEASES

- 1. Office Lease Agreement, dated April 4, 1997, by and between Landlord and Tenant, as amended by that certain Fourth Amendment to Office Lease Agreement dated February 1, 1999, to be amended by that certain Fifth Amendment to Office Lease Agreement, concerning approximately 20, 227 square feet, Suite 3000, Richardson, Texas 75080;
- 2. Office Lease Agreement, dated January 25, 2000, by and between Landlord and Tenant, concerning approximately 2,281 square feet, Suite 339, Richardson, Texas 75080; and
- 3. Office Lease Agreement, dated October 14, 1999, as amended by that certain First Amendment to Office Lease Agreement dated June 15, 2000, by and between Landlord and Tenant, concerning approximately 2,055 square feet, Suite 2400, Richardson, Texas 75080.

The undersigned hereby waives notice of acceptance of this guarantee and

all other notices in connection herewith or in connection with the liabilities, obligations, and duties guaranteed hereby, including notices of default by Tenant under the Leases, and waives diligence, presentment, and suit on the part of Collins Campbell Joint Venture ("Landlord") in the enforcement of any liability, obligation or duty guaranteed hereby.

The undersigned further agrees that Landlord shall not be first required to enforce against Tenant or any other person any liability, obligation or duty guaranteed hereby before seeking enforcement thereof against the undersigned. Suit may be brought and maintained against the undersigned by Landlord to enforce any liability, obligation or duty guaranteed hereby without joinder of Tenant or any other person. The liability of the undersigned shall not be affected by any indulgence, compromise, settlement or variation of terms which may be extended to the Tenant by the Landlord or agreed upon by the Landlord and the Tenant, and shall not be affected by any termination of the Leases, to the extent that the Tenant thereafter continues to be liable thereunder. Landlord and Tenant, without notice to or consent by the undersigned, may at any time or times enter into such modifications, extensions, amendments, or other covenants respecting the Leases, as they may deem appropriate and the undersigned shall not be released thereby, but shall continue to be fully liable for the payment and performance of all liabilities, obligations and duties of Tenant under the Leases, as so further modified, extended or amended; PROVIDED, HOWEVER, that the undersigned shall not be bound by any modifications, extensions, amendments, or any other covenants respecting the Leases prior to Landlord's notice to the undersigned of same, and upon notice to the undersigned of the foregoing, the undersigned shall be bound by and liable to Landlord under the terms thereof. Notice to the undersigned shall be sufficient, if sent to Sonus Networks, Inc., 5 Carlisle Road, Westford, Massachusetts 01886; Attention: Chief Financial Officer.

This agreement shall be binding upon the undersigned and the successors, heirs, executors, and administrators of the undersigned, and shall inure to the benefit of the Landlord and its heirs, executors, administrators and assigns.

EXHIBIT "D" Page 1 of 2

EXECUTED this 5th day of March, 2002.

Guarantor:

Sonus Networks, Inc.,
a Delaware corporation

By: /s/ Peter S. Hemme

Name: Peter S. Hemme

Title: Vice President and Controller

EXHIBIT "D" Page 2 of 2

EXHIBIT "E"

BILL OF SALE OF CERTAIN PERSONAL PROPERTY

This Bill Of Sale Of Certain Personal Property (this "BILL OF SALE") is made this 30th day of April, 2003, by telecom technologies, inc., a Texas corporation ("SELLER"), to and in favor of Collins Campbell Joint Venture ("PURCHASER"), and Sonus Networks, Inc. ("SONUS").

WHEREAS, Seller, Sonus, and Purchaser, among others, have entered into the terms of a certain global agreement, dated March 5, 2002, (the "GLOBAL AGREEMENT"), and Seller, Sonus, and Purchaser acknowledge and agree that the terms of the Global Agreement shall be binding on the parties hereto;

WHEREAS, Seller has sold to Purchaser, and Purchaser has agreed to purchase from Seller, various items of furniture, fixtures, and equipment, and other personal property located on the premises at Suite 3000, 1701 North Collins Boulevard, Richardson, Texas 75080, which are more particularly described on EXHIBIT "A" attached to this Bill of Sale and made a part hereof (collectively, the "PERSONAL PROPERTY").

NOW, THEREFORE, for and in consideration of the payment of in the amount of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, including the mutual covenants and agreements between and among Seller, Sonus, and Purchaser in the Global Agreement, the receipt and sufficiency of which are hereby acknowledged, and in further consideration of the mutual covenants and agreements contained herein, Seller, Sonus, and Purchaser hereby agree to the above recitals, and Seller does hereby sell, assign, transfer and convey to Purchaser and its successors and assigns, all of the Personal Property. The parties hereto agree that to the extent that such sale of assets provided hereunder requires that sales tax be paid to any appropriate taxing authorities on account of such transaction, the Purchaser agrees to assume such obligations.

TO HAVE AND TO HOLD the Personal Property unto Purchaser, its successors and assigns, for their exclusive use and benefit forever. Seller warrants that it has good and marketable title to the Personal Property, free and clear of all mortgages, liens, charges and encumbrances (including any ad valorem taxes) as of the effective date of this Bill of Sale.

Seller hereby assigns to Purchaser any and all service agreements,

warranties, operating agreements, maintenance agreements, manuals, plans, and all similar and other documents relating to the Personal Property which are in the possession or under the control of Seller, to the extent that the same may be assigned (collectively, "SERVICE AGREEMENTS"). Seller shall deliver to Purchaser copies of all of the Service Agreements at the time of the closing of the sale, unless otherwise agreed to by Seller and Purchaser in writing.

Such transfers and assignments provided herein shall be without recourse or liability to the Purchaser, and shall not constitute, nor be deemed to be, any assumption by the Purchaser of any obligations, liabilities, or indebtedness of the Seller arising out of or in connection with the Personal Property or Service Agreements to be transferred under this Bill of Sale.

This instrument and the Documents (as defined in the Global Agreement) contain the entire agreement and understanding between Purchaser and Seller as to the Personal Property conveyed by this Bill of Sale. No addition, or amendment, alteration, modification or waiver of, any provisions of this Bill of Sale shall be of any force or effect unless in writing and signed by Purchaser and Seller or their duly authorized representatives.

EXHIBIT "E" Page 1 of 2

Sonus agrees to indemnify and hold harmless the Purchaser, and pay Purchaser any losses, costs, fees, liabilities or expense (including attorney's fees) arising out of Seller's failure to meet its obligations under this agreement.

IN WITNESS WHEREOF, Seller, Sonus, and Purchaser have caused this instrument to be duly executed as of the date first written above.

SELLER:

telecom technologies, inc.,
a Texas corporation

By: _____
Name: _____
Title: _____

SONUS:

SONUS NETWORKS, INC.,
a Delaware corporation

By: _____
Name: _____
Title: _____

PURCHASER:

COLLINS CAMPBELL JOINT VENTURE,
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.

By: _____
W.T. Field, President

EXHIBIT "E" Page 2 of 2

EXHIBIT "A" TO BILL OF SALE

LIST OF PERSONAL PROPERTY

[TO BE PROVIDED BY TELECOM TECHNOLOGIES, INC.]

EXHIBIT "E" Page 3 of 2

EXHIBIT "F"

STORAGE AGREEMENT OF PERSONAL PROPERTY

This Storage Agreement of Personal Property (this "STORAGE AGREEMENT") is made this 5th day of March, 2002, by telecom technologies, inc., a Texas corporation ("TENANT"), to and in favor of Collins Campbell Joint Venture ("LANDLORD").

WITNESSETH:

That, for and in consideration of the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency

of which are hereby acknowledged by Tenant, Tenant and Landlord agree that Tenant may store all of the personal property (the "PERSONAL PROPERTY"), described on EXHIBIT "A" hereto.

Tenant and Landlord agree that Tenant shall have the right to store the Personal Property, without any fee or charge payable to Landlord, for the period from the effective date of that certain Global Agreement of even date herewith, by and among Tenant, Landlord, and others, and continuing for the period through and including the earlier of (i) April 30, 2003, or (ii) the Removal Date (as defined below).

Upon twenty (20) calendar days' prior written notice by the Landlord to the Tenant (the "REMOVAL DATE"), Tenant shall immediately thereafter remove all of the Personal Property from the premises of the Landlord, and the Tenant shall indemnify and hold harmless the Landlord from any damages, losses, or claims of the Landlord, caused by the removal of the Personal Property from the premises of the Landlord.

At any time or from time to time after the date hereof, the parties shall execute and deliver or cause to be executed and delivered to each other such other instruments and take or cause to be taken such other actions as may reasonably be requested in order to carry out the intent and purposes of this Storage Agreement.

During the term of this Storage Agreement, Tenant shall maintain and insure the Personal Property.

In the event that Landlord enters into a new lease with one or more tenants for the space where the Personal Property is presently stored, Tenant agrees to exercise best efforts to reach agreements with such Tenants for the sale and/or lease of the Personal Property, upon reasonable commercial terms acceptable to such parties, to facilitate the efforts of the Landlord in leasing such space to the new tenants.

Such right of storage shall be without recourse or liability to Landlord (or its successors and assigns), and shall not constitute, nor be deemed to be, any assumption by Landlord (or its successors and assigns) of any obligations, liabilities, or indebtedness of Tenant on or under the Personal Property Leases.

No addition, or amendment, alteration, modification or waiver of, any provisions of this Storage Agreement shall be of any force or effect unless in writing and signed by Tenant and Landlord or their duly authorized representatives.

EXHIBIT "F" Page 1 of 2

IN WITNESS WHEREOF, the undersigned have caused this instrument to be duly executed as of the date first written above.

TENANT:

telecom technologies, inc.,
a Texas corporation

By: /s/ Peter S. Hemme

Name: Peter S. Hemme

Title: Treasurer

LANDLORD:

COLLINS CAMPBELL JOINT VENTURE,
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.

By: /s/ Kelly P.B. Drabbs

Vice President

EXHIBITS

A - List of Personal Property [TO BE PROVIDED BY TENANT]

EXHIBIT "F" Page 2 of 2

EXHIBIT "G"

GUARANTEE

In connection with that certain Global Agreement, dated as of March 5, 2002 (the "Global Agreement"), by and among TR Lookout Partners, Ltd., Collins Campbell Joint Venture ("CCJV"), telecom technologies, inc. ("TTI"), Sonus Networks, Inc., the undersigned hereby unconditionally guarantees the full payment and performance of and agrees to pay and perform as primary obligor all liabilities, obligations and duties (including, but not limited to, payment of rent) imposed upon telecom technologies, inc. ("TTI") under the terms of the

following agreements (collectively, the "Agreements"), as if the undersigned had executed the Agreements:

GUARANTEED AGREEMENTS

1. The obligations of TTI to CCJV under Paragraph 7 of the Global Agreement;
2. The obligations of TTI to CCJV under the Bill of Sale, attached as Exhibit "E" to the Global Agreement; and
3. The obligations of TTI to CCJV under the Storage Agreement, attached as Exhibit "F" to the Global Agreement.

The undersigned hereby waives notice of acceptance of this guarantee and all other notices in connection herewith or in connection with the liabilities, obligations, and duties guaranteed hereby, including notices of default by TTI under the Agreements, and waives diligence, presentment, and suit on the part of CCJV in the enforcement of any liability, obligation or duty guaranteed hereby.

The undersigned further agrees that CCJV shall not be first required to enforce against TTI or any other person, any liability, obligation or duty guaranteed hereby before seeking enforcement thereof against the undersigned. Suit may be brought and maintained against the undersigned by CCJV to enforce any liability, obligation or duty guaranteed hereby without joinder of TTI or any other person. The liability of the undersigned shall not be affected by any indulgence, compromise, settlement or variation of terms which may be extended to TTI by CCJV or agreed upon by CCJV and TTI, and shall not be affected by any termination of and of the Agreements, to the extent that TTI thereafter continues to be liable thereunder. CCJV and TTI, without notice to or consent by the undersigned, may at any time or times enter into such modifications, extensions, amendments, or other covenants respecting the Agreements, as they may deem appropriate and the undersigned shall not be released thereby, but shall continue to be fully liable for the payment and performance of all liabilities, obligations and duties of TTI under the Agreements, as so further modified, extended or amended; PROVIDED, HOWEVER, that the undersigned shall not be bound by any modifications, extensions, amendments, or any other covenants respecting the Agreements prior to CCJV's notice to the undersigned of same, and upon notice to the undersigned of the foregoing, the undersigned shall be bound by and liable to CCJV under the terms thereof. Notice to the undersigned shall be sufficient, if sent to Sonus Networks, Inc., 5 Carlisle Road, Westford, Massachusetts 01886; Attention: Chief Financial Officer.

This agreement shall be binding upon the undersigned and the successors, heirs, executors, and administrators of the undersigned, and shall inure to the benefit of CCJV and its heirs, executors, administrators and assigns.

EXHIBIT "G" Page 1 of 2

EXECUTED this 5th day of March, 2002.

Guarantor:

Sonus Networks, Inc.,
a Delaware corporation

By: /s/ Peter S. Hemme

Name: Peter S. Hemme

Title: Vice President and Controller

EXHIBIT "G" Page 2 of 2

EXHIBIT "H"

[CONSENT BY LENDER TO TRLP TERMINATION]

March 5, 2002

James Reynolds
Texas Capital Bank, National Association
2100 McKinney Ave., Suite 900
Dallas, Texas 75201

RE: Termination of Office Lease Agreement (the "Termination") by and between TR Lookout Partners, Ltd. ("Landlord") and telecom technologies, inc. ("Tenant")

Ladies and Gentlemen:

The Termination attached hereto has been consented to by Texas Capital Bank, National Association ("Lender"). Lender holds the first lien on the building affected by the Termination. Please sign where indicated below to evidence your consent in writing to the Termination.

Very truly yours

TR Lookout Partners, Ltd.,
a Texas limited partnership

By: Thompson Realty Investment Corporation

By: /s/ W.T. Field

W.T. Field, President

telecom technologies, inc.,
a Texas corporation

By: /s/ G.M. Eastep

Name: G.M. Eastep

Title: Vice President and Chief Operating
Officer

ACCEPTED AND AGREED TO:

Texas Capital Bank, National Association
By: /s/ James R. Reynolds

Name: James R. Reynolds

Title: SVP

EXHIBIT "H" Page 1 of 1

EXHIBIT "I"

[CONSENT BY LENDER TO CCJV TERMINATION AND FIFTH AMENDMENT]

March 5, 2002

Principal Life Insurance Company
C/O Principal Financial Group
Des Moines, IA 50392-1360

RE: Termination of Office Lease Agreement (the "Termination") and Fifth
Amendment to Office Lease Agreement (the "Amendment"), both by and
between Collins Campbell Joint Venture ("Landlord") and telecom
technologies, inc. ("Tenant")

Ladies and Gentlemen:

The Termination and the Amendment attached hereto have been consented to by
Principal Life Insurance Company ("Lender"). Lender holds the first lien on the
building affected by the Termination and the Amendment. Please sign where
indicated below to evidence your consent in writing to the Termination and the
Amendment.

Very truly yours

COLLINS CAMPBELL JOINT VENTURE,
a Texas general partnership
By: Jaytex Properties, Ltd.,
a Texas limited partnership
By: JRS Management, Inc.

By: /s/ W.T. Field

W.T. Field, President

telecom technologies, inc.,
a Texas corporation

By: /s/ G.M. Eastep

Name: G.M. Eastep

Title: Vice President and Chief
Operating Officer

ACCEPTED AND AGREED TO:

PRINCIPAL LIFE INSURANCE COMPANY,
an Iowa corporation
By: /s/ Deborah A. Reinhard

Name: Deborah A. Reinhard

Title: Senior Loan Administrator

EXHIBIT "I" Page 1 of 1

EXHIBIT "J"

LIMITED INDEMNITY AGREEMENT

This Limited Indemnity Agreement (this "INDEMNITY") is entered into this 5th day of March, 2002, by and among Collins Campbell Joint Venture ("CCJV"), telecom technologies, inc., a Texas corporation ("TTI"), and Sonus Networks, Inc. ("SONUS").

WHEREAS, CCJV entered into a certain letter agreement, dated April 4, 1997 (the "AGREEMENT"), with Hamid Ansari and Anousheh Ansari (collectively, the "ANSARIS"), as amended by that certain letter agreement, dated November 1, 2000 (the "AMENDED AGREEMENT"), by and between the Ansaris and CCJV;

WHEREAS, the Agreement and the Amended Agreement (collectively, the "LETTER AGREEMENTS") provide for the payment by CCJV of a certain profit fee to the Ansaris under certain conditions and circumstances more fully described in the Letter Agreements, and which circumstances and conditions have not occurred as of this date and may not occur;

WHEREAS, TTI has consented to the terms of the Letter Agreements, but is not obligated to make any payments under the same to the Ansaris, nor has TTI agreed to perform any obligations under the Letter Agreements; and

WHEREAS, CCJV, TTI, and Sonus, among others, have entered into the terms of a certain global agreement, dated March 5, 2002, (the "GLOBAL AGREEMENT"), and CCJV, TTI, and Sonus acknowledge and agree that the terms of the Global Agreement shall be binding on the parties hereto;

NOW, THEREFORE, for and in consideration of the payment in the amount of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, including the mutual covenants and agreements between and among CCJV, TTI, and Sonus in the Global Agreement, the receipt and sufficiency of which are hereby acknowledged, and in further consideration of the mutual covenants and agreements contained herein, CCJV, TTI, and Sonus hereby agree to the above Recitals and as follows:

1. This Limited Indemnity Agreement shall be subject to the occurrence of all of the events set forth in the Global Agreement in Paragraph 1 thereof.

2. Subject to paragraph 3 below, CCJV agrees to (i) defend Sonus and TTI against any claims, suits or actions brought by the Ansaris (or either one of them) against Sonus or TTI for performance of TTI's obligations, if any, in the Letter Agreements (the "ANSARI CLAIMS"), and (ii) indemnify Sonus and TTI against any damages, liabilities, costs and expenses (including reasonable attorneys' fees) awarded by a court of final jurisdiction arising out of the Ansari Claims. CCJV shall assume the defense of the Ansari Claims against Sonus and TTI by counsel retained at CCJV's own expense.

3. CCJV's indemnification obligation is conditioned on Sonus' and TTI's compliance with the following procedures: (a) Sonus and TTI will promptly notify CCJV in writing of any claim or the commencement of any suit, action, proceeding or threat that Sonus and TTI believe will result in costs for which TTI or Sonus will be entitled to indemnification; (b) Sonus and TTI will tender to CCJV (and its insurer) full authority to defend or settle any such claim; and (c) Sonus and TTI shall cooperate in the defense of such claim. CCJV has no obligation to indemnify Sonus and TTI in connection with any settlement made without CCJV's written consent.

EXHIBIT "J" Page 1 of 2

IN WITNESS WHEREOF, CCJV, Sonus, and TTI have executed this Limited Indemnity Agreement as of the date first written above.

TTI:

telecom technologies, inc.,
a Texas corporation

By: /s/ G.M. Eastep

Name: G.M. Eastep

Title: Vice President and Chief Operating
Officer

SONUS:

SONUS NETWORKS, INC.,
a Delaware corporation

By: /s/ Peter S. Hemme

Name: Peter S. Hemme

Title: Vice President and Controller

CCJV:

COLLINS CAMPBELL JOINT VENTURE,
a Texas general partnership

By: Jaytex Properties, Ltd.,
a Texas limited partnership

By: JRS Management, Inc.

By: /s/ W.T. Field

W.T. Field, President

EXHIBIT "J" Page 2 of 2

LOAN AND SECURITY AGREEMENT

This LOAN AND SECURITY AGREEMENT (this "Agreement") between SILICON VALLEY BANK, a California chartered bank, with its principal place of business at 3003 Tasman Drive, Santa Clara, California 95054 and with a loan production office located at One Newton Executive Park, Suite 200, 2221 Washington Street, Newton, Massachusetts 02462, doing business under the name "Silicon Valley East" ("Bank") and SONUS NETWORKS, INC., a Delaware corporation with its chief executive office located at 5 Carlisle Road, Westford, Massachusetts 01886 ("Borrower"), provides the terms on which Bank shall lend to Borrower and Borrower shall repay Bank. The parties agree as follows:

1 ACCOUNTING AND OTHER TERMS

Accounting terms not defined in this Agreement shall be construed following GAAP. Calculations and determinations must be made following GAAP. The term "financial statements" includes the notes and schedules, if any. The terms "including" and "includes" always mean "including (or includes) without limitation," in this or any Loan Document. Capitalized terms in this Agreement shall have the meanings set forth in Section 13.

2 LOAN AND TERMS OF PAYMENT

2.1 PROMISE TO PAY. Borrower hereby unconditionally promises to pay Bank the unpaid principal amount of all Credit Extensions and interest on the unpaid principal amount of the Credit Extensions as and when due in accordance with this Agreement.

2.1.1 Revolving Advances.

(a) Bank shall make Advances not exceeding (i) the lesser of Committed Revolving Line or, if Borrower's Tangible Net Worth at any time falls below the TNW Threshold, the Borrowing Base, MINUS (ii) the amount of all outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit), MINUS (iii) the FX Reserve, AND MINUS (iv) the aggregate outstanding Advances hereunder (including any Cash Management Services). Amounts borrowed under this Section may be repaid and reborrowed during the term of this Agreement.

(b) To obtain an Advance, Borrower must notify Bank by facsimile or telephone by 3:00 p.m. Eastern time on the Business Day the Advance is to be made. If such notification is by telephone, Borrower must promptly confirm the notification by delivering to Bank a completed Payment/Advance Form in the form attached as EXHIBIT B. Bank shall credit Advances to Borrower's deposit account. Bank may make Advances under this Agreement based on instructions from a Responsible Officer or his or her designee or without instructions if the Advances are necessary to meet Obligations which have become due. Bank may rely on any telephone notice given by a person whom Bank reasonably believes is a Responsible Officer or designee. Borrower shall indemnify Bank for any loss Bank suffers due to such reliance.

(c) The Committed Revolving Line terminates on the Revolving Maturity Date, when the principal amount of all Advances and the unpaid interest thereon, shall be immediately payable.

LETTERS OF CREDIT SUBLIMIT.

(d) Subject to the availability of Credit Extensions in Section 2.1.1(a), Bank shall issue or have issued Letters of Credit for Borrower's account not exceeding: (i) the lesser of Committed Revolving Line or, if Borrower's Tangible Net Worth at any time falls below the TNW Threshold, the Borrowing Base, MINUS (ii) the outstanding principal balance of any Advances (including any Cash Management Services), MINUS (iii) the FX Reserve, MINUS (iv) the amount of all Letters of Credit (including drawn but unreimbursed Letters of Credit), PLUS (v) an amount equal to any Letter of Credit Reserves. Without limiting the foregoing, the face amount of

outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve) may not exceed One Million Dollars (\$1,000,000.00). Each Letter of Credit shall have an expiry date no later than 180 days after the Revolving Maturity Date provided Borrower's Letter of Credit reimbursement obligation shall be secured by cash on terms acceptable to Bank at all times on and after (i) the Revolving Maturity Date if the term of the Committed Revolving Line is not extended by Bank, or (ii) the occurrence of an Event of Default hereunder. All Letters of Credit shall be, in form and substance, acceptable to Bank in its sole discretion and shall be subject to the terms and conditions of Bank's form of standard Application and Letter of Credit Agreement. Borrower agrees to execute any further documentation in connection with the Letters of Credit as Bank may reasonably request.

(e) The obligation of Borrower to immediately reimburse Bank for drawings made under Letters of Credit shall be absolute, unconditional and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement and such Letters of Credit, under all circumstances whatsoever. Borrower shall indemnify, defend, protect, and hold Bank harmless from any loss, cost, expense or liability, including, without limitation, reasonable attorneys' fees, arising out of or in connection with any Letters of Credit.

(f) Borrower may request that Bank issue a Letter of Credit payable in a currency other than United States Dollars. If a demand for payment is made under any such Letter of Credit, Bank shall treat such demand as an Advance to Borrower of the equivalent of the amount thereof (plus cable charges) in United States currency at the then prevailing rate of exchange in San Francisco, California, for sales of that other currency for cable transfer to the country of which it is the currency.

(g) Upon the issuance of any letter of credit payable in a currency other than United States Dollars, Bank shall create a reserve (the "Letter of Credit Reserve") under the Committed Revolving Line for letters of credit against fluctuations in currency exchange rates, in an amount equal to ten percent (10%) of the face amount of such letter of credit. The amount of such reserve may be amended by Bank from time to time to account for fluctuations in the exchange rate. The availability of funds under the Committed Revolving Line shall be reduced by the amount of such reserve for so long as such letter of credit remains outstanding.

FOREIGN EXCHANGE SUBLIMIT. If there is availability for Credit Extensions under Section 2.1.1(a), then Borrower may enter in foreign exchange forward contracts with the Bank under which Borrower commits to purchase from or sell to Bank a set amount of foreign currency more than one business day after the contract date (the "FX Forward Contract"). Bank shall subtract 10% of each outstanding FX Forward Contract as the foreign exchange sublimit, which sublimit is a maximum of One Million Dollars (\$1,000,000.00) (the "FX Reserve"). The total FX Forward Contracts at any one time may not exceed 10 times the amount of the FX Reserve. Bank may terminate the FX Forward Contracts if an Event of Default occurs. Any outstanding amounts payable to the Bank under the FX Forward Contracts shall be paid in full, or, if agreed to by Bank, secured by cash on terms acceptable to Bank at all times on and after (i) the Revolving Maturity Date if the term of the Committed Revolving Line is not extended by Bank, or (ii) the occurrence of an Event of Default hereunder.

2.1.2 CASH MANAGEMENT SERVICES SUBLIMIT. Subject to the availability of Credit Extensions in Section 2.1.1(a), Borrower may use up to Five Million Dollars (\$5,000,000.00) for the Bank's Cash Management Services, which may include merchant services, direct deposit of payroll, business credit card, and check cashing services identified in the various cash management services agreements related to such services (the "Cash Management Services"). Such aggregate amounts utilized under the Cash Management Services sublimit shall at all times reduce the amount otherwise available for Credit Extensions under the Committed Revolving Line. Any amounts Bank pays on behalf of Borrower or any amounts that are not paid by Borrower for any Cash Management Services will be treated as Advances under the Committed Revolving Line and will accrue interest at the interest rate applicable to Advances. The balance of any Cash Management Services payable to the Bank on the Revolving Maturity Date shall be paid in full, or, if agreed to by Bank, secured by cash on terms acceptable to Bank at all times on and after (i) the Revolving Maturity Date if the term of the Committed Revolving Line is not extended by Bank, or (ii) the occurrence of an Event of Default hereunder.

2

2.1.3 EQUIPMENT ADVANCES.

(a) Through the date which is three hundred sixty-four (364) days following the Closing Date (the "Equipment Availability End Date"), Bank shall make advances ("Equipment Advance" and, collectively, "Equipment Advances") to Borrower in an aggregate amount not exceeding the Committed Equipment Line. To evidence the Equipment Advance or Equipment Advances, Borrower shall deliver to Bank, at the time of each Equipment Advance request, an invoice for the Eligible Equipment to be financed. Except as provided below, the Equipment Advances may only be used to finance Eligible Equipment purchased within ninety (90) days (determined based upon the applicable invoice date of such Eligible Equipment) of each Equipment Advance request. Notwithstanding the foregoing, the initial Equipment Advance may be used to finance Eligible Equipment purchased on or after September 30, 2001 (determined based upon the applicable invoice date of such Eligible Equipment). Equipment Advances shall not exceed one hundred percent (100%) of the invoice amount of such Eligible Equipment, excluding taxes, shipping, warranty charges, freight discounts and installation expense relating to such Equipment. Except as provided below, each Equipment Advance under the Committed Equipment Line shall be made by Bank on the first (1st) day of the month. Notwithstanding the foregoing, if Borrower requests an Equipment Advance on a day other than the first (1st) day of the month, such Equipment Advance shall be deemed to have occurred on and interest shall be calculated beginning with the first day of such month. Each Equipment Advance must be for a minimum amount of One Hundred Thousand Dollars (\$100,000.00).

(b) Interest accrues from the date of each Equipment Advance at the per annum rate described in Section 2.3(a), and shall be payable monthly on the Payment Date of each month commencing with the initial Payment Date following each such Equipment Advance. Each Equipment Advance shall be payable in (i) thirty-six (36) equal monthly installments of principal, PLUS (ii) monthly payments of accrued interest, beginning on the first Payment Date following such Equipment Advance and continuing on each Payment Date thereafter through the Equipment Maturity Date applicable to such Equipment Advance. Borrower shall have the right to pre-pay Equipment Advances without penalty. Equipment Advances when repaid may not be reborrowed.

(c) To obtain an Equipment Advance, Borrower must notify Bank (the notice is irrevocable) by facsimile no later than 3:00 p.m. Eastern time

one (1) Business Day before the day on which the Equipment Advance is to be made. The notice in the form of Exhibit B (Payment/Advance Form) must be signed by a Responsible Officer or designee and include a copy of the invoice for the Equipment being financed.

2.1.4 UNDISBURSED CREDIT EXTENSIONS. The Bank's obligation to lend the undisbursed portion of the Credit Extensions shall terminate if there has been a Material Adverse Change, or there has been any material adverse deviation by Borrower from the most recent business plan or budget of Borrower presented to and accepted by Bank prior to the execution of this Agreement.

2.2 OVERADVANCES. If Borrower's Tangible Net Worth at any time falls below the TNW Threshold, then at all times thereafter Borrower must immediately pay in cash to Bank the amount (if any) in which Borrower's aggregate Obligations under Sections 2.1.1, 2.1.2, 2.1.3 and 2.1.4 exceed the Borrowing Base.

2.3 INTEREST RATE; PAYMENTS.

(a) INTEREST RATE. Advances under the Committed Revolving Line shall accrue interest on the outstanding principal balance of the Committed Revolving Line at a per annum rate described on the INTEREST RATE SUPPLEMENT TO AGREEMENT attached hereto and incorporated by reference herein. Equipment Advances under the Committed Equipment Line shall accrue interest on the outstanding principal balance of the Committed Equipment Line at a per annum rate equal to the Bank's Prime Rate. After an Event of Default, Obligations shall bear interest at five percent (5.0%) above the rate effective immediately before the Event of Default. The interest rate shall increase or decrease when the Prime Rate changes. Interest is computed on the basis of a 360 day year for the actual number of days elapsed.

(b) PAYMENTS. Interest is payable on all Credit Extensions under this Agreement on the Payment Date of each month. Bank may debit any of Borrower's deposit accounts including Account Number

3

_____ for principal and interest payments or any amounts Borrower owes Bank. Bank shall promptly notify Borrower when it debits Borrower's accounts. These debits are not a set-off. Payments received after 12:00 noon Eastern time are considered received at the opening of business on the next Business Day; provided that this shall not apply if the Borrower had sufficient cash in such account to make such payment in full at all times on the due date therefore. When a payment is due on a day that is not a Business Day, the payment is due the next Business Day and additional fees or interest, as applicable, shall continue to accrue.

2.4 FEES. Borrower shall pay to Bank:

(a) COMMITTED REVOLVING LINE FACILITY FEE. A fully earned, non-refundable, one-time Committed Revolving Line facility fee of Fifty Thousand Dollars (\$50,000.00), due and payable on the Closing Date; and

(b) UNUSED COMMITTED EQUIPMENT LINE FACILITY FEE. As compensation for the Bank's maintenance of sufficient funds available for such purpose, the Bank shall have earned a facility fee on the Unused Committed Equipment Line in an amount equal to one-half of one percent (0.50%) of the Unused Committed Equipment Line on September 30, 2002, which Unused Committed Equipment Line facility fee shall be due and payable by Borrower on September 30, 2002. If the Committed Equipment Line is terminated prior to September 30, 2002, the Unused Committed Equipment Line facility fee shall be equal to one-half of one percent (0.50%) of the Unused Committed Equipment Line as of the date of such termination, which fee shall be due and payable by Borrower on the date of such termination. The Borrower shall not be entitled to any credit, rebate or repayment of any facility fee previously earned by the Bank pursuant to this Section notwithstanding any termination of the within Agreement, or suspension or termination of the Bank's obligation to make loans and advances hereunder; and

(c) LETTER OF CREDIT FEE. Except as provided below, Borrower shall pay the Bank's customary fees and expenses for the issuance of Letters of Credit, including, without limitation, a per annum fee for each Letter of Credit equal to one percent (1.0%) of the face amount of each such Letter of Credit issued, upon the issuance or renewal of such Letter of Credit by the Bank. The Letter of Credit fees shall be due and fully earned upon Borrower's request for each such Letter of Credit. Notwithstanding the foregoing, no Letter of Credit fee shall be charged to the Borrower for the initial Five Hundred Fifty-Five Thousand Dollars (\$555,000.00) of Letters of Credit (the "Non-Fee Letters of Credit") in the aggregate issued hereunder, nor shall any Letter of Credit fee be charged to Borrower for any renewal of the Non-Fee Letters of Credit; and

(d) BANK EXPENSES. All Bank Expenses (including reasonable attorneys' fees and expenses incurred through and after the Closing Date) when due.

2.5 ADDITIONAL COSTS. If any law or regulation increases Bank's costs or reduces its income for any loan, Borrower shall pay the increase in cost or reduction in income or additional expense PROVIDED, HOWEVER, that Borrower shall not be liable for any amount attributable to any period before 180 days prior to the date Bank notifies Borrower of such increased costs. Bank agrees that it shall allocate any increased costs among its customers similarly affected in good faith and in a manner consistent with Bank's customary practice.

3.1 CONDITIONS PRECEDENT TO INITIAL CREDIT EXTENSION. The obligation of Bank to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in form and substance satisfactory to Bank, the following:

- (a) this Agreement;
- (b) Interest Rate Supplement to Agreement;
- (c) Copy of Borrower's Certificate of Incorporation (certified by Secretary of State);
- (d) a certificate of the Secretary of Borrower with respect to articles, bylaws, incumbency and resolutions authorizing the execution and delivery of this Agreement;
- (e) Negative Pledge Agreement covering Intellectual Property;
- (f) landlord's consent;
- (g) a legal opinion of Borrower's counsel, in form and substance acceptable to Bank;
- (h) financing statements (Forms UCC-1);
- (i) Account Control Agreement/ Investment Account Control Agreement;
- (j) Perfection Certificate;
- (k) insurance certificate;
- (l) results satisfactory to Bank in its sole discretion from the Initial Audit described in Section 6.2 prior to the initial Advance under the Committed Revolving Line;
- (m) payment of the fees and Bank Expenses then due specified in Section 2.4 hereof;
- (n) Certificate of Good Standing/Legal Existence (Long Form);
- (o) Certificate of Foreign Qualification (if applicable); and
- (p) such other documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate.

3.2 CONDITIONS PRECEDENT TO ALL CREDIT EXTENSIONS. Bank's obligations to make each Credit Extension, including the initial Credit Extension, is subject to the following:

- (a) timely receipt of any Payment/Advance Form; and
- (b) the representations and warranties in Section 5 shall be materially true on the date of the Payment/Advance Form and on the effective date of each Credit Extension and no Event of Default shall have occurred and be continuing as of such effective date, or result from the Credit Extension. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in Section 5 remain true.

4 CREATION OF SECURITY INTEREST

4.1 GRANT OF SECURITY INTEREST. Borrower hereby grants Bank, to secure the payment and performance in full of all of the Obligations and the performance of each of Borrower's duties under the Loan Documents, a continuing security interest in, and pledges and assigns to the Bank, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof. Borrower warrants and represents that the security interest granted herein shall be a first priority security interest in the Collateral. Upon and during the continuance of an Event of Default, Bank may place a "hold" on any deposit account pledged as Collateral. Borrower agrees that any disposition of the Collateral in violation of this Agreement, by either the Borrower or any other Person, shall be deemed to violate the rights of the Bank under the Code. If the Agreement is terminated, Bank's lien and security interest in the Collateral shall continue until Borrower fully satisfies its Obligations. If Borrower shall at any time, acquire a commercial tort claim, Borrower shall promptly notify Bank in a writing signed by Borrower of the brief details thereof and grant to Bank in such writing a security interest therein and in the

proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance satisfactory to Bank.

5 REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows:

5.1 DUE ORGANIZATION AND AUTHORIZATION. Borrower and each Subsidiary is duly existing and in good standing in its state of formation and qualified and licensed to do business in, and in good standing in, any state in which the conduct of its business or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to cause a Material Adverse Change. In connection with this Agreement, the Borrower delivered to the Bank a certificate signed by the Borrower and entitled "Perfection Certificate". The Borrower represents and warrants to the Bank that: (a) the Borrower's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; and (b) the Borrower is an organization of the type, and is organized in the jurisdiction, set forth in the Perfection Certificate; and (c) the Perfection Certificate accurately sets forth the Borrower's organizational identification number or accurately states that the Borrower has none; and (d) the Perfection Certificate accurately sets forth the Borrower's place of business, or, if more than one, its chief executive office as well as the Borrower's mailing address if different, and (e) all other information set forth on the Perfection Certificate pertaining to the Borrower is accurate and complete. If the Borrower does not now have an organizational identification number, but later obtains it, Borrower shall forthwith notify the Bank or such organizational identification number.

The execution, delivery and performance of the Loan Documents have been duly authorized, and do not conflict with Borrower's organizational documents, nor constitute an event of default under any material agreement by which Borrower is bound. Borrower is not in default under any agreement to which or by which it is bound in which the default could reasonably be expected to cause a Material Adverse Change.

5.2 COLLATERAL. Borrower has good title to the Collateral, free of Liens except Permitted Liens. As of the Closing Date, Borrower has no other deposit account, other than the deposit accounts with Bank and deposit accounts described in the Perfection Certificate delivered to the Bank in connection herewith. The Accounts are bona fide, existing obligations, and the service or property has been performed or delivered to the account debtor or its agent for immediate shipment to and unconditional acceptance by the account debtor. The Collateral is not in the possession of any third party bailee (such as a warehouse). In the event that Borrower, after the date hereof, intends to store or otherwise deliver any portion of the Collateral to a bailee, then Borrower will first receive the written consent of Bank and such bailee must acknowledge in writing that the bailee is holding such Collateral for the benefit of Bank. Borrower has no knowledge of any actual or imminent Insolvency Proceeding of any account debtor whose accounts are an Eligible Account in any Borrowing Base Certificate. All Inventory is in all material respects of good and marketable quality, free from material defects.

5.3 LITIGATION. Except as shown in the Schedule, there are no actions or proceedings pending or, to the knowledge of Borrower's Responsible Officers, threatened by or against Borrower or any Subsidiary in which an adverse decision could reasonably be expected to cause a Material Adverse Change.

5.4 NO MATERIAL DEVIATION IN FINANCIAL STATEMENTS. All consolidated financial statements for Borrower and any Subsidiary delivered to Bank fairly present in all material respects Borrower's consolidated financial condition and Borrower's consolidated results of operations for the periods indicated. Such monthly financial statements shall not include notes. There has not been any material deterioration in Borrower's consolidated financial condition since the date of the most recent financial statements submitted to Bank.

5.5 SOLVENCY. Borrower is able to pay its debts (including trade debts) as they mature.

5.6 REGULATORY COMPLIANCE. Borrower is not an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act. Borrower is not engaged as one of its important

activities in extending credit for margin stock (under Regulations T and U of the Federal Reserve Board of Governors). Borrower has complied in all material respects with the Federal Fair Labor Standards Act. Borrower has not violated any laws, ordinances or rules, the violation of which could reasonably be expected to cause a Material Adverse Change. None of Borrower's or any Subsidiary's properties or assets has been used by Borrower or any Subsidiary or, to the best of Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than legally. Borrower and each Subsidiary has timely filed all required tax returns and paid, or made adequate provision to pay, all material taxes, except those being contested in good faith with adequate reserves under GAAP. Borrower and each Subsidiary has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all government authorities that are necessary to continue its business as currently conducted except where the failure to make such declarations, notices or filings would not reasonably be expected to cause a Material Adverse Change.

5.7 SUBSIDIARIES. Borrower does not own any stock, partnership interest or other equity securities except for Permitted Investments.

5.8 FULL DISCLOSURE. No written representation, warranty or other statement of Borrower in any certificate or written statement given to Bank taken together with all such written certificates and written statements given to Bank contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized by Bank that the projections and

forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.9 DESIGNATED SENIOR DEBT. All Obligations of the Borrower under or arising in connection with this Agreement, as may be amended from time to time, constitute "Designated Senior Debt" under and as defined in the 4.75% Convertible Subordinated Note Due 2006 dated May 1, 2001 made by Borrower payable to BellSouth Corporation issued pursuant to that certain Securities Purchase Agreement dated as of May 1, 2001 between BellSouth Corporation and the Borrower (hereinafter, said Note and Securities Purchase Agreement shall be referred to as the "BellSouth Debt"). The Borrower hereby acknowledges, confirms and agrees that the BellSouth Debt shall not be amended in any manner which might adversely effect the Bank's interest as a holder of "Designated Senior Debt", as such term is defined in the BellSouth Debt as of the Closing Date.

6 AFFIRMATIVE COVENANTS

Borrower shall do all of the following:

6.1 GOVERNMENT COMPLIANCE. Except as permitted in Section 7.1 and Section 7.3 with respect to Borrower's Subsidiaries, Borrower shall maintain its and all Subsidiaries' legal existence and good standing in its jurisdiction of formation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a material adverse effect on Borrower's business or operations. Borrower shall comply, and have each Subsidiary comply, with all laws, ordinances and regulations to which it is subject, noncompliance with which could have a material adverse effect on Borrower's business or operations or be expected to cause a Material Adverse Change.

6.2 FINANCIAL STATEMENTS, REPORTS, CERTIFICATES.

(a) Borrower shall deliver to Bank: (i) as soon as available, but no later than twenty-five (25) days after the last day of each month, a company prepared unaudited consolidated balance sheet and unaudited income statement covering Borrower's consolidated operations during the period certified by a Responsible Officer and in a form acceptable to Bank and such financial statements shall not include notes and shall be subject to year-end and quarterly adjustments; (ii) on or before the earlier of: (A) forty-five (45) days after the last day of each quarter or (B) five (5) days after filing with the Securities and Exchange Commission, a copy of Borrower's Form 10-Q as filed with the Securities and Exchange Commission; (iii) on or before the earlier of: (A) one hundred twenty

7

(120) days after the last day of Borrower's fiscal year or (B) five (5) days after filing with the Securities and Exchange Commission, a copy of Borrower's Form 10-K as filed with the Securities and Exchange Commission, together with an unqualified opinion on the financial statements from an independent certified public accounting firm; (iv) within five (5) days of filing with the Securities and Exchange Commission, a copy of Borrower's Form 8-K as filed with the Securities and Exchange Commission; (v) as soon as available, but no later than forty-five (45) days after the end of Borrower's fiscal year (and upon any revisions to same which are approved by Borrower's Board of Directors), a balance sheet, income statement and cash flow projections for the then current fiscal year; (vi) within five (5) days of filing, copies of all statements, reports and notices made available to Borrower's security holders or to any holders of Subordinated Debt; (vii) a prompt report of any legal actions pending or threatened against Borrower or any Subsidiary that could result in damages or costs to Borrower or any Subsidiary of Five Hundred Thousand Dollars (\$500,000.00) or more; and (viii) other financial information reasonably requested by Bank.

(b) If Borrower's Tangible Net Worth as at the last day of a month is below the TNW Threshold, Borrower shall deliver to Bank, within twenty-five (25) days after the last day of each month thereafter in which Advances were requested by Borrower or Obligations under the Committed Revolving Line were outstanding, a Borrowing Base Certificate signed by a Responsible Officer in the form of EXHIBIT C, with aged listings of accounts receivable.

(c) Within twenty-five (25) days after the last day of each month, Borrower shall deliver to Bank with the monthly financial statements a Compliance Certificate signed by a Responsible Officer in the form of EXHIBIT D.

(d) Allow Bank to audit Borrower's Collateral at Borrower's expense. Such audits shall be conducted no more often than once every twelve (12) months unless an Event of Default has occurred and is continuing. The Borrower shall provide the Bank with access to all its records and financial information so that the first such audit (the "Initial Audit") of Borrower's Accounts shall be completed by Bank prior to the initial Advance under the Committed Revolving Line.

6.3 INVENTORY; RETURNS. Borrower shall keep all Inventory in good and marketable condition, free from material defects. Returns and allowances between Borrower and its account debtors shall follow Borrower's customary practices as they exist at the Closing Date. Borrower must promptly notify Bank of all returns, recoveries, disputes and claims that involve more than Two Hundred Fifty Thousand Dollars (\$250,000.00). The obligations under this Section 6.3 shall not apply to Inventory which is supplied to Borrower's customers for trial or evaluation purposes.

6.4 TAXES. Borrower shall make, and cause each Subsidiary to make, timely payment of all material federal, state, and local taxes or assessments (other than taxes and assessments which Borrower is contesting in good faith, with adequate reserves maintained in accordance with GAAP) and will deliver to Bank, on demand, appropriate certificates attesting to such payments.

6.5 INSURANCE. Borrower shall keep its business and the Collateral insured for risks and in amounts, standard for Borrower's industry. Insurance policies shall be in a form, with companies, and in amounts that are reasonably satisfactory to Bank. All property policies shall have a lender's loss payable endorsement showing Bank as an additional loss payee and all liability policies shall show the Bank as an additional insured and all policies shall provide that the insurer must give Bank at least twenty (20) days notice before canceling its policy. At Bank's request, Borrower shall deliver certified copies of policies and evidence of all premium payments. Proceeds payable under any policy shall, at Bank's option, be payable to Bank on account of the Obligations. Notwithstanding the foregoing, so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to \$25,000.00, in the aggregate, toward the replacement or repair of destroyed or damaged property; provided that (i) any such replaced or repaired property (a) shall be of equal or like value as the replaced or repaired Collateral and (b) shall be deemed Collateral in which Bank has been granted a first priority security interest and (ii) after the occurrence and during the continuation of an Event of Default all proceeds

8

payable under such casualty policy shall, at the option of the Bank, be payable to Bank on account of the Obligations. If Borrower fails to obtain insurance as required under this Section or to pay any amount or furnish any required proof of payment to third persons and the Bank, Bank may make all or part of such payment or obtain such insurance policies required in this Section, and take any action under the policies Bank deems prudent.

6.6 PRIMARY ACCOUNTS. In order to permit the Bank to monitor the Borrower's financial performance and condition, Borrower shall maintain its primary operating accounts with Bank. In addition to the foregoing: (i) on the Closing Date, Borrower shall maintain or have administered through the Bank not less than Thirty-Five Million Dollars (\$35,000,000.00) in cash or securities, and (ii) at all times after the Closing Date and prior to the termination of this Agreement, Borrower shall maintain or have administered through the Bank not less than Twenty-Five Million Dollars (\$25,000,000.00) in cash or securities in excess of that amount used for Borrower's operations. Borrower shall identify to Bank, in writing, of any bank or securities account opened by Borrower with any institution other than Bank. In addition, for each such account that the Borrower at any time opens or maintains, Borrower shall, at the Bank's request and option, pursuant to an agreement in form and substance acceptable to the Bank, cause the depository bank or securities intermediary to agree that such account is the collateral of the Bank pursuant to the terms hereunder. The provisions of this paragraph shall not apply to deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of the Borrower's employees.

6.7 FINANCIAL COVENANTS. Borrower shall maintain at all times, to be tested as of the last day of each month, unless otherwise noted:

(a) QUICK RATIO. Borrower shall maintain a ratio of Quick Assets to Current Liabilities (less Deferred Maintenance Revenue), as of the last day of each month, of at least 1.5 to 1.0.

(b) TANGIBLE NET WORTH. Borrower shall maintain, as of the last day of each month, a Tangible Net Worth of at least: (i) Seventy Million Dollars (\$70,000,000.00) for each month through the month ending March 31, 2002, (ii) Sixty Million Dollars (\$60,000,000.00) for each month from April 30, 2002 through the month ending September 30, 2002, and (iii) Fifty Million Dollars (\$50,000,000.00) for each month after September 30, 2002; PROVIDED THAT each of the threshold amounts listed in (i)-(iii) above shall be increased by fifty percent (50%) of the amount of the proceeds received by Borrower from equity issued by Borrower after the Closing Date.

6.8 FURTHER ASSURANCES. Borrower shall execute any further instruments and take further action as Bank reasonably requests to perfect or continue Bank's security interest in the Collateral or to effect the purposes of this Agreement.

7 NEGATIVE COVENANTS

Borrower shall not do any of the following without the Bank's prior written consent which shall not be unreasonably withheld:

7.1 DISPOSITIONS. Convey, sell, lease, transfer or otherwise dispose of (collectively a "Transfer"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (i) of Inventory in the ordinary course of business; (ii) of non-exclusive licenses and similar arrangements for the use of the property of Borrower or its Subsidiaries in the ordinary course of business; (iii) of worn-out or obsolete Equipment; (iv) the discontinued products identified on the Schedule; and (v) furniture or equipment owned by telecom technologies, inc. and other fixed assets to be transferred to its landlord pursuant to a real property lease agreement; and (vi) of assets from a Subsidiary of the Borrower to the Borrower or another Subsidiary of the Borrower.

7.2 CHANGES IN BUSINESS, OWNERSHIP, MANAGEMENT OR BUSINESS LOCATIONS. Engage in or permit any of its Subsidiaries to engage in any business other than the businesses currently engaged in by Borrower, or have a

9

material change in management. Borrower shall not, without providing Bank with written notice within fifteen (15) days thereafter: (i) relocate its chief executive office, or add any new offices or business locations (unless such new offices or business locations contain less than Fifty Thousand Dollars (\$50,000.00) in Borrower's assets or property), or (ii) change its jurisdiction of organization, or (iii) change its organizational structure or type, or (iv) change its legal name, or (v) change any organizational number (if any) assigned by its jurisdiction of organization.

7.3 MERGERS OR ACQUISITIONS. Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person other than: (i) mergers of: (A) Borrower's Subsidiaries with other of Borrower's Subsidiaries, or (B) Borrower's Subsidiaries with and into the Borrower (provided that Borrower is the surviving legal entity), and (ii) the dissolution of Borrower's Subsidiaries by Borrower.

7.4 INDEBTEDNESS. Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 ENCUMBRANCE. Create, incur, or allow any Lien on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, or permit any Collateral not to be subject to the first priority security interest granted herein. The Collateral may also be subject to Permitted Liens.

7.6 DISTRIBUTIONS; INVESTMENTS. (i) Directly or indirectly acquire or own any Person, or make any Investment in any Person, other than Permitted Investments, or permit any of its Subsidiaries to do so; or (ii) pay any cash dividends or make any distribution (other than non-cash dividends) or payment or redeem, retire or purchase any capital stock except for: (A) the repurchase by Borrower of restricted stock owned by Borrower's terminated employees, and (B) the purchase by Borrower of Borrower's common stock purchased in the open market, except that the amount of Borrower's repurchases or purchases, as applicable, of stock in (A) and (B) above shall not be greater than \$3,000,000.00 in the aggregate.

7.7 TRANSACTIONS WITH AFFILIATES. Directly or indirectly enter or permit any material transaction with any Affiliate, except transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person.

7.8 SUBORDINATED DEBT. Make or permit any payment on any Subordinated Debt, except under the terms of the Subordinated Debt, or amend any provision in any document relating to the Subordinated Debt, without Bank's prior written consent.

7.9 COMPLIANCE. Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940 or undertake as one of its important activities extending credit to purchase or carry margin stock, or use the proceeds of any Credit Extension for that purpose; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have a material adverse effect on Borrower's business or operations or would reasonably be expected to cause a Material Adverse Change, or permit any of its Subsidiaries to do so.

8 EVENTS OF DEFAULT

Any one of the following is an Event of Default:

8.1 PAYMENT DEFAULT. Borrower fails to pay any of the Obligations within three (3) Business Days after their due date. During the additional period the failure to cure the default is not an Event of Default (but no Credit Extension shall be made during the cure period);

10

8.2 COVENANT DEFAULT. Borrower does not perform any obligation in Section 6 or violates any covenant in Section 7 or does not perform or observe any other material term, condition or covenant in this Agreement, any Loan Documents, or in any agreement between Borrower and Bank and as to any default under a term, condition or covenant that can be cured, has not cured the default within twenty (20) days after it occurs, or if the default cannot be cured within such twenty (20) days or cannot be cured after Borrower's attempts in the twenty (20) day period, and the default may be cured within a reasonable time, then Borrower shall have additional time, (of not more than twenty (20) days) to attempt to cure the default. Grace periods provided under this section shall not apply, among other things, to financial covenants or any other covenants that are required to be satisfied, completed or tested by a date certain. During the additional period the failure to cure the default is not an Event of Default (but no Credit Extensions shall be made during the cure period);

8.3 MATERIAL ADVERSE CHANGE. A Material Adverse Change occurs;

8.4 ATTACHMENT. (i) Any material portion of Borrower's assets is attached, seized, levied on, or comes into possession of a trustee or receiver and the attachment, seizure or levy is not removed in ten (10) days; (ii) the service of process upon the Borrower seeking to attach, by trustee or similar process any funds of the Borrower on deposit with the Bank; (iii) Borrower is enjoined, restrained, or prevented by court order from conducting a material part of its business; (iv) a judgment or other claim becomes a Lien on a material portion of Borrower's assets; or (v) a notice of lien, levy, or assessment is filed against any of Borrower's assets by any government agency and not paid within ten (10) days after Borrower receives notice. These are not Events of Default if stayed or if a bond is posted pending contest by Borrower (but no Credit Extensions shall be made during the cure period);

8.5 INSOLVENCY. (i) Borrower becomes insolvent; (ii) Borrower begins an Insolvency Proceeding; or (iii) an Insolvency Proceeding is begun against Borrower and not dismissed or stayed within forty-five (45) days (but no Credit Extensions shall be made before any Insolvency Proceeding is dismissed);

8.6 OTHER AGREEMENTS. If there is a default in any agreement to which Borrower is a party with a third party or parties resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount in excess of Five Hundred Thousand Dollars (\$500,000) or that could result in a Material Adverse Change;

8.7 JUDGMENTS. Except with respect to a judgment specified on SCHEDULE 8.7 with regard to Borrower's wholly-owned Subsidiary, telecom technologies, inc., if a judgment or judgments for the payment of money in an amount, individually or in the aggregate, of at least Five Hundred Thousand Dollars (\$500,000) shall be rendered against Borrower and shall remain unsatisfied and unstayed for a period of ten (10) days (provided that no Credit Extensions will be made prior to the satisfaction or stay of such judgment);

8.8 MISREPRESENTATIONS. If Borrower or any Person acting for Borrower makes any material misrepresentation or material misstatement now or later in any warranty or representation in this Agreement or in any writing delivered to Bank or to induce Bank to enter this Agreement or any Loan Document.

9 BANK'S RIGHTS AND REMEDIES

9.1 RIGHTS AND REMEDIES. When an Event of Default occurs and continues Bank may, without notice or demand, do any or all of the following:

(a) Declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations are immediately due and payable without any action by Bank);

(b) Stop advancing money or extending credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Bank;

11

(c) Settle or adjust disputes and claims directly with account debtors for amounts, on terms and in any order that Bank considers advisable;

(d) Make any payments and do any acts it considers necessary or reasonable to protect its security interest in the Collateral. Borrower shall assemble the Collateral if Bank requests and make it available as Bank designates. Bank may enter premises where the Collateral is located (to extent not prohibited by applicable law and as to Collateral in the possession of customers of Borrower, only after thirty (30) days prior written notice to Borrower), take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Bank a license to enter and occupy any of its premises, without charge, to exercise any of Bank's rights or remedies;

(e) Apply to the Obligations any (i) balances and deposits of Borrower it holds, or (ii) any amount held by Bank owing to or for the credit or the account of Borrower;

(f) Ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. Bank is granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, patents, copyrights, mask works, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section, Borrower's rights under all licenses and all franchise agreements inure to Bank's benefit for the purposes described herein and to the extent not prohibited by the terms of any licenses or franchise agreements in effect on the date hereof and under which the Borrower is the licensee or franchisee, only to the extent such prohibitions are enforceable; and

(g) Dispose of the Collateral according to the Code.

9.2 POWER OF ATTORNEY. Borrower hereby irrevocably appoints Bank as its lawful attorney-in-fact, to be effective upon the occurrence and during the continuance of an Event of Default, to: (i) endorse Borrower's name on any checks or other forms of payment or security; (ii) sign Borrower's name on any invoice or bill of lading for any Account or drafts against account debtors; (iii) settle and adjust disputes and claims about the Accounts directly with account debtors, for amounts and on terms Bank determines reasonable; (iv) make, settle, and adjust all claims under Borrower's insurance policies; and (v) transfer the Collateral into the name of Bank or a third party as the Code permits. Borrower hereby appoints Bank as its lawful attorney-in-fact to sign Borrower's name on any documents necessary to perfect or continue the perfection of any security interest regardless of whether an Event of Default has occurred until all Obligations have been satisfied in full and Bank is under no further obligation to make Credit Extensions hereunder. Bank's foregoing appointment as Borrower's attorney in fact, and all of Bank's rights and powers, coupled with an interest, are irrevocable until all Obligations have been fully repaid and performed and Bank's obligation to provide Credit Extensions terminates.

9.3 ACCOUNTS COLLECTION. In the event that an Event of Default occurs and is continuing, Bank may notify any Person owing Borrower money of Bank's security interest in the funds and verify and/or collect the amount of the Account. After the occurrence of an Event of Default, any amounts received by Borrower shall be held in trust by Borrower for Bank, and, if requested by Bank, Borrower shall immediately deliver such receipts to Bank in the form received from the account debtor, with proper endorsements for deposit.

9.4 BANK EXPENSES. Any amounts paid by Bank as provided herein are Bank Expenses and are immediately due and payable, and shall bear interest at the then applicable rate and be secured by the Collateral. No payments by Bank shall be deemed an agreement to make similar payments in the future or Bank's waiver of any Event of Default.

9.5 BANK'S LIABILITY FOR COLLATERAL. So long as the Bank complies with reasonable banking practices regarding the safekeeping of collateral, the Bank shall not be liable or responsible for: (a) the safekeeping of the

12

Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other person. Borrower bears all risk of loss, damage or destruction of the Collateral.

9.6 REMEDIES CUMULATIVE. Bank's rights and remedies under this Agreement, the Loan Documents, and all other agreements are cumulative. Bank has all rights and remedies provided under the Code, by law, or in equity. Bank's exercise of one right or remedy is not an election, and Bank's waiver of any Event of Default is not a continuing waiver. Bank's delay is not a waiver, election, or acquiescence. No waiver hereunder shall be effective unless signed by Bank and then is only effective for the specific instance and purpose for which it was given.

9.7 DEMAND WAIVER. Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Bank on which Borrower is liable.

10 NOTICES

All notices or demands by any party to this Agreement or any other related agreement must be in writing and be personally delivered or sent by an overnight delivery service, by certified mail, postage prepaid, return receipt requested, or by telefacsimile at the addresses listed below. Either Bank or Borrower may change its notice address by giving the other written notice.

If to Borrower: Sonus Networks, Inc.
5 Carlisle Road
Westford, Massachusetts 01886
Attn: Mr. Stephen J. Nill, CFO
Fax: 978-692-9118

with a copy to: Bingham Dana LLP
150 Federal Street
Boston, Massachusetts 02110
Attn: Johan V. Brigham, Esquire
Fax: 617-951-8736

If to Bank: Silicon Valley Bank
One Newton Executive Park, Suite 200
2221 Washington Street
Newton, Massachusetts 02462
Attn: Ms. Pamela Braren
Fax: (617) 969-4395

with a copy to: Riemer & Braunstein LLP
Three Center Plaza
Boston, Massachusetts 02108
Attn: David A. Ephraim, Esquire
FAX: (617) 880-3456

Massachusetts law governs the Loan Documents without regard to principles of conflicts of law. Borrower and Bank each submit to the exclusive jurisdiction of the State and Federal courts in Massachusetts; provided, however, that if for any reason Bank cannot avail itself of such courts in the Commonwealth of Massachusetts, Borrower accepts jurisdiction of the courts and venue in Santa Clara County, California. NOTWITHSTANDING THE FOREGOING, THE BANK SHALL HAVE THE RIGHT TO BRING ANY ACTION OR PROCEEDING

13

AGAINST THE BORROWER OR ITS PROPERTY IN THE COURTS OF ANY OTHER JURISDICTION WHICH THE BANK DEEMS NECESSARY OR APPROPRIATE IN ORDER TO REALIZE ON THE COLLATERAL OR TO OTHERWISE ENFORCE THE BANK'S RIGHTS AGAINST THE BORROWER OR ITS PROPERTY.

BORROWER AND BANK EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

12 GENERAL PROVISIONS

12.1 SUCCESSORS AND ASSIGNS. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign this Agreement or any rights or Obligations under it without Bank's prior written consent which may be granted or withheld in Bank's discretion. Bank has the right, without the consent of or notice to Borrower, to sell, transfer, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights and benefits under this Agreement, the Loan Documents or any related agreement.

12.2 INDEMNIFICATION. Borrower hereby indemnifies, defends and holds the Bank and its officers, employees and agents harmless against: (a) all obligations, demands, claims, and liabilities asserted by any other party in connection with the transactions contemplated by the Loan Documents; and (b) all losses or Bank Expenses incurred, or paid by Bank from, following, or consequential to transactions between Bank and Borrower (including reasonable attorneys' fees and expenses), except for losses caused by Bank's gross negligence or willful misconduct.

12.3 RIGHT OF SET-OFF. Borrower and any guarantor hereby grant to Bank, a lien, security interest and right of setoff as security for all Obligations to Bank, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Bank or any entity under the control of the Bank or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Bank may set off the same or any part thereof and apply the same to any liability or obligation of Borrower and any guarantor even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE BANK TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF THE BORROWER OR ANY GUARANTOR, ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

12.4 TIME OF ESSENCE. Time is of the essence for the performance of all Obligations in this Agreement.

12.5 SEVERABILITY OF PROVISION. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.6 AMENDMENTS IN WRITING; INTEGRATION. All amendments to this Agreement must be in writing signed by both Bank and Borrower. This Agreement and the Loan Documents represent the entire agreement about this subject matter, and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Agreement and the Loan Documents merge into this Agreement and the Loan Documents.

12.7 COUNTERPARTS. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, are an original, and all taken together, constitute one Agreement.

14

12.8 SURVIVAL. All covenants, representations and warranties made in this Agreement continue in full force while any Obligations remain outstanding. The obligation of Borrower in Section 12.2 to indemnify Bank shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

12.9 CONFIDENTIALITY. In handling any Confidential Information, Bank shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (i) to Bank's subsidiaries or affiliates in connection with their business with Borrower; (ii) to prospective transferees or purchasers of any interest in the Credit Extensions (provided, however, Bank shall use commercially reasonable efforts in obtaining such prospective transferee's or purchaser's agreement to the terms of

this provision); (iii) as required by law, regulation, subpoena, or other order, (iv) as required in connection with Bank's examination or audit; and (v) upon the occurrence and continuance of an Event of Default, as Bank considers appropriate in exercising remedies under this Agreement. The restrictions set forth above shall not apply to information that (a) is generally known within the industry at the time of its disclosure; (b) is lawfully received by the Bank from a third party (unless the Bank is aware that such third party is not permitted to make such disclosures due to a confidential relationship with the Borrower); (c) was already in the Bank's possession at the time such information was disclosed by the Borrower to the Bank; or (d) was independently developed by the Bank without use of the information disclosed under this Agreement. If a portion or aspect of the Confidential Information becomes generally known through no action of the Bank, only that portion or aspect shall not be governed by this Agreement and all other aspects of the Confidential Information shall remain subject to the provisions of this Agreement.

13 DEFINITIONS

13.1 DEFINITIONS.

"ACCOUNTS" are all existing and later arising accounts, contract rights, and other obligations owed Borrower in connection with its sale or lease of goods (including licensing software and other technology) or provision of services, all credit insurance, guaranties, other security and all merchandise returned or reclaimed by Borrower and Borrower's Books relating to any of the foregoing, as such definition may be amended from time to time according to the Code.

"ADVANCE" or "ADVANCES" is a loan advance (or advances) under the Committed Revolving Line, including, without limitation, the Prime Rate Loans and the LIBOR Rate Loans described in the Interest Rate Supplement.

"AFFILIATE" of a Person is a Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person's managers and members.

"BANK EXPENSES" are all audit fees and expenses and reasonable costs or expenses (including reasonable attorneys' fees and expenses) for preparing, negotiating, administering, defending and enforcing the Loan Documents (including appeals or Insolvency Proceedings).

"BELLSOUTH DEBT" is defined in Section 5.9.

"BORROWER'S BOOKS" are all Borrower's books and records including ledgers, records regarding Borrower's assets or liabilities, the Collateral, business operations or financial condition and all computer programs or discs or any equipment containing the information.

"BORROWING BASE" is eighty percent (80%) of Eligible Accounts, as determined by Bank from Borrower's most recent Borrowing Base Certificate; provided, however, that Bank may lower the percentage of the Borrowing Base after performing an audit of Borrower's Collateral, which reduction of the Borrowing Base shall be effective ten (10) days after Bank provides notice to Borrower of such change.

15

"BUSINESS DAY" is any day that is not a Saturday, Sunday or a day on which the Bank is closed.

"CASH MANAGEMENT SERVICES" are defined in Section 2.1.4.

"CLOSING DATE" is March 25, 2002.

"CODE" is the Uniform Commercial Code as adopted in Massachusetts, as amended and as may be amended and in effect from time to time.

"COLLATERAL" is any and all properties, rights and assets of the Borrower (other than Intellectual Property, except to the extent that a security interest in Borrower's Intellectual Property is granted by Borrower to Bank hereafter) granted by the Borrower to Bank or arising under the Code, now, or in the future, in which the Borrower obtains an interest, or the power to transfer rights, including, without limitation, the property described on EXHIBIT A.

"COMMITTED EQUIPMENT LINE" is an Equipment Advance or Equipment Advances of up to Ten Million Dollars (\$10,000,000.00).

"COMMITTED REVOLVING LINE" is an Advance or Advances of up to Twenty Million Dollars (\$20,000,000.00). Notwithstanding the foregoing, the availability of the initial Advance under the Committed Revolving Line shall be subject to the receipt by the Bank of satisfactory results, in the sole and absolute discretion of the Bank, of the Initial Audit of Borrower's Accounts pursuant to Section 6.2 hereof. If the results of the Initial Audit are not satisfactory to the Bank for any reason, the Bank may, at its discretion, reduce the amount of the Committed Revolving Line, or not make any Advances thereunder, except pursuant to terms satisfactory to Bank.

"CONFIDENTIAL INFORMATION" means all commercially valuable, propriety and confidential information and trade secrets with respect to the Borrower's business and products, whether of a technical, business or other nature (including, without limitation, know-how and information relating to the

technology, customers, business plans, promotional and marketing activities, finances and other business affairs of the Borrower), that is disclosed to the Bank or any of its officers, employees or agents or is otherwise learned by the Bank or any of its officers, employees or agents in the course of discussions or business dealings with, or physical or electronic access to the premises of, the Borrower, and that has been identified as being proprietary and/or confidential or that by the nature of the circumstances surrounding the disclosure or receipt ought to be treated as proprietary and confidential.

"CONTINGENT OBLIGATION" is, for any Person, any direct or indirect liability, contingent or not, of that Person for (i) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (ii) any obligations for undrawn letters of credit for the account of that Person; and (iii) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under the guarantee or other support arrangement.

"CREDIT EXTENSION" is each Advance (including Cash Management Services), Equipment Advance, Letter of Credit, FX Forward Contract or any other extension of credit by Bank for Borrower's benefit.

"CURRENT LIABILITIES" are the aggregate amount of Borrower's Total Liabilities which mature within one (1) year, PLUS, without duplication, all obligations and liabilities of Borrower to Bank.

16

"DEFERRED MAINTENANCE REVENUE" is all amounts received in advance of performance under maintenance contracts and not yet recognized as revenue.

"ELIGIBLE ACCOUNTS" are billed Accounts in the ordinary course of Borrower's business that meet all Borrower's representations and warranties in Section 5.2; BUT Bank may in its reasonable discretion change eligibility standards by giving Borrower thirty (30) days prior written notice. Unless Bank agrees otherwise in writing, Eligible Accounts shall not include:

- (a) Accounts that the account debtor has not paid within ninety (90) days of invoice date;
- (b) Accounts for an account debtor, fifty percent (50%) or more of whose Accounts have not been paid within ninety (90) days of invoice date;
- (c) Credit balances over ninety (90) days from invoice date;
- (d) Accounts for an account debtor, including Affiliates, whose total obligations to Borrower exceed twenty-five percent (25%) of all Accounts, for the amounts that exceed that percentage, unless Bank approves in writing;
- (e) Accounts for which the account debtor does not have its principal place of business in the United States, except for certain foreign accounts receivable which may be approved by Bank in its sole discretion on a case-by-case basis;
- (f) Accounts for which the account debtor is a federal, state or local government entity or any department, agency, or instrumentality thereof;
- (g) Accounts for which Borrower owes the account debtor, but only up to the amount owed (sometimes called "contra" accounts, accounts payable, customer deposits or credit accounts);
- (h) Accounts for demonstration or promotional equipment, or in which goods are consigned, sales guaranteed, sale or return, sale on approval, bill and hold, or other terms if account debtor's payment may be conditional;
- (i) Accounts for which the account debtor is Borrower's Affiliate, officer, employee, or agent;
- (j) Accounts in which the account debtor disputes liability or makes any claim and Bank believes there may be a basis for dispute (but only up to the disputed or claimed amount), or if the Account Debtor is subject to an Insolvency Proceeding, or becomes insolvent, or goes out of business;
- (k) Accounts for which Bank reasonably determines collection to be doubtful.

"ELIGIBLE EQUIPMENT" is (a) general purpose computer equipment, office equipment, test, manufacturing and laboratory equipment, furnishings, subject to the limitations set forth herein, and (b) Other Equipment that complies with all of Borrower's representations and warranties to Bank and which is reasonably

acceptable to Bank in all respects.

"EQUIPMENT" is all present and future machinery, equipment, tenant improvements, furniture, fixtures, vehicles, tools, parts and attachments in which Borrower has any interest.

"EQUIPMENT ADVANCE " is defined in Section 2.1.5.

"EQUIPMENT AVAILABILITY END DATE" is defined in Section 2.1.5.

17

"EQUIPMENT MATURITY DATE" is, with respect to each Equipment Advance, the thirty-sixth (36th) Payment Date following each such Equipment Advance.

"ERISA" is the Employment Retirement Income Security Act of 1974, and its regulations.

"FX FORWARD CONTRACT" is defined in Section 2.1.3.

"FX RESERVE" is defined in Section 2.1.3.

"GAAP" is generally accepted accounting principles.

"GUARANTOR" is any present or future guarantor of the Obligations.

"INDEBTEDNESS" is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations and (d) Contingent Obligations.

"INSOLVENCY PROCEEDING" is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"INTELLECTUAL PROPERTY" is any copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, now owned or later acquired; any patents, trademarks, service marks and applications therefor; any trade secret rights, including any rights to unpatented inventions, now owned or hereafter acquired.

"INTEREST RATE SUPPLEMENT" is that certain Interest Rate Supplement to Agreement attached hereto and incorporated herein by reference.

"INVENTORY" is present and future inventory in which Borrower has any interest, including merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products intended for sale or lease or to be furnished under a contract of service, of every kind and description now or later owned by or in the custody or possession, actual or constructive, of Borrower, including inventory temporarily out of its custody or possession or in transit and including returns on any accounts or other proceeds (including insurance proceeds) from the sale or disposition of any of the foregoing and any documents of title.

"INVESTMENT" is any beneficial ownership of (including stock, partnership interests or other securities) any Person, or any loan, advance or capital contribution to any Person.

"LETTER OF CREDIT" means a letter of credit or similar undertaking issued by Bank pursuant to Section 2.1.2.

"LETTER OF CREDIT FEES" is defined in Section 2.4.

"LETTER OF CREDIT RESERVE" has the meaning set forth in Section 2.1.2.

"LIEN" is a mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

"LOAN DOCUMENTS" are, collectively, this Agreement, any note, or notes or guaranties executed by Borrower, and any other present or future agreement between Borrower and/or for the benefit of Bank in connection with this Agreement, all as amended, extended or restated.

"MATERIAL ADVERSE CHANGE" is: (i) A material impairment in the perfection or priority of Bank's security interest in the Collateral or in the value of such Collateral; or (ii) a material adverse change in the business, operations, or condition (financial or otherwise) of the Borrower; or (iii) a material impairment of the prospect of

18

repayment of any portion of the Obligations; or (iv) Bank determines, based upon information available to it and in its reasonable judgment, that there is a substantial likelihood that Borrower shall fail to comply with one or more of the financial covenants in Section 6 during the next succeeding financial reporting period.

"OBLIGATIONS" are debts, principal, interest, Bank Expenses and other amounts Borrower owes Bank now or later under or in connection with this

Agreement, including letters of credit, cash management services, and foreign exchange contracts, if any, and including interest accruing after Insolvency Proceedings begin and debts, liabilities, or obligations of Borrower assigned to Bank.

"OTHER EQUIPMENT" is leasehold improvements, intangible property such as computer software and software licenses, equipment specifically designed or manufactured for Borrower, other intangible property, limited use property and other similar property and soft costs approved by the Bank, excluding sales tax, freight and installation expenses. Unless otherwise agreed to by Bank, not more than 25% of the proceeds of the Committed Equipment Line shall be used to finance Other Equipment.

"PAYMENT DATE" is the first calendar day of each month.

"PERMITTED INDEBTEDNESS" is:

(a) Borrower's indebtedness to Bank under this Agreement or the Loan Documents;

(b) Indebtedness existing on the Closing Date and shown on the Schedule;

(c) Subordinated Debt;

(d) Indebtedness to trade creditors incurred in the ordinary course of business;

(e) Indebtedness secured by Permitted Liens; and

(f) Extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (e) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

"PERMITTED INVESTMENTS" are:

(a) Investments shown on the Investments Schedule and existing on the Closing Date; and

(b) (i) marketable direct obligations issued or unconditionally guaranteed by the United States or its agency (including FannieMae or FreddieMac) or any state maturing within 1 year from its acquisition, (ii) commercial paper maturing no more than 1 year after its creation and having the highest rating from either Standard & Poor's Corporation or Moody's Investors Service, Inc., (iii) certificates of deposit issued maturing no more than 1 year after issue, and (iv) any other investments administered through the Bank.

"PERMITTED LIENS" are:

(a) Liens existing on the Closing Date and shown on the Schedule or arising under this Agreement or other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either not delinquent or being contested in good faith and for which Borrower maintains adequate reserves on its Books, IF they have no priority over any of Bank's security interests;

19

(c) Purchase money Liens granted in connection with the financing (by loan or capital lease) of Equipment in an outstanding amount not greater than \$10,000,000.00: (i) on Equipment acquired or held by Borrower incurred for financing the acquisition of the Equipment, or (ii) existing on Equipment when acquired, IF the Lien is confined to the property and improvements and the proceeds of the Equipment;

(d) Leases or subleases and non-exclusive licenses or sublicenses granted in the ordinary course of Borrower's business; and

(e) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (d), BUT any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase.

"PERSON" is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"PRIME RATE" is Bank's most recently announced "prime rate," even if it is not Bank's lowest rate.

"QUICK ASSETS" is, on any date, the Borrower's consolidated, unrestricted cash, cash equivalents, net billed accounts receivable and investments with maturities of fewer than 12 months determined according to GAAP.

"RESPONSIBLE OFFICER" is each of the Chief Executive Officer, President, Chief Financial Officer and Controller of Borrower.

"REVOLVING MATURITY DATE" is that date which is three hundred sixty-four (364) days following the Closing Date.

"SCHEDULE" is any attached schedule of exceptions.

"SUBORDINATED DEBT" is debt incurred by Borrower subordinated to Borrower's debt to Bank (pursuant to a subordination agreement entered into between the Bank, the Borrower and the subordinated creditor), on terms acceptable to Bank. As of the Closing Date, the BellSouth Debt shall be deemed Subordinated Debt hereunder.

"SUBSIDIARY" of any Person is any corporation, partnership, limited liability company, joint venture, or any other business entity of which more than 50% of the voting stock or other equity interests is owned or controlled, directly or indirectly, by the Person or one or more Affiliates of the Person.

"TANGIBLE NET WORTH" is, on any date, the consolidated total assets of Borrower and its Subsidiaries MINUS (i) any amounts attributable to (a) goodwill, (b) intangible items including unamortized debt discount and expense, patents, trade and service marks and names, copyrights and research and development expenses except prepaid expenses, and (c) reserves not already deducted from assets, MINUS (ii) Total Liabilities, PLUS (iii) Subordinated Debt to the extent that such Subordinated Debt is due and payable greater than one (1) year from the applicable testing date.

"TOTAL LIABILITIES" is on any day, obligations that should, under GAAP, be classified as liabilities on Borrower's consolidated balance sheet, including all Indebtedness, and current portion of Subordinated Debt permitted by Bank to be paid by Borrower, but excluding all other Subordinated Debt.

"TNW THRESHOLD" is Borrower's maintaining a Tangible Net Worth, as of the last day of the month, of not less than Seventy Million Dollars (\$70,000,000.00), as determined by Bank upon its review of Borrower's Compliance Certificate and financial statements.

20

"UNUSED COMMITTED EQUIPMENT LINE" is the maximum principal amount of the Committed Equipment Line less the principal amount of the Equipment Advances made thereunder (including any Equipment Advances which have been repaid by Borrower).

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

21

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as a sealed instrument under the laws of the Commonwealth of Massachusetts as of March 25, 2002, to be effective as of January 16, 2002.

BORROWER:

SONUS NETWORKS, INC.

By: /s/ Peter S. Hemme

Name: Peter S. Hemme

Title: Vice President and Controller

BANK:

SILICON VALLEY BANK, d/b/a
SILICON VALLEY EAST

By: /s/ Timothy O'Loughlin

Name: Timothy O'Loughlin

Title: Senior Vice President

SILICON VALLEY BANK

By: /s/ Maggie Garcia

Name: Maggie Garcia

Title: AVP

(Signed in Santa Clara County, California)

22

EXHIBIT A

The Collateral consists of all right, title and interest of Borrower in and to the following:

All goods, equipment, inventory, contract rights or rights to payment of money, license agreements, franchise agreements, general intangibles (including payment intangibles), accounts (including health-care receivables), documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), commercial tort claims, securities, and all other investment property supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

All Borrower's Books relating to the foregoing and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

The Collateral does not include:

Any copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, now owned or later acquired; any patents, trademarks, service marks and applications therefor; any trade secret rights, including any rights to unpatented inventions, now owned or hereafter acquired. Notwithstanding the foregoing, the Collateral shall include all accounts, license and royalty fees and other revenues, proceeds, or income arising out of or relating to any of the foregoing Intellectual Property.

EXHIBIT B

LOAN PAYMENT/ADVANCE TELEPHONE REQUEST FORM
DEADLINE FOR SAME DAY PROCESSING IS 3:00 P.M., E.S.T.

TO: CENTRAL CLIENT SERVICE DIVISION DATE: -----

FAX#: (617) 969-5965 TIME: -----

FROM: SONUS NETWORKS, INC.

CLIENT NAME (BORROWER)
REQUESTED BY: -----

AUTHORIZED SIGNER'S NAME

AUTHORIZED SIGNATURE: -----

PHONE NUMBER: -----

FROM ACCOUNT # TO ACCOUNT #

REQUESTED TRANSACTION TYPE	REQUEST DOLLAR AMOUNT
-----	-----
PRINCIPAL INCREASE (ADVANCE)	\$ -----
PRINCIPAL PAYMENT (ONLY)	\$ -----
INTEREST PAYMENT (ONLY)	\$ -----
PRINCIPAL AND INTEREST (PAYMENT)	\$ -----

OTHER INSTRUCTIONS: -----

All Borrower's representations and warranties in the Loan and Security Agreement are true, correct and complete in all material respects on the date of the telephone request for and Advance confirmed by this Borrowing Certificate; but those representations and warranties expressly referring to another date shall be true, correct and complete in all material respects as of that date.

BANK USE ONLY

TELEPHONE REQUEST:

The following person is authorized to request the loan payment transfer/loan advance on the advance designated account and is known to me.

EXHIBIT C
BORROWING BASE CERTIFICATE

Borrower: SONUS NETWORKS, INC. Lender: Silicon Valley Bank
Commitment Amount: \$20,000,000.00

ACCOUNTS RECEIVABLE

1. Accounts

Receivable Book

Value as of \$ -----

----- 2.

Additions (please
explain on reverse)

\$ -----

3. TOTAL ACCOUNTS
RECEIVABLE \$ -----

ACCOUNTS
RECEIVABLE

DEDUCTIONS (without
duplication) 4.

Amounts over 90 days
due \$ -----

--- 5. Balance of

50% over 90 day

accounts \$ -----

----- 6. Credit

balances over 90

days \$ -----

---- 7.

Concentration Limits

\$ -----

8. Foreign Accounts

\$ -----

9. Governmental

Accounts \$ -----

----- 10. Contra

Accounts \$ -----

----- 11.

Promotion or Demo

Accounts \$ -----

----- 12.

Intercompany/Employee

Accounts \$ -----

----- 13. Other

(please explain on

reverse) \$ -----

----- 14. TOTAL

ACCOUNTS RECEIVABLE

DEDUCTIONS \$ -----

----- 15.

Eligible Accounts

(#3 minus #14) \$ ---

----- 16.

LOAN VALUE OF

ACCOUNTS(80% OF #15)

\$ -----

BALANCES 17. Maximum

Loan Amount \$ -----

----- 18.

Total Funds

Available (Lesser of

#16 and #17) \$ -----

----- 19.

Present balance

owing on Committed

Revolving Line \$ ---

----- 20.

Outstanding under

Sublimits (Letter of

Credit, FX Reserve,

Cash Mngt) \$ -----

----- 21.

RESERVE POSITION

(#18 minus #19 and

#20) \$ -----

THE UNDERSIGNED REPRESENTS AND WARRANTS THAT THIS IS TRUE, COMPLETE AND CORRECT,
AND THAT THE INFORMATION IN THIS BORROWING BASE CERTIFICATE COMPLIES WITH THE
REPRESENTATIONS AND WARRANTIES IN THE LOAN AND SECURITY AGREEMENT BETWEEN THE
UNDERSIGNED AND SILICON VALLEY BANK.

COMMENTS:

Received by: -----

AUTHORIZED SIGNER

Date: -----

By: -----

Authorized Signer

Verified: -----

AUTHORIZED SIGNER

Date: -----

Compliance Status: Yes No

EXHIBIT D
COMPLIANCE CERTIFICATE

TO: SILICON VALLEY BANK

FROM: SONUS NETWORKS, INC.

The undersigned authorized officer of SONUS NETWORKS, INC. certifies that under the terms and conditions of the Loan and Security Agreement between Borrower and Bank (the "Agreement"), (i) Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below and (ii) all representations and warranties in the Agreement are true and correct in all material respects on this date. Attached are the required documents supporting the certification. The Officer certifies that these are prepared in accordance with Generally Accepted Accounting Principles (GAAP) consistently applied from one period to the next except as explained in an accompanying letter or footnotes. The Officer acknowledges that no borrowings may be requested at any time or date of determination that Borrower is not in compliance with any of the terms of the Agreement, and that compliance is determined not just at the date this certificate is delivered.

PLEASE INDICATE COMPLIANCE STATUS BY CIRCLING YES/NO UNDER "COMPLIES" COLUMN.

REPORTING
COVENANT
REQUIRED
COMPLIES -

Financial
statements
with CC
Monthly
within 25
days Yes
No BBC w/
A/R Agings
Monthly
w/in 25
days* Yes
No 10-Q,
10-K and
8-K Within
5 days
after
filing
with SEC
Yes No
Balance
Sheet,
Income
Statement,
and FYE
within 45
days Yes
No

Cash Projections (plus all revisions approved by Board)

* To be submitted by Borrower to Bank in accordance with Section 6.2 of the Loan and Security Agreement

FINANCIAL
COVENANT
REQUIRED
ACTUAL
COMPLIES -

-- Minimum Quick Ratio (monthly) 1.5:1.0 :1.0 Yes No -----
Minimum Tangible Net Worth (monthly) (i) \$70,000,000 thru 3/31/02, \$ Yes No ---

\$60,000,000 thru 9/30/02, \$ Yes No ---
----- and \$50,000,000 after 9/30/02; \$ Yes No ---
----- PLUS (ii) 50% of new equity issued.

COMMENTS REGARDING EXCEPTIONS: See Attached.

BANK USE ONLY

Sincerely,

Received by: -----
AUTHORIZED SIGNER

SIGNATURE

Date: -----

TITLE

Verified: -----
AUTHORIZED SIGNER

DATE

Date: -----

Compliance Status: Yes No

EXHIBIT 21.1

SUBSIDIARIES OF THE REGISTRANT

NAME
JURISDICTION
OF
INCORPORATION

telecom
technologies,
inc. Texas
Sonus
International,
Inc.,
Delaware
Sonus
Securities
Corp.
Massachusetts
Sonus
Networks
Limited
United
Kingdom Sonus
Networks Pte
Ltd Singapore
Nihon Sonus
Networks K.K.
Japan
Westford
Networks
Mexico, S. de
R.L. de C.V.
Mexico

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation of our report included in this Form 10-K, into the Company's previously filed Registration Statement File Nos. 333-61940, 333-54932, 333-53970 and 333-32206.

/s/ Arthur Andersen LLP

Boston, Massachusetts
March 25, 2002

EXHIBIT 99.1

SONUS NETWORKS, INC.

5 Carlisle Road
Westford, MA 01886

LETTER TO COMMISSION PURSUANT TO TEMPORARY NOTE 3T

March 27, 2002

Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, D.C. 20549-0408

Ladies and Gentlemen:

Pursuant to Temporary Note 3T to Article 3 of Regulation S-X, Sonus Networks, Inc. has obtained a letter of representation from Arthur Andersen LLP ("Andersen") stating that the December 31, 2001 audit was subject to their quality control system for the U.S. accounting and auditing practice to provide reasonable assurance that the engagement was conducted in compliance with professional standards, that there was appropriate continuity of Andersen personnel working on the audit and availability of national office consultation. Availability of personnel at foreign affiliates of Andersen is not relevant to this audit.

Very truly yours,

Sonus Networks, Inc.

/s/ Stephen J. Nill

Stephen J. Nill
Vice President Finance and
Administration and Treasurer