LUCENT TECHNOLOGIES 1998 ANNUAL REPORT

# AT THE CENTER OF THE COMMUNICATIONS REVOLUTION

Lucent Technologies

Bell Labs innovations 600 Mountain Avenue

Murray Hill, NJ 07974-0636 http://www.lucent.com 1-888-4-Lucent



There is a revolution taking place in the communications industry, and its ripples are being felt worldwide.

### Lucent Technologies 1998 Annual Report

Old paradigms are being replaced by new technologies and market dynamics. The Internet is generating unprecedented **data traffic**, and customers are no longer tolerant of routine network "downtime." But this revolution is about more than data. It's about **optical networking**, which is creating virtually unlimited capacity and mind-boggling speed. It's about **wireless systems** that offer mobility without sacrificing quality or reliability. And it's about the need for networks of networks that can handle data or voice, wired or wireless, optical or electronic signals with equal aplomb. It's not just a data networking revolution or a voice networking revolution.

It's a communications networking revolution, and Lucent Technologies is at the center of it.



#### CONTENTS

- 2 Letter to Shareowners
- 4 Financial Highlights
- 8 Communications Networking
- 12 Data Networking
- 15 Optical Networking
- 18 Wireless
- 20 Services and Support
- 22 Messaging and Call Centers
- 24 Software
- 26 Semiconductors
- 28 Ventures
- 30 Lucent at a Glance
- 31 Leadership
- 32 Board of Directors
- 33 Financial Review
- 68 Philanthropy, Environment and Diversity
- 69 Investor Information

#### <u>1998</u> Highlights

#### **JANUARY 19**

Lucent offers digital modem technology for standard phone lines that can download data at 1.5 megabits per second, about 30 times faster than the fastest analog modems.

#### **JANUARY 26**

Lucent unveils 80-channel optical networking system with record-breaking capacity.

#### **FEBRUARY 18**

Lucent announces two-forone stock split at annual shareowners' meeting; Rich McGinn succeeds Henry Schacht as chairman.

#### **FEBRUARY 24**

Lucent signs five-year, multimillion-dollar agreement with Ameritech Services to provide broad spectrum of voice messaging services and products.

#### MARCH 9

Lucent introduces WaveStar<sup>™</sup> BandWidth Manager, which routes all the traffic — voice, data and video — being handled by today's largest telephone central offices and saves carriers up to 60 percent in equipment costs.

continued on page 4

## CHAIRMAN'S MESSAGE Communications Revolution

#### o Our Shareowners:

Our industry has always been fast moving. But today we are witnessing something truly unique. The pace of change has reached revolutionary proportions. The impact of this revolution on our lives will be greater than anything that has happened in the last century of communications history.

Some believe the revolution is all about the rise of data networking and the Internet. We see it differently. No question, the Internet is creating tremendous growth opportunities for Lucent and others. But the communications revolution is about more than the Internet. It's about communications networking: how voice and data, optical, wireless, software and semiconductor technologies are redefining what's possible in communications.

This is a global revolution, varying only in intensity from region to region. In developed nations there is unprecedented growth of traffic on public and private networks as more people work at home, access the Internet, and carry cell phones and laptops. In developing nations, the revolution is driven by the creation of new businesses and rising demand for access to communications. Throughout the world, deregulation and privatization of government-controlled telephone monopolies are encouraging competition and, with it, increased demand for communications networking.

Leading this revolution requires outstanding technology and a relentless focus on customers. It requires expertise in voice, data, optical and wireless networking. It requires a deep understanding of how large, complex networks fit together into networks of networks. And it requires a vision of where the technology is heading.

These requirements play to Lucent's strengths and make us uniquely qualified to lead this revolution.

#### **FINANCIAL HIGHLIGHTS**

In a market that is growing rapidly, Lucent is taking market share. In 1998 we earned record revenues and profits.

For the fiscal year ended September 30, 1998, net income rose 52 percent to \$2.3 billion, while earnings per share increased 47 percent to \$1.72, excluding one-time acquisition-related charges and gains (see notes a and b, page 4). Revenues increased 20 percent on continuing operations to \$30.1 billion. (Continuing operations excludes revenues from businesses we've exited.) We are uniquely qualified to lead the communications revolution. We grew in each of our three major market segments. Sales of Systems for Network Operators, our largest group, rose 20 percent to \$18.8 billion, led by sales of optical networking, data networking, switching and wireless systems (with associated software) for service providers. Increasing demand for data services and Internet access in businesses and residences contributed to this growth.

Our Business Communications Systems group posted a 26 percent improvement in revenues to \$8.1 billion, led by sales of messaging systems, data networks and network services.

Despite a decline in the world semiconductor market of nearly 8 percent over the last year, Lucent's microelectronics business posted revenue growth of 10 percent for the year to \$3.0 billion, driven by an increase in sales of chips for wireless telephones, local area networks and computer disk drives, as well as optoelectronics components and power systems.

Our success did not go unnoticed on Wall Street. By February 1998 Lucent's stock price had tripled from its April 1996 initial public offering price, and our board of directors approved a two-for-one stock split of our common shares.

In 1997 we launched a venture with Royal Philips Electronics, called Philips Consumer Communications (PCC), to sell and lease wired and wireless phones and answering machines. But the venture has not worked out as we had hoped. Lucent's strategic focus is on being a communications networking leader, not a consumer products company or a consumer brand name. In October 1998 we announced plans to end the venture, and we are now working to sell or close our portions of it.

continued on next page

#### 1998 Highlights continued

#### MARCH 19

PrimeCo Personal Communications awards Lucent exclusive contract to supply equipment and services valued at more than \$500 million over three years.

#### MARCH 30

Lucent signs five-year deal with Bell Atlantic valued at approximately \$500 million for optical networking equipment and software.

#### MAY 20

In a four-year agreement estimated to be worth up to \$1 billion, CTR Group selects Lucent to be a preferred supplier for CTR's global undersea network called Project Oxygen.

#### **MAY 27**

Lucent introduces revolutionary Internet protocol switch and breakthrough portfolio of IP products for service provider networks.

#### JUNE 10

Lucent announces new optical fiber that leapfrogs the capabilities of any other fiber in the long distance marketplace.

continued on page 6

### Financial Highlights

(dollars in millions, except per-share amounts; unaudited)		September 30,	September 30,	
OPERATIONS		1998	1997	CHANGE
	Revenues	\$30,147	\$26,360	14.4%
	Gross margin		11,470 <sup>(b)</sup>	22.0
	Selling, general and administrative	6,436	5,758 <sup>(b)</sup>	11.8
	Research and development		3,102 <sup>(b)</sup>	18.6
	Operating income		2,610 <sup>(b)</sup>	48.5
	Net income (excluding certain one-time Earnings per share – diluted <sup>(d)</sup>		1,507 <sup>(b)</sup>	51.8
	(excluding certain one-time event	s) <b>1.72</b> <sup>(a)</sup>	1.17 <sup>(b)</sup>	47.0
FINANCIAL POSITION	、 J	,		
	Total assets	\$26,720	\$23,811	12.2%
	Working capital	3,650	1,763	107.0
	Shareowners' equity	5,534	3,387	63.4
OTHER INFORMATION	1 5			
	Capital expenditures	\$1,626	\$1,635	(0.6%
	Return on assets	9.3% <sup>(a)</sup>	6.5% <sup>(b)</sup>	2.8 point
	Debt to total capital		55.4%	(9.8) point
	Stock price	\$69 <sup>1</sup> /4	\$4011/16	70.2%

Twelve Months Ended

Twelve Months Ended

(a) Excludes impact of \$1,416 (\$1,412 after tax) of one-time charges associated with the acquisitions of Livingston Enterprises, Prominet Corporation, Yurie Systems Inc., Optimay GmbH, LANNET, SDX Business Systems plc, JNA Telecommunications Limited and MassMedia Communications Inc., as well as \$95 (after tax) gain on the sale of Lucent's Advanced Technology Systems business. Including these charges and gain, Lucent reported net income of \$970.

(b) Excludes impact of \$979 (\$966 after tax) of one-time charges associated with the acquisition of Octel Communications. Including the impact of these charges, Lucent reported net income of \$541.

(c) 1996 numbers exclude impact of \$2,801 (\$1,847 after tax) restructuring charges. In addition, earnings per share are calculated on a pro-forma basis. (d) All earnings-per-share amounts reflect a two-for-one stock split that became effective April 1, 1998.

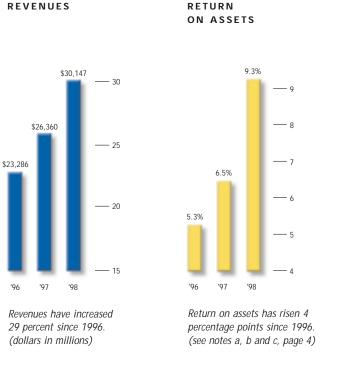
#### **OPERATIONAL HIGHLIGHTS**

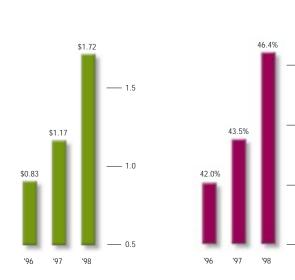
Early in the 1998 fiscal year, we reorganized Lucent to better focus our resources on the fastest-growing areas of the communications market. That strategy has paid off handsomely.

Our growth came both from increasing our business with long-standing customers, such as the regional Bell operating companies in the United States, and from such new service providers as ICG Netcom and KMC Telecom.

In 1998, we announced 10 major contracts representing repeat business with existing service-provider customers, totaling \$4.5 billion. And across our entire business, including microelectronics components and sales of communications products to businesses, we announced more than 40 contracts with new customers worth up to \$4.4 billion.

Acquisitions have broadened our portfolio of offerings and augmented our technological capabilities. We've made 11 key acquisitions since December 1997, seven of which were in the field of data networking (see list on page 5). These have helped us reduce time to market, retain or gain customers, control risks and add top-notch talent. The acquisition of Livingston Enterprises, for example, gave Lucent access to 2,500 Internet service providers that are Livingston customers.





Earnings per share have increased 107 percent since 1996. (see notes a, b and c, page 4)

EARNINGS

PER SHARE

Gross margin has risen more than 4 percentage points since 1996. (see note c, page 4)

**GROSS MARGIN** 

PERCENTAGE

#### **OUTLOOK FOR 1999 AND BEYOND**

Can Lucent continue this momentum? I'm convinced that we can — and will. There are three reasons.

First, we believe the telecommunications market will remain robust in 1999 and beyond. Businesses and consumers remain hungry for phone lines, Internet connections and other telecom services. Based on planning discussions we've had with service providers all over the world, we believe demand for our products in 1999 will be stronger than ever. In particular, substantial opportunities exist to help service providers install systems based on Internet technology to transmit voice, video and data. We estimate that the total market for our products and services will reach \$650 billion by the year 2001, up from \$380 billion in 1997.

Second, we're the only company in our industry that can put all the pieces together, integrating wireless, packet, circuit, enterprise, wide area and local area networks. No other company comes close to our ability to make networks work together.

Lucent has the broadest and deepest portfolio of offerings in the telecom industry, as well as the highest product quality and reliability. But in today's market, great products are just table stakes — they get you into the game, but they don't guarantee you'll go home a

#### Recent Acquisitions

Hewlett-Packard LMDS (local multipoint distribution service) business, a leader in next-generation microwave radio technology.

JNA Telecommunications, a major Australian supplier of data networking and telecommunications systems.

LANNET, located in Israel, a leading supplier of high-capacity Ethernet and asynchronous transfer mode (ATM) switches for local area networks.

Livingston Enterprises, a leader in hardware and software that act as the access point to the Internet and corporate networks for remote users.

#### MassMedia Communications,

a developer of enhanced voice, data and video internetworking capabilities.

**Optimay**, a German cellular phone software developer.

**Prominet**, a leader in switches that connect PCs, workstations and servers using Gigabit Ethernet technology.

**Quadritek Systems**, a developer of highly reliable, next-generation Internet protocol (IP) network administration software.

SDX Business Systems, located in the United Kingdom, a leader in call center and business systems markets.

**TKM Communications**, a Canadian company specializing in call center systems integration.

Yurie Systems, a leader in ATM access equipment for wide area networks.

continued on next page

#### 1998 Highlights continued

#### JULY 21

Lucent announces agreement worth up to \$2.4 billion with SBC Communications Inc.'s telephone subsidiaries to expand their digital networks.

#### SEPTEMBER 9

Bell Labs scientists shatter limit on fixed wireless transmission; breakthrough technology could boost the capacity of wireless links by a factor of 20.

#### **SEPTEMBER 14**

Lucent's Microelectronics Group develops new chip fabrication process that will radically improve chip performance.

#### **OCTOBER 13**

Current and former Bell Labs scientists win Nobel Prize in physics.

#### **OCTOBER 20**

PrimeCo Personal Communications becomes the first major U.S. wireless provider to operate a network totally equipped by Lucent Technologies.

#### **OCTOBER 22**

WinStar Communications chooses Lucent to provide the majority of the equipment for a \$2 billion fixed wireless broadband network. winner. Communications equipment customers today want an end-to-end networking solution, and that's just what Lucent delivers.

Third, we're constantly refreshing the technology that we bring to the marketplace with innovations from the most powerful and prolific R&D organization in the communications industry — Bell Laboratories. We earn an average of more than 3.5 patents each workday, and we've become more aggressive in filing for patents, licensing technology and protecting patents against infringement.

Our product creation engine is firing on all cylinders, and **Bell Labs teams are getting innovations to market in half the time it took just three years ago.** Our PathStar<sup>™</sup> Access Server for IP networks and our WildWire<sup>™</sup> digital subscriber line access system both went from concept to completed design in just six months.

Perhaps such accomplishments inspired the editors of *Red Herring* magazine to rank Lucent Technologies as the "best overall" technology company and, as well, as having the "best R&D" in 1998. The magazine's reason for our R&D supremacy: "two words: Bell Laboratories."

The 1998 Nobel Prize in physics was awarded to a Bell Labs physicist and two of his former colleagues (see story at right). That brings to 11 the total number of scientists who have done Nobel Prize-winning work at Bell Labs. We're proud of Horst Stormer, Robert Laughlin and Daniel Tsui, and proud that Bell Labs remains the sort of environment in which innovative work like this takes place.

#### **OUR COMPETITIVE ADVANTAGE**

Our industry has never been more fiercely competitive than it is today. Lucent's traditional competitors are still strong, while aggressive new competitors are entering our industry, or we're entering theirs. There are several excellent companies supplying voice-networking, data-networking and wireless equipment. But these companies tend to be one-trick ponies — a force in only one market segment.

It will take more than niche players and niche technologies to deliver the end-to-end networking solutions that customers need. It will take innovations throughout the entire range of communications technologies, expertise in both the voice and data worlds, and the ability to link a variety of communications networks, protocols and devices so that they all work together smoothly.

This holistic approach to networking is Lucent's specialty. No company understands how networks work and work together — better than Lucent.

#### EARNING OUR CUSTOMERS' TRUST

The large, long-term contracts in our industry tend to go to vendors that have long-standing alliances with customers. We have just that. I'm particularly proud, for example, that two major wireless customers — PrimeCo and Sprint PCS — awarded us significant additional contracts based on our excellent execution of earlier installations for them. That kind of long-term relationship is the hallmark of our enterprise.

Lucent knows networks — how to build them and how to keep them at peak performance. That enables us to serve the needs both of new carriers such as Advanced Radio Telecom Corporation, which is relying on Lucent to provide equipment, services and financing for wireless broadband data networks in a number of U.S. cities, and of established network operators such as Bell Atlantic, for which Lucent is integrating a new advanced data network.

Both new and incumbent service providers are looking for more than an equipment vendor. They are looking for a partner they can trust to work with them for the long term. Lucent is the only player in the industry that can serve customers on multiple levels, from products, system design, installation and network-management services to consulting, project management and even financing.

In short, only Lucent has the technology, the expertise and the hands-on experience to lead the communications revolution.

#### **GLOBAL GROWTH**

Our sales outside the United States grew 22 percent in fiscal 1998, and our fourth quarter was particularly strong, showing a 41 percent increase over the fourth quarter of 1997. We announced more than \$2.3 billion in major new contracts outside the United States in 1998. Business Communications Systems sales outside the United States grew 54 percent in 1998.

But I believe we can do even better. More than 60 percent of our growth opportunity is outside the United States. Deregulation and privatization of telecom suppliers is accelerating, and the competitive landscape is shifting as new operators and incumbents pursue cross-border services.

So we're intensifying our focus on globalization. Our goal is to significantly increase our market share in Asia, Europe and Latin America, and we've embarked on a sales and marketing effort to heighten our presence in these high-growth markets.

Part of our strategy is to place sales and other resources closer to our customers, sometimes through acquisitions. Acquiring JNA, for example, doubled our presence in Australia.

We added more than 2,500 employees outside the United States, including about 350 R&D people. We now have Bell Labs facilities in 20 countries.

Like most global businesses, Lucent felt the impact

of the economic crisis in Asia in 1998. But we believe long-term opportunities remain substantial. So we're continuing to invest in Asia, and we're reaping the rewards through increased market share.

#### **INTANGIBLE ASSETS**

In closing, I would like to recognize the man who, more than any other individual, gave birth to the Lucent spirit. In February 1998, Henry Schacht stepped down as chairman of Lucent. Henry's incredible breadth of business knowledge and skills were instrumental in creating Lucent, and his profound influence on our culture and values will continue to guide us for years to come.

You'll find a detailed financial analysis of our business later in this report. But in addition to our tangible assets — buildings, machines, finished goods, cash — I put great stock in our intangible assets, such as the skills of our employees, the loyalty of our customers, the strength of our brand.

The Wall Street Journal recently quoted an analyst who compared Lucent with the New York Yankees: "deep in talent and ... relentless to win." I agree. Our employees are the best in the communications industry, the most knowledgeable, the most enthusiastic. In a recent survey, 94 percent said they would recommend Lucent to others as a career choice. That's the kind of spirit it takes to lead the communications revolution.

Sch Mc Ginn

RICHARD A. McGINN Chairman and Chief Executive Officer November 19, 1998

#### Our Newest Nobel Laureates

In October the Nobel Prize in physics was awarded to Bell Labs physicist Horst Stormer (at left) and

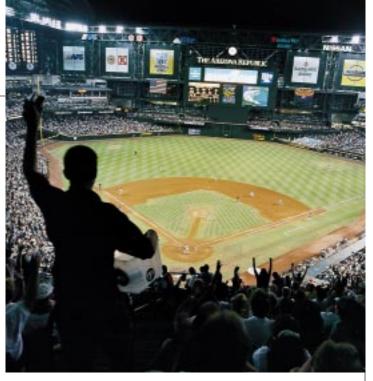
two former Bell Labs scientists, Robert Laughlin and Daniel Tsui, for their work in quantum physics. They were cited for

their discovery of the fractional quantum Hall effect, a new state of matter created when electrons come together to form guasi-particles with fractional electrical charges. The experimental work was done at Bell Labs in the early 1980s; the theory was explained by Laughlin, who became a professor at Stanford University. Tsui is now a professor at Princeton University and consults with Bell Labs. Stormer is adjunct physics director at Bell Labs and is a professor of physics at Columbia University.

Lucent is No. 1 in telecom equipment sales worldwide.

Building a Network of Networks

6.63



here is a revolution going on in the communications industry, and Lucent Technologies is at the center of it. It is a revolution driven by customer demand, bolstered by changing market dynamics and fueled by technology.

First and foremost, it is a revolution in the way we all communicate. We want to do more with communications than we ever have before. We want mobility, we want immediate access to data, and we want all of our networking to be as easy as making a telephone call.

Consider:

- 900 million voice-mail messages are exchanged each business day.
- 2.7 trillion e-mails were sent last year that's 5 million every minute.
- Internet traffic is doubling every 100 days. More than 100 million additional Internet users are expected to come online by 2001.

Lucent's 5ESS<sup>®</sup> AnyMedia<sup>™</sup> switch, the most reliable switch on the market, is at the heart of ICG Netcom's networks in Colorado, California, Ohio and the southeastern United States. From this operations center near Denver, ICG uses Lucent software to monitor traffic on its network.

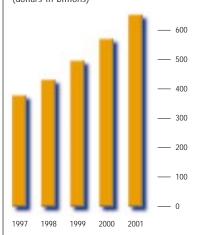
 75 million new customers signed up for cellular phone service in 1998, bringing the worldwide untethered population to roughly 285 million.

Those numbers add up to an insatiable appetite for "bandwidth" — the amount of information that can be transmitted each second over a communications channel, such as a telephone line — and unprecedented opportunities for Lucent Technologies.

#### CHANGING COMMUNICATIONS MARKETS

The changing structure of the communications industry is also creating new growth opportunities for Lucent. Faster than you can say "deregulation," a whole new alphabet of service providers is appearing around the world: CLECs (competitive local exchange carriers), ISPs (Internet service providers) and ILECs (incumbent local exchange carriers). The Bank One Ballpark in Phoenix, home of the Arizona Diamondbacks major league baseball team, is the world's first "smart" stadium. A single network, based on Lucent's SYSTIMAX® technology, not only connects the stadium's telephones and computers, but also controls the temperature, lighting, scoreboard and retractable roof.





The market for communications equipment and support services is growing 15 percent annually (based on industry sources).

continued on next page

#### The Father Of Bandwidth

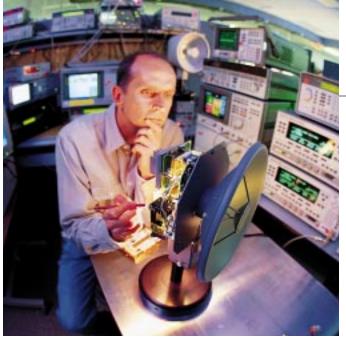
Fifty years ago, Claude Shannon, a Bell Labs mathematician, wrote a treatise called "A Mathematical Theory of Communication" that has become a blueprint for the computer and communications revolution. Just as Albert Einstein's theories ushered in the atomic age, Shannon opened the gate to the Information Age.

Shannon's Information Theory, as it is known today, predicts the ultimate information-carrying capacity of any transmission system, from tin cans joined by string to computers joined by optical fiber.

Shannon's contributions have helped scientists and engineers develop everything from the communications systems used by NASA to compact discs, modems, data networks and cellular phones.

A half-century later, the world seems to have developed an insatiable appetite for Claude Shannon's bandwidth recipe.





Fixed wireless broadband access, which offers high-speed connections for voice, data and video to businesses, is expected to become one of the fastest-growing wireless markets. Lucent engineer Rick Compton led the development of this broadband wireless radio unit.

Over the next two years, as many as 1,000 new telecommunications carriers will spring up.

Both these new start-ups and the large, established carriers are looking for end-to-end networking solutions that include not just a product, but design, installation and network-management services to back it up. They all face the challenge of offering new data networks with the same quality of service that traditional voice networks deliver — service that is rich in features and reliability.

Lucent understands how to design, build and service networks for maximum reliability. That allows us to meet the needs of all types of service providers.

#### TECHNOLOGY TO THE RESCUE

You might say technology is supplying the ammunition for the communications revolution. In fact, we expect

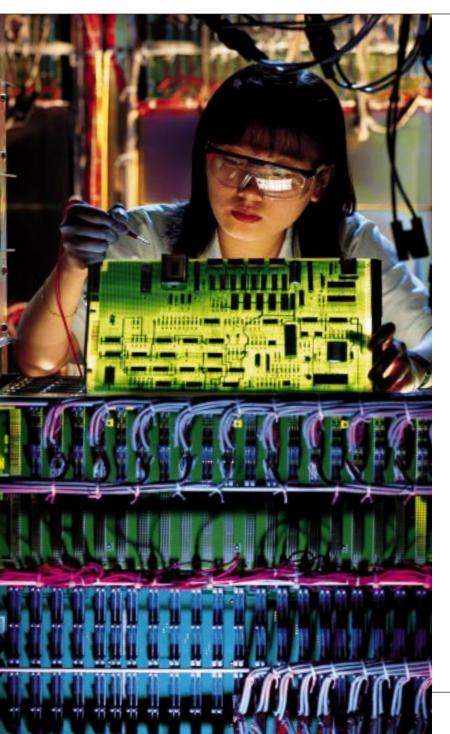
to be able to increase network capacity 25,000 percent by 2005.

There were three key breakthroughs in communications technology in 1998, in the areas of data networking, optical networking and wireless, and Lucent was responsible for all three:

- The industry's first Internet routing switch that can identify high-priority traffic and deliver it immediately over the Internet, breaking through bottlenecks. The switch uses innovative software for traffic management developed by Bell Labs and enables service providers to offer a premium data service to their most demanding customers.
- The world's first long-distance transmission of a terabit (a trillion bits) of information per second over a single strand of optical fiber a new world record. A terabit is enough capacity for all the voice calls that take place around the world at any point in time.
- A breakthrough technology that could boost the capacity of certain wireless links by a factor of 20.

#### HAVE YOUR NETWORK CALL MY NETWORK

Some in our industry define the communications revolution strictly in terms of the Internet. We know it's much broader than that. It's about optical networks that operate at mind-boggling speeds to deliver virtually unlimited capacity. It's about wireless networks that offer mobility without sacrificing quality or reliability. And it's about converged voice and data networks that enable you to make phone calls over the Internet. But most important, it's about the ability to make all of these different tech-



nologies and protocols work together. Lucent is a leader in providing each type of networking technology *and* in making them all work together.

The real challenge is to weave together "networks of networks" that are as reliable and robust as today's voice networks. Lucent is something of an expert in reliability. Our flagship 5ESS AnyMedia switch is the most reliable switch in the industry, according to analysis of data collected

by the United States Federal Communications Commission.

The communications revolution is really about liberating communications from the confines of one medium or protocol. It's about how and where and why we communicate, and it will change forever the way we work, play, shop and socialize.

Left: Chunghwa Telecom, the largest telephone service provider in Taiwan, purchased all of its switches from Lucent Technologies in 1998. Here, Ann Lian, a systems technician at Lucent's switch factory in Hsin Chu, Taiwan, inspects a circuit board she is about to install in a 5ESS switch.

Right: Lucent's AnyMedia<sup>M</sup> Access System alleviates congestion in central office switches by separating voice and data traffic. Frontier Corporation, a nationwide data and voice communications company, installed the system to expand the capacity of its switching office in Monroe, N.Y.



Millions of people surf the Internet each day, for everything from homework assistance to tax advice, with help from Lucent Technologies. Lucent provides a wide range of Internet-enabling technologies to PC manufacturers, Internet service providers, network operators and business enterprises.

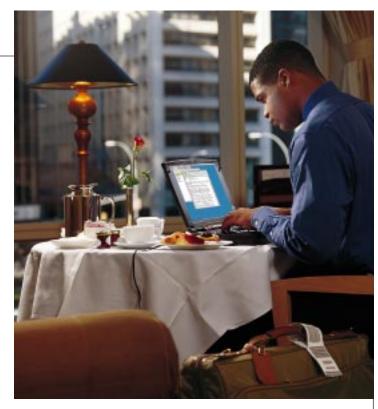


# Data Networking You Can Count On

Lucent Technologies

PacketStar

Data will overtake voice as the dominant type of traffic over the world's networks by 2005.



here is a revolution going on in the data networking industry, and Lucent Technologies is at the center of it. If you listen carefully you can hear it, as the quiet clicking of millions of computer mice swell into a collective roar, the sound of ravenous PCs greedy for their steady diet of Web pages and spreadsheets.

Data traffic is tripling every year and will overtake voice as the dominant type of traffic over the world's telecommunications networks by 2005.

Data networks were once the poor cousins of public voice networks, plagued by delays, breakdowns and quirky transmission.

But today, customers are demanding the same quality of service in the data world that they've become used to in the voice world — service rich in features and unconditionally reliable. The "good enough for data" attitude is no longer acceptable.

This shift plays to Lucent's strengths. After all, we're the company that builds equipment that is 99.9999

Lucent's PacketStar<sup>™</sup> IP switch, one of more than 30 data networking products we launched in 1998, identifies high-priority traffic on the Internet. It was developed in only 12 months by a team that included (left to right) Bell Labs engineers Pramod Koppol, Yin Bao and Leon Theisen.

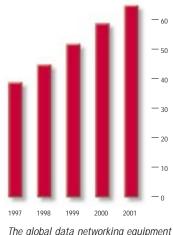
percent dependable. We're now transferring this knowhow — in areas like self-diagnostics, fault tolerance and redundancy-by-design — to data networking for both service providers and business enterprises.

We have four goals:

- · to bring the reliability of voice to data networks,
- to reduce the complexity of managing data networks,
- to provide the most comprehensive customer support and professional services in the industry,
- to offer the best path to a converged voice/data network.

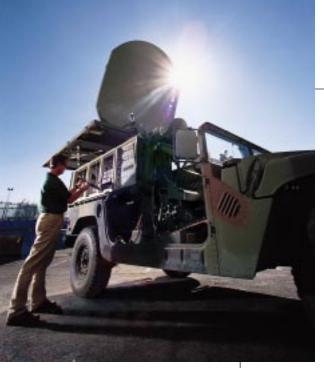
Even on the road, business people can get instant access to e-mail and other data thanks to Lucent's PortMaster® technology, which connects users to corporate intranets and the Internet.

DATA NETWORKING EQUIPMENT MARKET (dollars in billions)



The global data networking equipment market is growing 13 percent annually (based on industry sources).

continued on next page



A wireless packet switch from Yurie Systems, now part of Lucent Technologies, is a key component of this new mobile satellite communications system developed by Raytheon. The system can be used in disaster relief, military maneuvers and other applications. Through a combination of internal development and acquisitions (see page 5), we have been rapidly expanding our data networking portfolio for both telecom service providers and individual businesses.

In 1998 we introduced some of the industry's most advanced data networking products — more than 30 in all. They revolutionize the way new networks handle data, while letting existing voice networks gracefully evolve to the data world. Together, they hold the potential to take the Internet into a higher realm of reliability and consistency.

#### **VOICE OVER DATA**

"Voice over IP" — using the Internet and other "Internet protocol" (IP) data networks to carry voice traffic — is all the rage in the communications industry today. Analysts estimate that the total annual market for voice-over-IP products will approach \$1 billion by 2002.

But voice over IP isn't quite "ready for prime time." Lucent is leading the way toward overcoming some key challenges:

- When Internet telephony first came on the market in 1995, users had to place calls between two personal computers, each equipped with microphones and speakers. Lucent's PacketStar Gateway Solution allows Internet calling to take place between regular phones.
- Some attempts to transmit voice over data networks result in choppy, delayed transmissions. Now Bell Labs

has developed dynamic routing algorithms for IP networks that make these phone calls as reliable and high-quality as conventional calls.

 Most of the voice-over-IP equipment sold today offers only basic calling. But Lucent's new PacketStar IP Services Platform, developed by Bell Labs in only six months, enables network providers to offer Internet phone customers such services as 800-number calling, call forwarding and conference calling.

Lucent's Internet telephony systems have been deployed to more than 70 enterprises and network operators in 25 different countries. Kanematsu, a leading Japanese trading company, is a typical customer. With Lucent's Internet Telephony Server, which transmits phone calls over the Internet and intranet backbone networks, Kanematsu is now saving more than 60 percent on voice and fax calls between the United States and Japan.

Our DEFINITY<sup>®</sup> systems for business communications are also examples of voice and data integration. In addition to offering standard phone-system features, DEFINITY lets employees working away from their main office access all the voice features they have when they're in the office, as well as their company's data networks, over a single telephone line.

Lucent provides data networking equipment to 42 percent of all the Internet service providers in Europe and to 59 percent in Central and Latin America. Our PortMaster remote access products, developed by Lucent's Remote Access business unit (formerly Livingston Enterprises), currently support more than 10 million Internet users worldwide.

14

# Networking at the Speed of Light

Bell Labs has earned more than 1,600 patents for optical technologies. here is an optical networking revolution going on, and Lucent Technologies is at the center of it. As we jam more and more voice, data and video onto today's networks, optical networking is emerging as the only way to accommodate the colossal increases in network traffic.

Lucent's solution: dense wavelength division multiplexing (DWDM) technology. DWDM allows carriers to boost the capacity of their existing fiber-optic cables by sending laser pulses of different colors simultaneously over the same fiber — like squeezing 80 lanes of traffic onto a 16-lane highway. Each wavelength, or color, of laser light can serve as a separate channel carrying information boosting the capacity of the fiber up to a hundredfold.

Lucent is the global leader in DWDM technology. In 1995 we were the first to market DWDM products, and since then we've installed nearly 1,500 DWDM systems — more than any other vendor has.

Just in the last year we announced a breakthrough

continued on page 17

Bell Labs engineer Christopher Doerr invented a breakthrough device that can switch optical signals from one fiber to another without using any electronics. This is the first step toward ultrafast, all-optical switches. Four of the new devices are visible on the silicon wafer he's holding. Light Begins at 40

1998 marked the 40th anniversary of one of Bell Laboratories' brightest ideas: the laser.

In August 1958, Bell Labs scientist Arthur Schawlow (shown above) teamed with consultant Charles Townes to publish a scientific paper that explained how to amplify infrared and visible light.

Later dubbed the laser (for Light Amplification by Stimulated Emission of Radiation), this breakthrough was first applied in the medical field. Both men received Nobel Prizes for their work.

Today, semiconductor lasers no larger than a grain of salt are spurring the optical networking revolution. Lasers carry telephone conversations, video signals, Internet traffic and other data through glass fibers at speeds of hundreds of billions of bits of information per second.



product called the WaveStar<sup>™</sup> OLS 400G system that delivers record-breaking capacity.

Based on Bell Labs' patented research, the WaveStar system combines up to 80 optical channels over a single fiber, providing record-breaking capacity of 400 gigabits per second.

How fast is that? Mind-numbingly fast — the equivalent of carrying about 5 million simultaneous phone conversations.

But it gets even better. Each WaveStar system can handle up to eight fibers. So a system can have a total capacity of 3.2 terabits (or 3.2 trillion bits) per second. At that speed, one could transmit the entire contents of the United States Library of Congress in one second.

The WaveStar system will be deployed in the global undersea network called Project Oxygen that will link every continent except Antarctica. Our sales of optical networking equipment and other hardware and software to Project Oxygen could result in up to \$1 billion in revenues for Lucent over four years.

#### **DESIGNER FIBER**

While DWDM focuses on the optoelectronics at either end of a fiber cable, Lucent is also putting a lot of ingenuity into the fiber itself. Optical fiber once was something of a commodity product. Lucent is now spearheading a trend toward specialty fiber engineered for specific applications.

Take our new TrueWave<sup>®</sup> RS and AllWave<sup>™</sup> fibers, for example. Both were designed for high-capacity DWDM

Lucent's fiber manufacturing facility in Norcross, Ga., has produced well over a billion meters of optical fiber since it began operations in 1972. Here, Dau Nguyen Tran stores spools of fiber that are ready to be turned into cable.

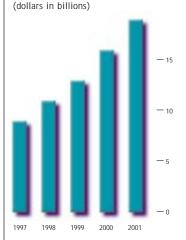


networks, and AllWave fiber offers more than 50 percent more channels (more usable wavelengths) than conventional fiber.

Since 1991 we've increased our global fiber-optic production fivefold. We began another major worldwide expansion of our optical fiber manufacturing capacity in 1998, representing an investment of \$350 million over two years.

Bell Labs experts believe there's still much room for progress in optical networking. They've demonstrated the world's **first long-distance**, **error-free transmission of a terabit** of information per second over a single strand of optical fiber. That's the equivalent of carrying all the Internet traffic in the world over a single strand of fiber. We expect to introduce this technology to the market by 2001. An artist's rendering of a new type of semiconductor microlaser that emits beams in multiple directions that are 1,000 times more powerful than those from conventional microlasers. This new laser, about as wide as a human hair, could be used in tomorrow's optical networks.

#### OPTICAL NETWORKING MARKET



The global optical networking market is growing 19 percent annually (based on industry sources).

# Riding the Wireless Wave

here is a revolution going on in wireless communications, and Lucent Technologies is at the center of it. Today, data traffic makes up only about 3 percent of wireless network traffic. But that soon will change.

To accommodate the anticipated need for high-speed data, Lucent is working on mobile wireless systems with **transmission rates more than 100 times faster than those of today's cellular phones.** These so-called third-generation, or 3G, phones (see panel at right) will be able to support such exotic features as Web surfing and videoconferencing.

Although 3G standards are still being developed, Lucent is already planning a phased deployment of 3G products beginning in 1999. While delivering up to a tenfold increase over current data rates, the system preserves our customers' substantial investments in today's digital technology.

Vodafone, the largest mobile phone network in the United Kingdom and a leading wireless operator in many other countries, is now testing Lucent's 3G technology.

But 3G is still a couple of years away, and Lucent has More than 100,000 businesses, including Home Depot, use Lucent in-building wireless telephone systems to give employees greater mobility.

By 2007, half of the world's telephones are expected to be wireless.

#### Wireless: The Next Generation

With data traffic tripling every year on wired networks, it's no longer a question of *whether* people will demand faster data performance from their mobile phones, but *when*. That's why Lucent is preparing for Third Generation Mobile technology, or 3G for short. (The first generation of cell phones was analog; the second generation is currentstyle digital.)

Most of today's cell phones transmit at a top rate of 14.4 kilobits a second, but 3G phones will send data at up to 2 megabits a second faster than the modems most people have at home, and easily fast enough to surf the Web.

3G networks will permit global roaming with a single phone. Such networks will start popping up around the world between 2000 and 2005, but Lucent is already helping carriers make a smooth transition to 3G without having to rebuild their networks. a thriving wireless business today. In fact, we won more than \$2.5 billion in wireless contracts in 1998, as we saw our wireless business grow faster than the overall market.

#### **BEYOND CELLULAR**

There's more to Lucent's wireless story than mobile networks. We're also a leading player in wireless business systems and data networks.

Lucent is No. 1 in the United States wireless business communications market, measured by the number of wireless handsets installed. We also lead the United States market in the number of installed wireless local area networks.

Our DEFINITY Wireless Business System gives large businesses the convenience of in-building wireless communications with all the features and functions provided by



Using Lucent's technology, Grupo

service in Mexico. Fulvio del Valle

(front), chief executive officer of

manager for Lucent Technologies

of Mexico, analyze calling data at Iusacell's network management

Iusacell, and Rogelio Velasco, general

lusacell is deploying digital cellular

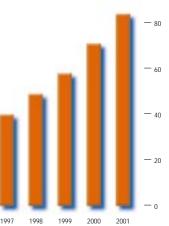
wired, desktop telephone sets. Our TransTalk digital wireless pocket phones can handle 10 phone lines, and make it easy for users to transfer calls, set up conference calls and access voice mail.

Our WaveLAN® family of products offers mobile workers wireless access to their corporate data networks at rates comparable to those of their tethered counterparts. These products have been particularly popular in the healthcare and retail industries.



Lucent is helping two Taiwanese companies, KG Telecom and Tuntex Telecom, expand their wireless networks beyond the major cities into Taiwan's rural communities.

WIRELESS INFRASTRUCTURE EQUIPMENT MARKET

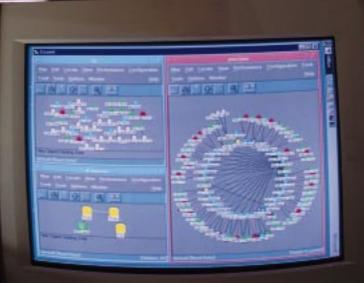


The total wireless infrastructure equipment market is growing 20 percent annually (based on industry sources).

### (dollars in billions)

# Services and Support Keep Networks Humming

Lucent has the largest services and support work force in the industry more than 25,000 people.



Lucent Technologie



here is a revolution going on in services and support for communications networks, and Lucent Technologies is at the center of it. While network operators in the past managed all aspects of their own networks, today's carriers — both new and established phone companies — are eager for help.

In addition, all of those individual businesses installing LANs, WANs, remote-access networks, and converged data and voice networks are seeking help to operate and maintain them.

Lucent provides network services to more than 7,000 businesses, from individual offices to large multinationals, as well as to telecommunications service providers, from mega-carriers to Internet service providers and cable TV companies.

We have more experience building and operating networks than any other vendor, and we can provide maintenance services for products made by most of our competitors, as well as for our own equipment. Lucent NetCare<sup>®</sup> Services offers a wide range of consulting, management and maintenance services for enterprise voice, data and video networks. In 1998 we opened a new NetCare Services Center in St. Petersburg, Fla. We also have NetCare centers in Colorado, Texas, California, France, the United Kingdom and Singapore.

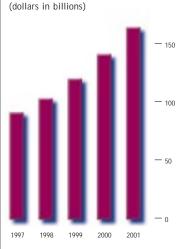
A network we designed for Neff Corporation, which rents and sells construction equipment, allowed the company to cut its communications costs while opening 60 new stores.

Lucent also designed and integrated Kinko's Internet network this year to enable customers to send e-mail or surf the Web at any of Kinko's more than 900 locations.

In September we expanded our NetCare capabilities through an agreement with EQUANT, a leading provider of data network services to multinational businesses. The agreement strengthens our ability to provide international support for U.S.-based global companies. We can now provide seamless services in 55 countries.

Our Network Reliability Center for network service providers, located outside Denver, opened in 1997 and now has 17 customers, including several CLECs (competitive local exchange carriers). A combined voice and data network designed by Lucent is helping Neff Corporation cut communications costs as its rental business expands.

NETWORK SUPPORT SERVICES MARKET

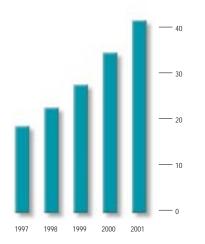


The global market for network support services is growing 16 percent annually (based on industry sources).

Lucent's new Netcare<sup>®</sup> Services Center in St. Petersburg, Fla., offers a broad set of consulting, management and maintenance services for enterprise voice, data and video networks. Muriel Patton and John Flores are two of the more than 225 engineers and technicians at the center.

# Messaging Is the Medium

MESSAGING EQUIPMENT AND SERVICES MARKET (dollars in billions)



The global messaging equipment market is growing 22 percent annually (based on industry sources).

At right: More than 100,000 customer sites around the world use Lucent messaging servers and software to help manage communications. Here, Paul Rose of Cadence Design Systems, which provides product-development services and software to electronics companies, checks phone messages on his PC screen.

22

here's a messaging revolution going on, and Lucent Technologies is at the center of it. We're moving from messaging systems that are essentially overgrown answering machines to messaging systems that are integral parts of communications networks. This integration of messaging and networks makes possible new services for customers, such as "unified messaging," in which e-mail messages, faxes and voice mail all can be retrieved and managed from one in-box. Lucent's Octel Messaging Division offers unified messaging products for both business and service provider customers.

When you make a phone call, your chance of reaching someone is less than one in four, which is one reason why messaging systems are a growing industry. But just as voice and data networks are converging, so, too, are voice and data network technologies.

One Lucent messaging product, for example, provides access to all voice, e-mail and fax messages from a phone or PC. Users can listen to e-mail messages over the phone and then reply to them with voice messages. Or they can have e-mail messages and attachments printed as faxes at a fax machine.

Where will messaging technology go now? Bell Labs



Lucent is the world's leading supplier of messaging systems.

engineers are developing intelligent agents that can sort and filter incoming messages, as well as systems that will allow callers to retrieve and manage voice mail using spoken commands rather than a telephone keypad.

#### FROM CALL CENTERS TO PROFIT CENTERS

There's a revolution going on in the **call center** industry, and Lucent Technologies is at the center of it. Call centers — often found at the receiving end of a business's tollfree number — are evolving into multimedia "consumer contact centers," handling not just telephone calls but also e-mail messages and Internet inquiries. In the vanguard of this trend, Lucent provides innovative software that integrates voice, Internet and e-mail capabilities.

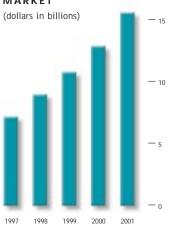
The leader in call center systems, **Lucent has installed 15,000 centers around the world** for customers, including more than half of the Fortune 500 companies.

Lucent's Internet call centers allow users to click on a Web page icon and have the "call" answered by a customer service agent in the call center.

Lucent recently completed installation of the first Internet call center in Europe in conjunction with the SITEL Corporation, a leading provider of outsourced call center services.

In 1998 Lucent introduced breakthrough technology that fundamentally changes the way call centers route calls to operators. CentreVu® Advocate software uses artificial intelligence to assign calls to call center agents, which reduces caller wait times and business costs.

#### CALL CENTER HARDWARE, SOFTWARE AND SERVICES MARKET



The global call center market is growing 21 percent annually (based on industry sources).

QVC, which depends on Lucent call center technology to handle customer orders and inquiries, receives between 6 million and 10 million calls a month.



## Software: The Brains Behind the Network

Two-thirds of Bell Labs R&D employees are involved in software development. here is a revolution going on in the communications software market, and Lucent Technologies is at the center of it. Network operators are turning to software to help them manage increasingly complex — and often converging voice and data networks. And in a market flooded with alternative carriers, software is becoming a critical way operators can differentiate themselves from their competitors by providing advanced service features, proactive customer care and flexible billing.

Lucent has an extensive software portfolio to help network operators increase revenues and reduce costs.

Often, we sell our software together with switching and other hardware as part of a total solution. A good example is Lucent's recent contract with Bell Atlantic to provision a packet-switched data network. The majority of the more than \$200 million agreement represents communications software.

In March 1998, Bell Labs and Beijing University in China established a joint software laboratory. Meeting on the university campus are Jiang Meijing of Bell Labs (upper right) and (lower level, left to right) Yan Jun and Jiang Zhenming of Bell Labs, and Wu Qiong and Liu Xiaudan of Beijing University.



#### This dispatch service can only

be used to page Comcast Digital PCS subscribers.



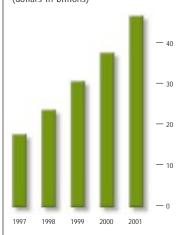
#### JUST OUT OF THE LAB

In September we opened a new software development center in France that will provide applications for communications service providers throughout Europe. There are now **seven Bell Labs software R&D centers** outside the United States. 1998 was a prolific year for our software developers. Among their innovations were:

- The PacketStar IP Services Platform, which service providers can use to offer the same telephone services on the Internet that customers are used to getting on the traditional phone network.
- Flexible Alerting, which lets customers use a Web site to program their calls to follow them, ringing phones at various locations at different times of the day.
- OneMeeting<sup>™</sup> Software, the first software that lets users set up voice and data conference calls from their PCs so that participants can talk and edit the same document, spreadsheet, presentation or other file.

Telecom Italia, the largest phone company in Italy and the sixth largest in the world, is one of many global service providers that use Lucent intelligent network software. Lucent's software handles 18 million calls a day in Italy. Comcast Cellular Communications plans to use Lucent's Short Message Service to allow its customers to send brief text messages instantaneously to wireless phones via the Internet.

#### COMMUNICATIONS SOFTWARE MARKET (dollars in billions)



The global communications software market is growing 25 percent annually (based on industry sources).

## Semiconductors: Liffle hings Mean a Lot

Lucent's semiconductor business grew 10 percent in 1998, while the semiconductor industry as a whole shrank. here is a revolution going on in the **semiconductor** industry, and Lucent Technologies is at the center of it. The battle cry of the revolution is: "Integrate!" In the past a single microchip generally performed a single function, but soon we'll be able to put the electronics for entire systems, like cellular phones or disk drives, on a single sliver of silicon — a superchip, if you will.

Long a holy grail of the semiconductor industry, **putting complete systems on one chip** will reduce the size of the end product and dramatically cut costs.

Part of what makes superchips possible is the ongoing shrinkage of the circuitry on chips. But this alone isn't enough. Combining components onto a single chip can be devilishly difficult. Traditionally, different types of circuitry have been made with very different processing technologies.

This is where Lucent's Microelectronics Group is leading the industry. The group — which not only makes chips for Lucent products but is the leading vendor of communications chips worldwide as well — is advancing

Each of these eight-inch silicon wafers, manufactured in special dust-free rooms in Orlando, Fla., contains approximately 700 Lucent chips that later will be individually packaged for use in communications devices and computers.

the system-on-a-chip concept with a manufacturing technology that will combine on a single chip all the circuitry needed to transmit and receive wireless calls. As a result, wireless phones could soon become the size of a wristwatch or pendant and operate for a month without needing to be recharged.

The superchip revolution forces semiconductor companies supplying the communications industry today to understand more than chips. They need to understand networks, big and small, fast and faster. No other semiconductor company can match Lucent's knowledge of voice and data networks.

Whether we're designing chips for cellular phones or for modems, our solutions usually include not just integrated circuits, but also software that con-

trols trols trese

its, but also software that controls the functioning of the end product. **Our value to customers is our systems knowledge**, not just our semiconductor expertise. That's helped to make Lucent's integrated circuits (IC) business one of the fastest growing in the industry. The market research firm Dataguest ranked

us the second-fastest-growing semi-

conductor company, based on 1997 data, and we grew 10 percent in a year that saw the semiconductor industry as a whole shrink 8 percent.

In fact, in a year when much of the semiconductor industry retrenched, Lucent's sales were sufficiently



healthy to justify an expansion of our manufacturing capacity. In January 1998 we formed a joint venture with Chartered Semiconductor Manufacturing Ltd. to build a new IC manufacturing facility in Singapore. The alliance helps both companies reduce the capital-intensive investment required for a wafer fabrication facility.

#### **OPTOELECTRONIC DEVICES**

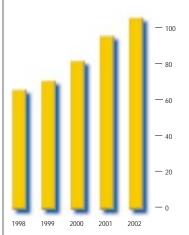
In addition to being the leading provider of integrated circuits for the communications industry, Lucent's Microelectronics Group is the **leading supplier of opto**electronic components for communications.

In 1998 we introduced a group of laser modules, photodetectors and receivers that will quadruple the bandwidth capacity of fiber-optic networks, from 2.5 to 10 gigabits per second. This will allow telecommunications providers to transmit four times as much data through their existing fiber networks.

We also announced the fastest and smallest optical transceiver for use in high-speed voice and data communication systems, offering designers space and power savings. Lucent ranks first worldwide in sales of modem chips for PCs, according to VisionQuest 2000. Dell Computer Corp. uses modem chips from Lucent in its Inspiron line of custom-built notebook PCs for consumers and small businesses.

Lower left: The features on today's chips are only 0.25 micron (a hundred-thousandth of an inch) wide — about the same size as most bacteria. In this electron-microscope image, the circuitry on a Lucent chip has been magnified 6,000 times.

#### THE MARKET FOR LUCENT'S SEMICONDUCTOR PRODUCTS (dollars in billions)

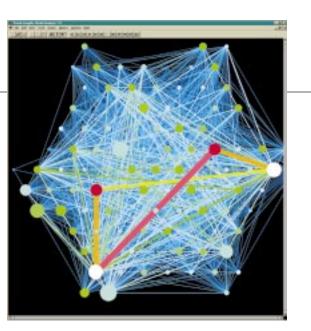


The market for the types of semiconductors sold by Lucent is growing 12 percent annually (source: International Data Corp.).

# Something Ventured. Something Gained

11111

...........



- o maximize the value Lucent derives from Bell Labs, we have created a number of autonomous venture businesses. Five such ventures were formed in fiscal 1998, bringing the total currently in operation to nine. The newest are:
  - Lucent Public Safety Systems, which markets caller location databases, computer-aided dispatch systems and other software to help police, fire departments and other agencies respond to 911 emergency calls faster and more efficiently. Its products can shave vital seconds off the average connect time and can even provide the location of callers on cellular phones.
  - Lucent Digital Video, which manufactures encoders and other hardware that make digital television broadcasting possible.
  - Visual Insights, which markets Bell Labs software programs that transform vast amounts of business data into visual displays to uncover patterns, trends and relationships that might otherwise go unrecognized.

Lucent engineers John Mailhot (left) and Nelson Botsford work on Lucent Digital Video's digital video encoding system. Digital television broadcasts, which began in the United States in November, offer film-quality images.

- Electroplating Chemicals and Services, which sells technologies developed by Bell Labs for plating articles with palladium, gold, nickel, tin and other coatings. These technologies resulted from a decade of effort at Bell Labs to reduce the amount spent on precious metals used in the manufacture of electronic and other components.
- Lucent Digital Radio, which is developing technology for broadcasters that converts analog radio signals to near-CD-quality digital sound. Field tests of the systems will begin early in 1999.

Lucent also formed Lucent Venture Partners (LVP) in 1998, a venture capital fund designed to identify and invest in emerging technologies. With a \$100 million initial commitment, LVP is focusing on such areas as data networking, optical networking, wireless, semiconductors and communications software.

Henry Schacht, who stepped down as Lucent's chairman in February 1998, is now chairman of LVP, which has already invested in seven ventures. Lucent's Visual Insights software can help businesses detect patterns in their data. Each dot in this example represents items purchased by shoppers at one supermarket, with lines drawn between the purchases of individual shoppers. It reveals a notunexpected link between purchases of cookies (red dots) and milk (white dots).

Software from Lucent Public Safety Systems helps ambulance and other emergency services respond to 911 calls faster.



L	ucent	at a Glar	nce		
	1998 REVENUES	KEY PRODUCTS	MARKET POSITION	KEY CUSTOMERS	1999 FOCUS
Systems for Network Operators	\$18.8 billion	Switching and transmission systems for voice and data; data networking routing switches and servers; wireless network infrastructure; optical networking systems; optical fiber products; communications software; Internet telephony servers.	<ul> <li>No. 1 in optical networking</li> <li>No. 1 in U.S. switching systems</li> <li>No. 1 in U.S. wireless infrastructure equipment</li> </ul>	Global service providers; competitive local exchange companies; wireless service providers; independent tele- phone companies; Internet service providers; private, public and government- owned telephone companies around the world; U.S. gov- ernment agencies.	Linking networks, pro- tocols and any device that connects to the network, while improv- ing reliability and quali- ty of service. Increasing the speed and capacity of voice and data trans- mission while driving down costs.
Business Communications Systems	\$8.1 billion	Private branch exchange and key telephone systems; wireless systems; support services for voice, data and video networks; network cabling within and between buildings; messaging systems and servers (offered through Lucent's Octel Messaging Division); call center offerings; conferencing systems; Internet- based products; network manage- ment software.	<ul> <li>No. 1 in messaging</li> <li>No. 1 in in-building wiring systems</li> <li>No. 1 in call centers in U.S.</li> <li>No. 1 in in-building wireless systems</li> </ul>	More than 1.5 million customer locations world- wide, including small businesses, multinational Fortune 500 companies, government agencies, schools and universities.	Products that allow customers to put their voice traffic over the Internet protocol or to network their voice and data networks over asynchronous transfer mode (ultrahigh-speed switching technology) systems.
Microelectronics Products	\$3.0 billion	Integrated circuits for wireless and wired communications, com- puter modems and networks; optoelectronic components for communications systems; power systems.	<ul> <li>No. 1 in communications integrated circuits (ICs)</li> <li>No. 1 in transmission ICs</li> <li>No. 1 in modem ICs in personal computers</li> <li>No. 1 in optoelectronic components for optical transmission systems</li> <li>No. 1 in power equipment</li> <li>No. 2 in local area network ICs</li> <li>No. 2 in digital signal processors</li> </ul>	Manufacturers of wireless, data networking, and other communications products and equipment; computer manufacturers; and commu- nications service providers.	Putting the electronics for entire systems — such as a cell phone or computer disk drive — onto a single "super- chip." Providing entire system-level solutions that incorporate hardware, software and support.
Bell Laboratories	Fiscal 1998 R&D <i>funding</i> level was \$3.7 billion.	Bell Labs is the innovation engine for Lucent and creates most of the technology for Lucent's new business ven- tures. It supports other Lucent units by providing basic research and product and service develop- ment. Recent innovations include Internet switching and transmission products and pace-setting optical networking systems.	More than any other private R&D institution, Bell Labs has helped weave the technological fabric of modern society. It's the birthplace of the transistor, the laser and the communications satellite. Eleven Nobel laureates conducted their prize-winning work at Bell Labs.	Lucent's business units; Lucent's direct customers, such as enterprises and service providers; end users of communications network- ing products and services.	Continue to develop and advance the tech- nologies needed to ensure Lucent's leader- ship in communications technology. Reduce the time it takes to bring innovations to market for customers.

## Lucent Leadership



JOHN T. DICKSON Group President, Microelectronics and President, Intellectual Property

**GERALD J. BUTTERS** Group President, Optical Networking

**CURTIS R. ARTIS** Senior Vice President, Human Resources WILLIAM T. O'SHEA Group President, Business Communications Systems and Data Networking

**BEN J. M. VERWAAYEN** Executive Vice President and Chief Operating Officer

**ROBERT C. HOLDER** Group President, Switching and Access Solutions **DONALD K. PETERSON** Executive Vice President and Chief Financial Officer

RICHARD A. McGINN Chairman and Chief Executive Officer

**PATRICIA F. RUSSO** Executive Vice President, Strategy and Corporate Operations **CARLETON S. FIORINA** Group President, Global Service Provider Business

**DANIEL C. STANZIONE** Executive Vice President, Chief Operating Officer; President, Bell Laboratories

JAMES K. BREWINGTON Group President, Wireless Networks LANCE B. BOXER Group President, Communications Software

**ARUN N. NETRAVALI** Executive Vice President, Research, Bell Laboratories

> **KATHLEEN M. FITZGERALD** Senior Vice President, Public Relations, Investor Relations and Advertising

WILLIAM R. SPIVEY Group President, Network Products

THOMAS M. UHLMAN President, New Ventures

RICHARD J. RAWSON Senior Vice President, General Counsel

## **Board of Directors**



#### FRONT ROW (right to left):

**RICHARD A. McGINN**, 52, chairman and chief executive officer of Lucent since February 1998; chief executive officer and president of Lucent 1997-1998; president and chief operating officer of Lucent 1996-1997; executive vice president of AT&T and chief executive officer of AT&T Network Systems Group 1994-1996. Director, Oracle Corp.; American Express Company. Lucent director since 1996.

**CARLA A. HILLS**, 64, chairman and chief executive officer of Hills & Company (international consultants) since 1993. Director, American International Group, Inc.; Chevron Corp.; Time Warner Inc. Lucent director since 1996.

**FRANKLIN A. THOMAS**, 64, consultant to the TFF Study Group (nonprofit initiative assisting development in southern Africa) since 1996; retired president of The Ford Foundation 1979-1996. Director, Aluminum Company of America; Citigroup, N.A.; Cummins Engine Company, Inc.; PepsiCo, Inc. Lucent director since 1996.

#### MIDDLE ROW (right to left):

**DREW LEWIS**, 67, retired chairman and chief executive officer, 1987-1996, Union Pacific Corporation (rail transportation and trucking). Director, Aegis Communications Group, Inc.; American Express Company; FPL Group, Inc.; Gannett Co., Inc.; Gulfstream Aerospace Corporation; Millennium Bank; Union Pacific Resources Group Inc. Lucent director since 1996.

**PAUL H. O'NEILL**, 63, chairman and chief executive officer of Aluminum Company of America (aluminum production) since 1987. Chairman, Rand Corporation. Director, Eastman Kodak Company: The National Association of Securities Dealers, Inc.; Gerald R. Ford Foundation; Manpower Demonstration Research Corp. Lucent director since 1996.

**HENRY B. SCHACHT**, 64, chairman of Lucent Venture Partners Inc. (venture capital fund) since February 1998; chairman of Lucent 1996-1998; chief executive officer of Lucent 1996-1997; chairman (1977-1995) and chief executive officer (1973-1994) of Cummins Engine Company, Inc. Director, The Chase Manhattan Corporation and The Chase Manhattan Bank, N.A.; Aluminum Company of America; Cummins Engine Company, Inc.; Johnson & Johnson. Lucent director since 1996.

#### BACK ROW (right to left):

**PAUL A. ALLAIRE**, 60, chairman and chief executive officer of Xerox Corporation (document processing products and services) since 1991. Director, Sara Lee Corp.; SmithKline Beecham p.I.c.; J.P. Morgan & Co. Lucent director since 1996.

JOHN A. YOUNG, 66, vice chairman of Novell, Inc. (network software and directory-enabled network solutions) since 1997; retired president and chief executive officer of Hewlett-Packard Co. 1978-1992. Director, Wells Fargo Bank, Wells Fargo & Co.; Chevron Corp.; International Integration Incorporated; SmithKline Beecham p.I.c.; Affymetrix, Inc.; Novell, Inc. Lucent director since 1996.

**DONALD S. PERKINS**, 71, retired chairman and chief executive officer, 1970-1980, of Jewel Companies, Inc. (diversified retailer); nonexecutive chairman of Kmart Corp. 1995. Director, Aon Corp.; Cummins Engine Company, Inc.; LaSalle Hotel Properties; Nanophase Technologies Corporation; The Putnam Funds; Ryerson Tull Inc.; Springs Industries, Inc. Lucent director since 1996.

32

## Lucent Technologies 1998 Financial Review



- 34 Management's Discussion and Analysis
- 37 Five Year Summary
- 48 Reports of Management and Independent Accountants
- 49 Consolidated Statements of Income
- 50 Consolidated Balance Sheets
- 51 Consolidated Statements of Changes in Shareowners' Equity
- 52 Consolidated Statements of Cash Flows
- 53 Notes to Consolidated Financial Statements

#### Highlights

For the year ended September 30, Lucent Technologies Inc. ("Lucent" or the "Company") reported the following:

1998

• Net income of \$970 million, \$0.73 per share (diluted)

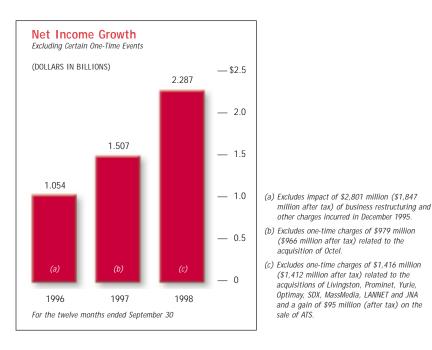
- 1997
- Net income of \$541 million, \$0.42 per share (diluted)

EXCLUDING CERTAIN ONE-TIME EVENTS:

- Net income of \$2,287 million, \$1.72 per share (diluted)
- EXCLUDING CERTAIN ONE-TIME EVENTS: • Net income of \$1,507 million.
- \$1.17 per share (diluted)

ONE-TIME EVENTS in 1998 include \$1,416 million (\$1,412 million after tax) of purchased in-process research and development charges related to the acquisitions of Livingston Enterprises Inc., Prominet Corporation, Yurie Systems, Inc., Optimay GmBH, SDX Business Systems plc, MassMedia Communications Inc., LANNET and JNA Telecommunications Limited, as well as a \$95 million after tax gain on the sale of Lucent's Advanced Technology Systems ("ATS") unit.

ONE-TIME EVENTS in 1997 include a purchased in-process research and development charge and other charges of \$979 million (\$966 million after tax) related to the acquisition of Octel Communications Corporation.



The earnings per share data discussed above have been adjusted to reflect the two-for-one split of Lucent's common stock which became effective April 1, 1998.

#### **Communications Revolution**

The communications industry is going through a revolution, centered on rapidly growing demand by commercial and residential users for voice, data, Internet and wireless services. As a result, the industry has undergone a global consolidation of key players, including traditional telecommunications network manufacturers and data networking companies, which compete in the same markets as Lucent. This consolidation–driven by the need for key technologies, new distribution channels in untapped markets, economies of scale and global expansion–is expected to continue into the near future.

Lucent continues to evaluate its presence and product offerings in the marketplace and may use acquisitions to enhance those offerings where that makes good business sense. These acquisitions may occur through the use of cash, or the issuance of debt or common stock, or any combination of the three.

#### Acquisitions and Divestitures

As part of Lucent's efforts to focus on the fastest growing markets in the communications industry, the Company has acquired a number of businesses, complementing its existing product lines and its internal product development efforts.

- In September 1998, Lucent acquired JNA, an Australian telecom equipment manufacturer, reseller and system integrator.
- In August 1998, Lucent acquired LANNET, an Israeli-based supplier of Ethernet and asynchronous transfer mode ("ATM") switching solutions.
- In July 1998, Lucent acquired both SDX, a United Kingdom-based provider of business communications systems, and MassMedia, a developer of next-generation network inter-operability software.
- In May 1998, Lucent acquired Yurie, a provider of ATM access technology and equipment for data, voice and video networking.
- In April 1998, Lucent acquired Optimay, a developer of software products and services for chip sets to be used for Global System for Mobile Communications ("GSM") cellular phones.
- In January 1998, Lucent acquired Prominet, a participant in the emerging Gigabit Ethernet networking industry.
- In December 1997, Lucent acquired Livingston, a global provider of equipment used by Internet service providers to connect their subscribers to the Internet.
- In September 1997, Lucent acquired Octel, a provider of voice, fax and electronic messaging technologies that complement those offered by Lucent.

Lucent has also sought to divest itself of non-core businesses.

- On October 1, 1997, Lucent contributed its Consumer Products business to a new venture formed by Lucent and Philips Electronics N.V. ("Philips") in exchange for 40% ownership of the venture. The venture, Philips Consumer Communications ("PCC"), was formed to create a worldwide provider of personal communications products. On October 22, 1998, Lucent and Philips announced their intention to end the venture in PCC. It is expected that Lucent and Philips will each regain control of the original businesses they contributed to the venture. Lucent plans to close down the wireless handset business it previously contributed to PCC and to sell the consumer product and leasing businesses.
- In October 1997, Lucent completed the sale of its ATS unit.
- In December 1996, Lucent sold its interconnect products and Custom Manufacturing Services ("CMS") businesses.
- In July 1996, Lucent completed the sale of its Paradyne subsidiary.

### Lucent's Formation

Lucent was formed from the systems and technology units that were formerly part of AT&T Corp., including the research and development capabilities of Bell Laboratories. Prior to February 1, 1996, AT&T conducted Lucent's original business through various divisions and subsidiaries. On February 1, 1996, AT&T began executing its decision to separate Lucent into a stand-alone company (the "Separation") by transferring to Lucent the assets and liabilities related to its business. In April 1996, Lucent completed the initial public offering of its common stock ("IPO") and on September 30, 1996, became independent of AT&T when AT&T distributed to its shareowners all of its Lucent shares.

Lucent's consolidated financial statements for periods prior to February 1, 1996 reflect the financial position, results of operations and cash flows of the operations transferred to Lucent from AT&T in the Separation and were carved out from the financial statements of AT&T using the historical results of operations and historical basis of the assets and liabilities of the business. Management believes the assumptions underlying these financial statements are reasonable, although these financial statements may not necessarily reflect the results of operations or financial position had Lucent been a separate, stand-alone entity.

In 1996, Lucent changed its fiscal year to begin October 1 and end September 30. Due to this change, Lucent reported 1996 audited consolidated financial results for a short fiscal period beginning on January 1, 1996 and ending on September 30, 1996. For comparability to the audited consolidated financial statements, Lucent has provided unaudited consolidated statements of income and cash flows for the twelve months ended September 30, 1996.

### Key Business Challenges

Lucent continues to face significant competition and expects that the level of competition on pricing and product offerings will intensify. Lucent expects that new competitors will enter its markets as a result of the trend toward global expansion by foreign and domestic competitors as well as continued changes in technology and public policy. These competitors may include entrants from the telecommunications, software, data networking and semiconductor industries. Existing competitors have, and new competitors may have, strong financial capability, technological expertise, well-recognized brand names and a global presence. Such competitors may include Cisco Systems, Inc., Nortel Networks, Ericsson, Alcatel Alsthom and Siemens AG. As a result, Lucent's management periodically assesses market conditions and redirects the Company's resources to meet the challenges of competition. Steps Lucent may take include acquiring or investing in new businesses and ventures, partnering with existing businesses, delivering new technologies, closing and consolidating facilities, disposing of assets, reducing work force levels or withdrawing from markets.

Lucent has taken measures to manage the seasonality of its business by changing the date on which its fiscal year ends and its compensation programs for employees. As a result, Lucent has achieved a more uniform distribution of revenues–accompanied by a related redistribution of earnings–throughout the year. Revenues and earnings still remain higher in the first fiscal quarter primarily because many of Lucent's large customers historically delay a disproportionate percentage of their capital expenditures until the fourth quarter of the calendar year (Lucent's first fiscal quarter).

# MANAGEMENT'S DISCUSSION AND ANALYSIS

The purchasing behavior of Lucent's largest customers has increasingly been characterized by the use of fewer, larger contracts. These contracts typically involve longer negotiating cycles, require the dedication of substantial amounts of working capital and other resources, and in general require costs that may substantially precede recognition of associated revenues. Moreover, in return for larger, longer-term purchase commitments, customers often demand more stringent acceptance criteria, which can also cause revenue recognition delays. Lucent has increasingly provided or arranged long-term financing for customers as a condition to obtain or bid on infrastructure projects. Certain multi-year contracts involve new technologies that may not have been previously deployed on a large-scale commercial basis. On its multi-year contracts, Lucent may incur significant initial cost overruns and losses that are recognized in the quarter in which they became ascertainable. Further, profit estimates on such contracts are revised periodically over the lives of the contracts, and such revisions can have a significant impact on reported earnings in any one quarter. Lucent has been successful in diversifying its customer base and seeking out new types of customers globally. These new types of customers include competitive access providers, competitive local exchange carriers, wireless service providers, cable television network operators and computer manufacturers.

Historically, a limited number of customers have provided a substantial portion of Lucent's total revenues. These customers include AT&T, which continues to be a significant customer, as well as other large carriers such as Sprint Spectrum Holdings LP ("Sprint PCS"), and the Regional Bell Operating Companies ("RBOCs"). The loss of any of these customers, or any substantial reduction in orders by any of these customers, could materially adversely affect the Company's operating results.

# FIVE-YEAR SUMMARY

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS) (Unaudited)

			September 30, (Twelve Months)	Nir	e Months Ended September 30,	Year Ende	ed December 31, (Twelve Months)
RESULTS OF OPERATIONS	1998	1997	1996	<b>1996</b> <sup>(1)</sup>	1995	1995	1994
Revenues	\$30,147	\$26,360	\$23,286	\$15,859	\$13,986	\$21,413	\$19,765
Gross margin	13,991	11,462	8,894	6,569	6,143	8,468	8,428
Depreciation and amortization expense	1,334	1,450	1,326	937	1,104	1,493	1,311
Operating income (loss)	2,461	1,631	(947)	487	434	(1,000)	971
Net income (loss)	970	541	(793)	224	150	(867)	482
Earnings (loss) per common share-basic <sup>(2) (3)</sup>	0.74	0.42	(0.69)	0.19	0.14	(0.83)	n/a
Earnings (loss) per common share-diluted <sup>(2) (3)</sup>	0.73	0.42	(0.69)	0.19	0.14	(0.83)	n/a
Earnings (loss) per common share-pro forma <sup>(3) (4)</sup>	n/a	n/a	(0.62)	0.18	0.12	(0.68)	n/a
Dividends per common share <sup>(3)</sup>	0.155	0.1125	0.075	0.075	_	-	n/a
FINANCIAL POSITION							
Total assets	\$26,720	\$23,811	\$22,626	\$22,626	\$18,219	\$19,722	\$17,340
Working capital	3,650 <sup>(8)</sup>	1,763	2,068	2,068	188	(384)	246
Total debt	4,640	4,203	3,997	3,997	4,192	4,014	3,164
Shareowners' equity	5,534	3,387	2,686	2,686	2,783	1,434	2,476
OTHER INFORMATION							
Selling, general and administrative							
expenses as a percentage of revenues	21.3%	21.9%	31.3%	26.8%	28.9%	33.1%	27.1%
expenses as a percentage of revenues	12.2	11.5	11.0	11.6	12.0	11.1	10.6
Gross margin percentage	46.4	43.5	38.2	41.4	43.9	39.5	42.6
Return on assets	9.3 <sup>(5)</sup>	6.5(6)	5.3(7)	n/a	n/a	n/a	n/a
Ratio of total debt to total capital							
(debt plus equity)	45.6	55.4	59.8	59.8	60.1	73.7	56.1
Capital expenditures	\$ 1,626	\$ 1,635	\$ 1,432	\$ 939	\$ 784	\$ 1,277	\$ 878
EXCLUDING CERTAIN ONE-TIME EVENTS							
Net income	\$ 2,287 <sup>(5)</sup>	\$ 1,507 <sup>(6)</sup>	\$ 1,054 <sup>(7)</sup>	\$ 224	\$ 150	\$ 980 <sup>(7)</sup>	\$ 482
Earnings per common share-diluted <sup>(2) (3)</sup>	1.72(5)	1.17 <sup>(6)</sup>	0.83(4,7)	0.19	0.14	0.93(7)	n/a

(1) Beginning September 30, 1996, Lucent changed its fiscal year end from December 31 to September 30, and reported results for the nine-month transition period ended September 30, 1996.

(2) The calculation of earnings per share on a historical basis includes the retroactive recognition to January 1, 1995 of the 1,049,249,788 shares (524,624,894 shares on a pre-split basis) owned by AT&T on April 10, 1996.

(3) All per share data has been restated to reflect the two-for-one split of Lucent's common stock which became effective on April 1, 1998.

(4) The calculation of earnings (loss) per share on a pro forma basis assumes that all 1,273,323,862 shares (636,661,931 shares on a pre-split basis) outstanding on April 10, 1996 were outstanding since January 1, 1995 and gives no effect to the use of proceeds from the IPO.

(5) Excludes one-time charges of \$1,412 (after tax) of purchased in-process research and development costs from acquisitions of Livingston, Prominet, Optimay, Yurie, SDX, MassMedia, LANNET and JNA, as well as a \$95 (after tax) gain on the sale of ATS.

(6) Excludes one-time acquisition charges of \$966 (after tax), including \$945 of purchased in-process research and development costs, from the acquisition of Octel.

(7) Excludes pre-tax restructuring and other charges of \$2,801 (\$1,847 after tax) recorded as \$892 of costs, \$1,645 of selling, general and administrative expenses and \$264 of research and development expenses.

(8) Reflects the reclassification from debt maturing within one year to long-term debt as a result of the November 19, 1998 sale of \$500 (\$495 net of unamortized costs) of ten-year notes.

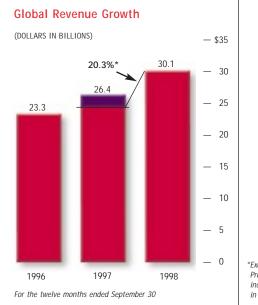
n/a Not applicable.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

# TWELVE MONTHS ENDED SEPTEMBER 30, 1998 VERSUS TWELVE MONTHS ENDED SEPTEMBER 30, 1997

#### Revenues

Total revenues increased to \$30,147 million, or 14.4% compared with the same period in 1997, primarily due to increases in sales from Systems for Network Operators, Business Communications Systems and Microelectronic Products. The overall revenue growth was impacted by the elimination of the Consumer Products sales as a component of total revenue as well as lower revenues from Other Systems and Products. The decline in Other Systems and Products was due primarily to the sale of Lucent's ATS and CMS businesses in October 1997 and in December 1996, respectively. Excluding revenues from Lucent's Consumer Products, ATS and CMS businesses, total revenues increased 20.3% compared with the same period in 1997. Revenue growth was driven by sales increases globally. For fiscal year 1998, sales within the United States grew 11.9% compared with the same period in 1997. These sales represented 25.7% of total revenues compared with 24.1% in 1997. Excluding revenues from Lucent's Consumer Products, ATS and CMS businesses, sales within the United States increased 22.2% compared with 24.1% in 1997. Excluding revenues from Lucent's Consumer Products, ATS and CMS businesses, sales within the United States increased 20.4% compared with 24.1% in 1997. Excluding revenues from Lucent's Consumer Products, ATS and CMS businesses, sales within the United States increased 19.6% compared with the same period in 1997.



38

\*Excluding the revenues from Lucent's Consumer Products, ATS and CMS businesses, total revenues increased 20.3% compared with the same period in 1997 The following table presents Lucent's revenues by product line, and the approximate percentage of total revenues for the twelve months ended September 30, 1998 and 1997:

		Twelve Months Ended September 30,		
(DOLLARS IN MILLIONS) 1998	As a Percentage of Total Revenue	1997	As a Percentage of Total Revenue	
Systems for Network Operators \$18,752	62%	\$15,614	59%	
Business Communications Systems 8,093	27	6,411	24	
Microelectronic Products	10	2,755	11	
Consumer Products	-	1,013	4	
Other Systems and Products 275	1	567	2	
TOTAL\$30,147	100%	\$26,360	100%	

Revenues from SYSTEMS FOR NETWORK OPERATORS increased \$3,138 million, or 20.1% compared with the same period in 1997. The increase resulted from higher sales of switching and wireless systems with associated software, optical networking systems, communications software, and data networking systems for service providers–including those provided by recently acquired Livingston. Demand for those products was driven in part by second line subscriber growth in businesses and residences for Internet services and data traffic.

Revenues from Systems for Network Operators in the United States increased by 20.4% over the year-ago period. The revenue increase in the United States was led by sales to RBOCs, competitive local exchange carriers, wireless service providers and long distance carriers. Revenues generated outside the United States for 1998 increased 19.3% compared with the same period in 1997 due to revenue growth in the Europe/Middle East/Africa, Canada, China and Caribbean/Latin America regions. Revenues generated outside the United States represented 24.9% of revenues for 1998 compared with 25.1% in the same period of 1997.

For 1998, sales of wireless infrastructure increased significantly compared with 1997 as customers accepted networks for commercial service in 1998 using various digital technologies. These technologies include Code Division Multiple Access ("CDMA"), GSM and Time Division Multiple Access ("TDMA"). The Lucent digital technologies continue to show acceptance in markets both within and outside the United States.

Revenues from BUSINESS COMMUNICATIONS SYSTEMS increased \$1,682 million, or 26.2% compared with the same period in 1997. This increase was led by sales of messaging systems, including systems provided by recently acquired Octel, SYSTIMAX\* structured cabling, enterprise data networking systems and services. Revenues generated outside the United States increased by 53.9% due to growth in all international regions, led by the Europe/Middle East/Africa region. Revenues generated outside the United States

® Registered trademark of Lucent

represented 19.2% of the revenues for 1998 compared with 15.8% in the same period in 1997. For 1998, sales within the United States increased 21.1% compared with the same period in 1997.

Revenues from MICROELECTRONIC PRODUCTS increased \$272 million, or 9.9% for 1998 compared with the same period in 1997 due to higher sales of chips for computing and communications, including components for broadband and narrowband networks, data networking, wireless telephones and infrastructure, high-end workstations, optoelectronic components, power systems and the licensing of intellectual property. Sales within the United States increased 11.9% compared with the same period in 1997. Revenues generated outside the United States increased 8.0% compared with the same period in 1997. The increase in revenues generated outside the United States was driven by sales in all international regions, led by the Caribbean/Latin America region. Revenues generated outside the United States represented 50.5% of sales compared with 51.3% for the same period in 1997.

Despite a nearly  $8.0\%^{(a)}$  decline in the world semiconductor market, Microelectronic Products achieved revenue growth of 9.9% for 1998.

On October 1, 1997, Lucent contributed its CONSUMER PRODUCTS unit to PCC in exchange for 40% ownership of PCC. On October 22, 1998, Lucent and Philips announced they would end their PCC venture. Lucent plans to close down the wireless handset business it previously contributed to PCC and to sell the remaining businesses. Lucent expects that these activities will be completed during the first calendar quarter of 1999.

Revenues from sales of OTHER SYSTEMS AND PRODUCTS decreased \$292 million, or 51.5% compared with the same period in 1997. The reduction in revenues was primarily due to the sale of Lucent's ATS and CMS businesses. ATS designed and manufactured custom defense systems for the United States government.

### Costs and Gross Margin

Total costs increased \$1,258 million, or 8.4% compared with the same period in 1997 due to the increase in sales volume. Gross margin percentage increased to 46.4% from 43.5% in the year-ago period. The increase in gross margin percentage for the current period was due to an overall favorable mix of higher margin products and services sales.

### **Operating Expenses**

Selling, general and administrative expenses as a percentage of revenues were 21.3% for 1998, a decrease of 0.6 percentage points from the same period in 1997. Excluding the amortization expense associated with goodwill and existing technology for both years, selling, general and administrative expenses as a percentage of revenues was 20.9%, a decrease of 0.9 percentage points from the same period in 1997.

Selling, general and administrative expenses increased \$652 million, or 11.3% compared with the same period in 1997. This increase is attributed to the higher sales volume, investment in growth initiatives, amortization expense associated with goodwill and existing technology as well as the implementation of SAP, an integrated software plat-

<sup>(a)</sup> Source: World Semiconductor Trade Statistics, Inc.

form. Amortization expense associated with goodwill and existing technology was \$147 million for the year ended September 30, 1998, an increase of \$115 million from the same year-ago period. These increases were offset by the reversal of \$66 million of 1995 business restructuring charges. In addition, the 1997 period included a \$174 million reversal of 1995 business restructuring charges.

Research and development expenses represented 12.2% of revenues for the period as compared with 11.5% of revenues from the same period in 1997.

Research and development expenses increased \$655 million compared with the same period in 1997. This was primarily due to increased expenditures in support of wireless, data networking, optical networking and software as well as switching and access systems and microelectronic products.

The purchased in-process research and development expenses for 1998 were \$1,416 million, reflecting the charges associated with the acquisitions of Livingston, Prominet, Yurie, Optimay, SDX, MassMedia, LANNET and JNA compared with \$1,024 million related to the acquisitions of Octel and Agile Networks Inc. for the same period in 1997.

#### Other Income, Interest Expense and Provision for Income Taxes

Other income-net increased \$22 million for 1998 compared with the same period in 1997. This increase was primarily due to gains recorded on the sale of certain business operations, including \$149 million associated with the sale of Lucent's ATS business. These gains were offset by higher net losses associated with Lucent's equity investments, primarily from the PCC investment. Also, included in Other income-net for 1998 is a charge of \$110 million related to a write-down associated with Lucent's investment in the PCC venture. This charge was offset by one-time gains of \$103 million primarily related to the sale of an investment and the sale of certain business operations including Bell Labs Design Automation Group.

Interest expense was \$318 million for the 1998 fiscal year, an increase of \$13 million compared with the same period in 1997. The increase in interest expense is due to higher debt levels in 1998 as compared with the prior year.

The effective income tax rate of 57.9% for 1998 decreased from the effective income tax rate of 63.1% in the same year-ago period. Excluding the impact of the purchased in-process research and development expenses associated with Livingston, Prominet, Yurie, Optimay, SDX, LANNET and JNA acquisitions, as well as the similar impact of the Octel and Agile acquisitions in 1997, the effective income tax rate was 36.0% for 1998, a decrease from the year-ago rate of 37.2%. This decrease was primarily due to a reduced state effective tax rate and increased research tax credits.

### **Cash Flows**

Cash provided by operating activities was \$1,366 million in 1998, a decrease of \$580 million compared with the same period in 1997. This decrease in cash was largely due to the increase in accounts receivable, partially offset by the increase in payroll and benefit-related liabilities.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

Cash payments of \$176 million were charged against the December 1995 business restructuring reserves in 1998 compared with \$483 million in 1997. Of the 23,000 positions that Lucent announced it would eliminate in connection with the 1995 restructuring charges, approximately 19,900 positions had been eliminated through September 30, 1998. Actual experience in employee separations, combined with redeploying employees into other areas of the business, resulted in lower separation costs than originally anticipated. Lucent expects employee reductions in positions to be substantially complete by September 1999.

Comparing 1998 and 1997, cash used in investing activities decreased to \$2,808 million from \$3,121 million primarily due to a decrease in cash used for acquisitions, as well as an increase in cash received from dispositions. In 1998, cash was used in the acquisitions of Yurie, Optimay, SDX, LANNET and JNA. The acquisitions of Livingston and Prominet in 1998 were completed through the issuance of stock and options and did not require the use of cash. The use of cash in 1998 was partially offset by proceeds from the sale of ATS. In 1997, Lucent acquired Octel and Agile and disposed of its interconnect products and CMS businesses.

Capital expenditures were \$1,626 million and \$1,635 million for 1998 and 1997, respectively. Capital expenditures include expenditures for equipment and facilities used in manufacturing and research and development, including expansion of manufacturing capacity and international growth.

Cash provided by financing activities for 1998 was \$838 million compared with \$295 million in 1997. The increase in cash provided by financing activities was due to higher debt levels and increased issuances of common stock when compared with the prior period.

# TWELVE MONTHS ENDED SEPTEMBER 30, 1997 VERSUS TWELVE MONTHS ENDED SEPTEMBER 30, 1996

#### Revenues

Total revenues increased \$3,074 million or 13.2% for 1997 compared with 1996, primarily due to gains in sales from Systems for Network Operators, Business Communications Systems and Microelectronic Products. The overall revenue growth was partially offset by the expected decline in revenue from Consumer Products and Other Systems and Products. Revenues for Lucent's three core businesses increased 17.9% for 1997 compared with 1996. Revenue growth continued to be generated from sales both within and outside the United States. Sales outside the United States increased 11.9% compared with 1996 and represented 24.1% of total revenues in 1997. The increased sales outside of the United States reflected Lucent's targeted approach toward revenue expansion outside the United States for increased profitability.

The following table presents Lucent's revenues by product line, and the related percentage of total revenues for the twelve months ended September 30, 1997 and 1996: Twelve Months Ended September 30,

(DOLLARS IN MILLIONS)	1997	As a Percentage of Total Revenue	1996	As a Percentage of Total Revenue
Systems for Network Operators	\$15,614	59%	\$13,192	57%
Business Communications Systems	6,411	24	5,509	24
Microelectronic Products	2,755	11	2,315	10
Consumer Products	1,013	4	1,431	6
Other Systems and Products	567	2	839	3
TOTAL	\$26,360	100%	\$23,286	100%

Revenues from SYSTEMS FOR NETWORK OPERATORS increased \$2,422 million or 18.4% compared with 1996. The increase resulted from higher sales of both switching and wire-less systems with associated software, fiber-optic cable and professional services. Demand for second lines in businesses and residences for Internet services and data connectivity contributed to the revenue growth for 1997.

Sales from Systems for Network Operators in the United States increased 22.2%. The revenue increase in the United States was led by sales to traditional service providers and non-traditional customers such as personal communications services ("PCS") wireless providers, competitive access providers and cable television companies. Sales outside the United States increased 8.2% compared with 1996, resulting from increased sales in the Europe/Middle East/Africa, Asia/Pacific and Caribbean/Latin America regions. Sales outside the United States represented 25.1% of Systems for Network Operators revenues for 1997.

For 1997, sales of wireless infrastructure increased significantly compared with the same period in 1996 primarily due to PCS contracts as customers accepted networks for commercial service in 1997 using various digital technologies. These technologies include CDMA, GSM and TDMA. The Lucent digital technologies continue to show acceptance in markets both within and outside the United States.

Revenues from BUSINESS COMMUNICATIONS SYSTEMS increased \$902 million or 16.4% compared with the same period in 1996. This increase was led by sales of DEFINITY<sup>®</sup> products, SYSTIMAX structured cabling, messaging systems, integrated offers such as call centers and higher revenues from service contracts. This increase was partially offset by the continued erosion of the rental base. Revenues in the United States increased 17.0% compared with 1996. Revenues outside the United States increased by 13.2%, reflecting growth in all international regions. The increases both within and outside the United States were primarily due to sales of DEFINITY products, call centers and messaging systems. In addition, higher sales of SYSTIMAX structured cabling contributed to the revenue growth in the United States. Sales outside the United States represented 15.8% of revenue for 1997.

® Registered trademark of Lucent

Sales of MICROELECTRONIC PRODUCTS increased \$440 million or 19.0% compared with 1996, due to higher sales of customized chips for computing and communications, including components for local area networks, data networking, high-end computer workstations and wireless telephones. Higher sales of power systems and optoelectronic components also contributed to the increase for 1997. Sales within the United States increased 12.5% compared with 1996, led by sales to original equipment manufacturers ("OEMs"). The 25.9% growth in revenues outside the United States was driven by application specific integrated circuits ("ASICs") sales in the Asia/Pacific region as well as the growth of wireless and multimedia integrated circuits and power products sold to customers in Europe for cellular applications. Sales outside the United States represented 51.3% of the Microelectronic Products sales for 1997. Microelectronic Products continued to bring to market new technologies, such as the introduction of the K56flex<sup>™</sup>

Revenues from CONSUMER PRODUCTS decreased \$418 million or 29.2% compared with 1996. The decline in revenues was primarily due to decreased product sales related to the closing of the Phone Center Stores, the discontinuation of unprofitable product lines and the continued decrease in phone rental revenues. Lucent's Consumer Products unit was contributed to the venture between Lucent and Philips on October 1, 1997.

Revenues from OTHER SYSTEMS AND PRODUCTS decreased \$272 million or 32.4% compared with 1996. The decrease is largely due to the sale of Lucent's CMS business in fiscal year 1997 and its Paradyne subsidiary in fiscal year 1996.

### Gross Margin

Gross margin percentage increased to 43.5% from 38.2% in 1996 primarily due to the restructuring charges recorded in the quarter ended December 31, 1995. Excluding restructuring charges, gross margin for 1996 was 42.0%. The increase in gross margin percentage for 1997 was due to an overall favorable mix of higher margin product revenues and the benefits associated with Lucent's business productivity improvement initiatives.

### **Operating Expenses**

Selling, general and administrative expenses decreased \$1,506 million or 20.7% compared with 1996. Excluding the \$1,645 million of restructuring charges recorded in December 1995, selling, general and administrative expenses increased \$139 million compared with 1996. This increase was due to expenditures associated with higher sales levels, investment in growth initiatives, and the implementation of SAP, an integrated software platform. These increases were partially offset by the reversal of \$174 million of business restructuring liabilities in 1997, the lower start-up costs incurred in 1997, and business productivity improvement initiatives, including lower expenses since some businesses were exited in fiscal 1997 and 1996. Selling, general and administrative expenses as a percentage of revenue declined 2.3 percentage points to 21.9% of revenues compared with 24.2% of revenues, excluding restructuring charges in 1996.

<sup>™</sup> Trademark of Lucent

Research and development expenses increased \$472 million or 18.5% compared with 1996. Excluding the impact of restructuring charges recorded in the quarter ended December 31, 1995, research and development expenses increased by \$736 million, primarily due to expenditures in support of wireless infrastructure, microelectronic products and advanced multimedia communications systems as well as a \$127 million write-down of special-purpose Bell Labs assets no longer being used. Research and development expenses represented 11.5% of revenues as compared with 11.0% of revenues in 1996. Research and development expenses as a percentage of revenues increased 1.7 percentage points from 9.8%, excluding restructuring charges in 1996.

Purchased in-process research and development for 1997 reflects one-time write-offs totaling \$1,024 million of in-process research and development in connection with the acquisitions of Octel and Agile. Agile is a provider of advanced intelligent data switching products acquired by Lucent in October 1996.

### Other Income, Interest Expense and Provision for Income Taxes

Other income-net decreased \$77 million compared with 1996. This decrease was largely due to gains recognized on the sale of certain investments and insurance recoveries in 1996, offset in part by increased interest income in 1997.

Interest expense increased \$12 million compared with 1996 due primarily to replacing a portion of commercial paper with long-term debt in July 1996.

The effective tax rate of 63.1% for 1997 increased from the effective tax rate of 22.4% for the same period of 1996 due to the 1997 write-offs of purchased in-process research and development costs and the tax impact of restructuring charges incurred in 1996. Excluding charges related to the acquisitions of Agile and Octel, the effective tax rate for 1997 was 37.2%, a decrease of 3.6 percentage points from the 1996 effective tax rate of 40.8% before considering the effects of restructuring charges incurred in 1996. This decrease is primarily attributable to the tax impact of foreign earnings.

### **Cash Flows**

Cash provided by operating activities was \$1,946 million in 1997, an increase of \$967 million compared with the same period in 1996. This increase in cash was largely due to the retention of \$2,000 million of customer accounts receivable by AT&T in 1996 as well as the increase in cash collections associated with higher sales. This was offset by changes in accounts payable due to the end of payments to AT&T related to the Separation and the change in other operating assets and liabilities over 1996. The change in other operating assets and liabilities over 1996. The change in other operating assets and liabilities over 1996. The change is \$500 million cash advance made to Lucent in April 1996 by AT&T and the utilization by AT&T of that advance in 1997.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

Cash payments of \$483 million were charged against the December 1995 business restructuring reserves in 1997. As of September 30, 1997, the work force had been reduced by approximately 17,900 positions in connection with business restructuring. In addition, approximately 1,000 employees left Lucent's work force as part of the sale of Paradyne in 1996. Actual experience in employee separations, combined with redeploying employees into other areas of the business, has resulted in lower separation costs than originally anticipated.

Comparing 1997 and 1996, cash used in investing activities increased to \$3,121 million from \$1,638 million primarily due to the acquisition of Octel.

Capital expenditures were \$1,635 million and \$1,432 million for 1997 and 1996, respectively. Capital expenditures include expenditures for equipment and facilities used in manufacturing and research and development, including expansion of manufacturing capacity and international growth.

Cash provided by financing activities for 1997 was \$295 million compared with \$2,503 million in 1996. This decrease was primarily due to the proceeds received from the IPO in the year-ago period.

In 1995, Lucent relied on AT&T to provide financing for its operations. The cash flows from financing activities for the year ended September 30, 1996 reflect changes in the Company's assumed capital structure. These cash flows are not necessarily indicative of the cash flows that would have resulted if Lucent had been a stand-alone entity.

### Financial Condition, Liquidity and Capital Resources

Total assets as of September 30, 1998 increased \$2,909 million, or 12.2%, from September 30, 1997. This increase was primarily due to increases in accounts receivable and other assets of \$1,566 million and \$1,001 million, respectively. The increase in accounts receivable was primarily due to higher sales. The increase in other assets was largely due to the increase in goodwill and existing technology associated with the Livingston, Prominet, Yurie, Optimay, SDX, LANNET and JNA acquisitions, and an increase in equity investments as a result of Lucent's contribution of its Consumer Products business to PCC.

Total liabilities increased \$762 million, or 3.7%, from September 30, 1997. This increase was largely due to the increases in payroll and benefit-related liabilities and postretirement and postemployment benefit liabilities. These increases are primarily related to the increase in employee headcount as a result of Lucent's recent acquisitions as well as year end payroll and benefit accruals.

Working capital, defined as current assets less current liabilities, increased \$1,887 million from fiscal year end 1997 primarily resulting from the increase in accounts receivable and the following reclassification of \$500 million (\$495 million net of unamortized costs) from short-term debt to long-term debt. On November 19, 1998, Lucent sold \$500 million of ten-year notes and reclassified the amount from debt maturing within one year to long-term debt. The proceeds were used to pay down a portion of Lucent's commercial paper during the first quarter of fiscal 1999. For the year ended September 30, 1998, Lucent's inventory turnover ratio was 4.6 times compared with 4.0 times for the year ended September 30, 1997. The increase was primarily due to improved inventory management at the factories and in the distribution channels. Inventory turnover is defined as cost of sales (excluding costs related to long-term contracts) divided by average inventory during the year.

Accounts receivable were outstanding an average of 64 days for the years ended September 30, 1998 and 1997.

The fair value of Lucent's pension plan assets is greater than the projected pension obligations. Lucent records pension income when the expected return on plan assets plus amortization of the transition asset is greater than the interest cost on the projected benefit obligation plus service cost for the year. Consequently, Lucent continued to have a net pension credit that added to prepaid pension costs in 1998 and which is expected to continue in the near term.

Lucent expects that, from time to time, outstanding commercial paper balances may be replaced with short- or long-term borrowings as market conditions permit. At September 30, 1998, Lucent maintained approximately \$5,200 million in credit facilities, of which a portion is used to support Lucent's commercial paper program. At September 30, 1998, approximately \$4,850 million was unused. Future financings will be arranged to meet Lucent's requirements, with the timing, amount and form of issue depending on the prevailing market and general economic conditions. Lucent anticipates that borrowings under its bank credit facilities, the issuance of additional commercial paper, cash generated from operations, and short- and long-term debt financings will be adequate to satisfy its future cash requirements, although there can be no assurance that this will be the case.

Network operators, inside and outside the United States, increasingly have required their suppliers to arrange or provide long-term financing for them as a condition to obtaining or bidding on infrastructure projects. These projects may require financing in amounts ranging from modest sums to over a billion dollars. Lucent has increasingly provided or arranged long-term financing for customers. As market conditions permit, Lucent's intention is to lay off these long-term financing arrangements, which may include both commitments and drawn down borrowings, to other financial institutions and investors. This enables Lucent to reduce the amount of its commitments and free up additional financing capacity.

As of September 30, 1998, Lucent had made commitments or entered into an agreement to extend credit to certain customers, including Sprint PCS up to an aggregate of approximately \$2,300 million. As of September 30, 1998, approximately \$400 million had been advanced and was outstanding. Included in the \$2,300 million is approximately \$1,230 million to six other PCS or wireless network operators (including fixed wireless) for possible future sales. As of September 30, 1998, approximately \$130 million had been advanced under four of these arrangements. In addition, Lucent had made commitments or entered into agreements to extend credit up to an aggregate of approximately \$370 million for two network operators other than PCS or wireless network operators. As of September 30, 1998, no amount was advanced under either of these agreements. In November 1998, a commitment for \$110 million, included in the \$370 million, was terminated.

In October 1996, Lucent entered into a credit agreement to provide Sprint PCS long-term financing of \$1,800 million for purchasing Lucent's equipment and services for its PCS network. In May 1997, under the \$1,800 million credit facility provided by Lucent to Sprint PCS, Lucent closed transactions to lay off \$500 million of loans and undrawn commitments and \$300 million of undrawn commitments to a group of institutional investors and Sprint Corporation (a partner in Sprint PCS), respectively. As of September 30, 1998, all of these commitments were drawn down by Sprint PCS. On June 8, 1998, Lucent sold \$645 million of loans in a private sale. As of September 30, 1998, Lucent has \$253 million of undrawn commitments and \$226 million of drawn loans outstanding.

As part of the revenue recognition process, Lucent has assessed the collectibility of the accounts receivable relating to the Sprint PCS purchase contract in light of its financing commitment to Sprint PCS. Lucent has determined that the receivables under the contract are reasonably assured of collection based on various factors among which was the ability of Lucent to sell the loans and commitments without recourse. Lucent intends to continue pursuing opportunities for the sale of the \$226 million of loans outstanding, and the future loans and commitments to Sprint PCS.

On October 22, 1998, Lucent announced that it had entered into a five-year agreement with WinStar Communications, Inc. to provide WinStar with a fixed wireless broadband telecommunications network in major domestic and international markets. In connection with this agreement, Lucent entered into a credit agreement with WinStar to provide up to \$2,000 million in equipment financing to fund the buildout of this network. The maximum amount of credit that Lucent is obligated to extend to WinStar at any one time is \$500 million.

In addition to the above arrangements, Lucent will continue to provide or commit to financing where appropriate for its business. The ability of Lucent to arrange or provide financing for its customers will depend on a number of factors, including Lucent's capital structure and level of available credit, and its continued ability to lay off commitments and drawn down borrowings on acceptable terms.

Lucent believes that it will be able to access the capital markets on terms and in amounts that will be satisfactory to Lucent and that it will be able to obtain bid and performance bonds, to arrange or provide customer financing as necessary, and to engage in hedging transactions on commercially acceptable terms, although there can be no assurance that this will be the case. The ratio of total debt to total capital (debt plus equity) was 45.6% at September 30, 1998 compared with 55.4% at September 30, 1997. The decrease in the ratio was primarily due to the increase in shareowners' equity, which resulted from net income and the issuance of common stock, partially offset by the increase in debt.

Excluding the one-time charges related to the acquisitions of Livingston, Prominet, Optimay, Yurie, SDX, MassMedia, LANNET and JNA as well as the gain on the sale of ATS in 1998, the return on assets was 9.3%. This represents a 2.8 percentage point increase over the prior year return on assets of 6.5%, excluding the Octel acquisition charges in 1997.

#### **Risk Management**

Lucent is exposed to market risk from changes in foreign currency exchange rates and interest rates, which could impact its results of operations and financial condition. Lucent manages its exposure to these market risks through its regular operating and financing activities and, when deemed appropriate, through the use of derivative financial instruments. Lucent uses derivative financial instruments as risk management tools and not for speculative or trading purposes. In addition, derivative financial instruments are entered into with a diversified group of major financial institutions in order to manage Lucent's exposure to nonperformance on such instruments.

Lucent uses foreign currency exchange contracts, and to a lesser extent, foreign currency purchased options to reduce its exposure to the risk that the eventual net cash inflows and outflows resulting from the sale of products to foreign customers and purchases from foreign suppliers will be adversely affected by changes in exchange rates. Foreign currency exchange contracts are designated for firmly committed or forecasted purchases and sales. The use of these derivative financial instruments allows Lucent to reduce its overall exposure to exchange rate movements, since the gains and losses on these contracts substantially offset losses and gains on the assets, liabilities and transactions being hedged. As of September 30, 1998, Lucent's primary net foreign currency market exposures include Deutsche marks and British pounds. As of September 30, 1997, Lucent's primary net foreign currency market exposures included Deutsche marks, Japanese yen and Dutch guilders. Lucent has not changed its policy regarding how such exposures are managed since the year ended September 30, 1997. Management does not foresee or expect any significant changes in foreign currency exposure in the near future.

The fair value of foreign currency exchange contracts is sensitive to changes in foreign currency exchange rates. As of September 30, 1998 and 1997, a 10% appreciation in foreign currency exchange rates from the prevailing market rates would increase the related net unrealized gain by \$11 million and \$27 million, respectively. Conversely, a 10%

# MANAGEMENT'S DISCUSSION AND ANALYSIS

depreciation in these currencies from the prevailing market rates would decrease the related net unrealized gain by \$18 million and \$35 million, as of September 30, 1998 and 1997, respectively. Unrealized gains/losses in foreign currency exchange contracts are defined as the difference between the contract rate at the inception date of the foreign currency exchange contract and the current market exchange rates. Consistent with the nature of the economic hedge of such foreign currency exchange contracts, such unrealized gains or losses would be offset by corresponding decreases or increases, respectively, of the underlying instrument or transaction being hedged.

While Lucent hedges actual and anticipated transactions with customers, the decline in value of the Asia/Pacific currencies or currencies in other regions may, if not reversed, adversely affect future product sales because Lucent products may become more expensive for customers to purchase in their local currency.

Lucent manages its ratio of fixed to floating rate debt with the objective of achieving a mix that management believes is appropriate. To manage this mix in a costeffective manner, Lucent, from time to time, enters into interest rate swap agreements, in which it agrees to exchange various combinations of fixed and/or variable interest rates based on agreed upon notional amounts. Lucent had no material interest rate swap agreements in effect as of September 30, 1998 and 1997. The strategy employed by Lucent to manage its exposure to interest rate fluctuations is unchanged from September 30, 1997. Management does not foresee or expect any significant changes in its exposure to interest rate fluctuations or in how such exposure is managed in the near future.

The fair value of Lucent's fixed rate long-term debt is sensitive to changes in interest rates. Interest rate changes would result in gains/losses in the market value of this debt due to differences between the market interest rates and rates at the inception of the debt obligation. Based on a hypothetical immediate 150 basis point increase in interest rates at September 30, 1998 and 1997, the market value of Lucent's fixed rate long-term debt would be impacted by a net decrease of \$209 million and \$113 million, respectively. Conversely, a 150 basis point decrease in interest rates would result in a net increase in the market value of Lucent's fixed rate long-term debt outstanding at September 30, 1998 and 1997 of \$247 million and \$121 million, respectively. As a result of the change in market conditions in 1998, Lucent used a hypothetical 150 basis point change, versus 100 basis points used in the fiscal year 1997 presentation, to determine the change in market value of this debt.

#### **Other**

Lucent's current and historical operations are subject to a wide range of environmental protection laws. In the United States, these laws often require parties to fund remedial action regardless of fault. Lucent has remedial and investigatory activities underway at numerous current and former facilities. In addition, Lucent was named a successor to AT&T as a potentially responsible party ("PRP") at numerous "Superfund" sites pursuant

44

to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA") or comparable state statutes. Under the Separation and Distribution Agreement, among AT&T, Lucent and NCR Corporation dated as of February 1, 1996, as amended and restated, Lucent is responsible for all liabilities primarily resulting from or related to the operation of Lucent's business as conducted at any time prior to or after the Separation including related businesses discontinued or disposed of prior to the Separation, and Lucent's assets including, without limitation, those associated with these sites. In addition, under the Separation and Distribution Agreement, Lucent is required to pay a portion of contingent liabilities paid out in excess of certain amounts by AT&T and NCR, including environmental liabilities.

It is often difficult to estimate the future impact of environmental matters, including potential liabilities. Lucent records an environmental reserve when it is probable that a liability has been incurred and the amount of the liability is reasonably estimable. This practice is follwed whether the claims are asserted or unasserted. Management expects that the amounts reserved will be paid out over the period of remediation for the applicable site which ranges from 5 to 30 years. Reserves for estimated losses from environmental remediation are, depending on the site, based primarily upon internal or third party environmental studies, and estimates as to the number, participation level and financial viability of any other PRPs, the extent of the contamination and the nature of required remedial actions. Accruals are adjusted as further information develops or circumstances change. The amounts provided for in Lucent's consolidated financial statements in respect to environmental reserves are the gross undiscounted amount of such reserves, without deductions for insurance or third party indemnity claims. In those cases where insurance carriers or third party indemnitors have agreed to pay any amounts and management believes that collectibility of such amounts is probable, the amounts are reflected as receivables in the financial statements. Although Lucent believes that its reserves are adequate, there can be no assurance that the amount of capital and other expenditures that will be required relating to remedial actions and compliance with applicable environmental laws will not exceed the amounts reflected in Lucent's reserves or will not have a material adverse effect on Lucent's financial condition, results of operations or cash flows. Any amounts of environmental costs that may be incurred in excess of those provided for at September 30, 1998 cannot be determined.

#### **Forward-Looking Statements**

This Management's Discussion and Analysis of Results of Operations and Financial Condition and other sections of this report contain forward-looking statements that are based on current expectations, estimates, forecasts and projections about the industries in which Lucent operates, management's beliefs and assumptions made by management. In addition, other written or oral statements which constitute forward-looking statements may be made by or on behalf of the Company. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates," variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions ("Future Factors") which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements. The Company undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

Future Factors include increasing price and product/services competition by foreign and domestic competitors, including new entrants; rapid technological developments and changes and the Company's ability to continue to introduce competitive new products and services on a timely, cost-effective basis; the mix of products/services; the achievement of lower costs and expenses; the outcome and impact of Year 2000; domestic and foreign governmental and public policy changes which may affect the level of new investments and purchases made by customers; changes in environmental and other domestic and foreign governmental regulations; protection and validity of patent and other intellectual property rights; reliance on large customers; technological, implementation and cost/financial risks in the increasing use of large, multi-year contracts; the cyclical nature of the Company's business; the outcome of pending and future litigation and governmental proceedings and continued availability of financing, financial instruments and financial resources in the amounts, at the times and on the terms required to support the Company's future business. These are representative of the Future Factors that could affect the outcome of the forward-looking statements. In addition, such statements could be affected by general industry and market conditions and growth rates, general domestic and international economic conditions including interest rate and currency exchange rate fluctuations and other Future Factors.

#### Competition:

See discussion above under KEY BUSINESS CHALLENGES.

### Dependence on New Product Development:

The markets for the Company's principal products are characterized by rapidly changing technology, evolving industry standards, frequent new product introductions and evolving methods of building and operating communications systems for network operators and business customers. The Company's operating results will depend to a significant extent on its ability to continue to introduce new systems, products, software and services successfully on a timely basis and to reduce costs of existing systems, products, software and services, including proper identification of customer needs, cost, timely completion and introduction, differentiation from offerings of the Company's competitors and market acceptance. In addition, new technological innovations generally require a substantial investment before any assurance is available as to their commercial viability, including, in some cases, certification by international and domestic standards-setting bodies.

#### Reliance on Major Customers:

See discussion above under KEY BUSINESS CHALLENGES.

#### Readiness for Year 2000:

Lucent is engaged in a major effort to minimize the impact of the Year 2000 date change on Lucent's products, information technology systems, facilities and production infrastructure. Lucent has targeted June 30, 1999 for completion of these efforts.

The Year 2000 challenge is a priority within Lucent at every level of the Company. Primary Year 2000 preparedness responsibility rests with program offices which have been established within each of Lucent's product groups and corporate centers. A corporatewide Lucent Year 2000 Program Office ("LYPO") monitors and reports on the progress of these offices. Each program office has a core of full-time individuals augmented by a much larger group who have been assigned specific Year 2000 responsibilities in addition to their regular assignments. Further, Lucent has engaged third parties to assist in its readiness efforts in certain cases. LYPO has established a methodology to measure, track and report Year 2000 readiness status consisting of five steps: inventory; assessment; remediation; testing and deployment.

Lucent is completing programs to make its new commercially available products Year 2000 ready and has developed evolution strategies for customers who own non-Year 2000 ready Lucent products. The majority of the upgrades and new products needed to support customer migration are already generally available. By the end of 1998, all but a few of these products are targeted for general availability.

Lucent has launched extensive efforts to alert customers who have non-Year 2000 ready products, including direct mailings, phone contacts and participation in user and industry groups. Recently, Lucent has set up a Year 2000 website www.lucent.com/y2k that provides Year 2000 product information. Lucent continues to cooperate in the Year 2000 information sharing efforts of the Federal Communications Commission and other governmental bodies.

Lucent believes it has sufficient resources to provide timely support to its customers that require product migrations or upgrades. However, because this effort is heavily dependent on customer cooperation, Lucent continues to monitor customer response and will take steps to improve customer responsiveness, as necessary. Also, Lucent has begun contingency planning to address potential spikes in demand for customer support resulting from the Year 2000 date change. These plans are targeted for completion by April 30, 1999.

Lucent has largely completed the inventory and assessment phases of the program with respect to its factories, information systems, and facilities. Approximately, two-thirds of the production elements included in the factory inventory were found to be Year 2000

# MANAGEMENT'S DISCUSSION AND ANALYSIS

ready. The factories have commenced the remediation phase of their effort through a combination of product upgrades and replacement. Plans have been developed to facilitate the completion of this work, as well as the related testing and deployment, by June 30, 1999.

Currently, approximately 60% of Lucent's information technology infrastructure has been determined to be Year 2000 ready and is deployed for use. Approximately, 45% of the applications requiring Year 2000 remediation that are supported by Lucent's information technology group are now Year 2000 ready and have been deployed or are awaiting deployment. LYPO is monitoring the progress of readiness efforts across the Company, with a special emphasis on the early identification of any areas where progress to-date could indicate difficulty in meeting the Company's June 1999 internal readiness target date. Lucent is developing specific contingency plans, as appropriate.

Lucent is also assessing the Year 2000 readiness of the large number of facilities that it owns or leases world-wide. Priority is being placed on Lucent-owned facilities, leased facilities that Lucent manages and other critical facilities that house large numbers of employees or significant operations. Based on the results of these assessment activities, Lucent plans to complete remediation efforts by March 31, 1999 and complete development of applicable contingency plans by May 31, 1999.

To ensure the continued delivery of third party products and services, Lucent's procurement organization has analyzed Lucent's supplier base and has sent surveys to approximately 5,000 suppliers. Follow-up efforts have commenced to obtain feedback from critical suppliers. To supplement this effort, Lucent plans to conduct readiness reviews of the Year 2000 status of the suppliers ranked as most critical based on the nature of their relationship with Lucent, the product/service provided and/or the content of their survey responses. Almost all of Lucent's suppliers are still deeply engaged in executing their Year 2000 readiness efforts and, as a result, Lucent cannot, at this time, fully evaluate the Year 2000 risks to its supply chain. Lucent will continue to monitor the Year 2000 status of its suppliers to minimize this risk and will develop appropriate contingent responses as the risks become clearer.

The risk to Lucent resulting from the failure of third parties in the public and private sector to attain Year 2000 readiness is the same as other firms in Lucent's industry or other business enterprises generally. The following are representative of the types of risks that could result in the event of one or more major failures of Lucent's information systems, factories or facilities to be Year 2000 ready, or similar major failures by one or more major third party suppliers to Lucent: (1) information systems–could include interruptions or disruptions of business and transaction processing such as customer billing, payroll, accounts payable and other operating and information processes, until systems can be remedied or replaced; (2) factories and facilities–could include interruptions or disruptions of manufacturing processes and facilities with delays in delivery of products, until non-compliant conditions or components can be remedied or replaced; and (3) major suppliers to Lucent-could include interruptions or disruptions of the supply of raw materials, supplies and Year 2000 ready components which could cause interruptions or disruptions of manufacturing and delays in delivery of products, until the third party supplier remedied the problem or contingency measures were implemented. Risks of major failures of Lucent's principal products could include adverse functional impacts experienced by customers, the costs and resources for Lucent to remedy problems or replace products where Lucent is obligated or undertakes to take such action, and delays in delivery of new products.

Lucent believes it is taking the necessary steps to resolve Year 2000 issues; however, given the possible consequences of failure to resolve significant Year 2000 issues, there can be no assurance that any one or more such failures would not have a material adverse effect on Lucent. Lucent estimates that the costs of efforts to prepare for Year 2000 from calendar year 1997 through 2000 is about \$535 million, of which an estimated \$210 million has been spent as of September 30, 1998. Lucent has been able to reprioritize work projects to largely address Year 2000 readiness needs within its existing organizations. As a result, most of these costs represent costs that would have been incurred in any event. These amounts cover costs of the Year 2000 readiness work for inventory, assessment, remediation, testing and deployment including fees and charges of contractors for outsourced work and consultant fees. Costs for previously contemplated updates and replacements of Lucent's internal systems and information systems infrastructure have been excluded without attempting to establish whether the timing of non-Year 2000 replacement or upgrading was accelerated.

While the Year 2000 cost estimates above include additional costs, Lucent believes, based on available information, that it will be able to manage its total Year 2000 transition without any material adverse effect on its business operations, products or financial prospects.

The actual outcomes and results could be affected by Future Factors including, but not limited to, the continued availability of skilled personnel, cost control, the ability to locate and remediate software code problems, critical suppliers and subcontractors meeting their commitments to be Year 2000 ready and provide Year 2000 ready products, and timely actions by customers.

#### **European Monetary Union-Euro:**

On January 1, 1999, several member countries of the European Union will establish fixed conversion rates between their existing sovereign currencies, and adopt the Euro as their new common legal currency. As of that date, the Euro will trade on currency exchanges and the legacy currencies will remain legal tender in the participating countries for a transition period between January 1, 1999 and January 1, 2002.

During the transition period, cash-less payments can be made in the Euro, and parties can elect to pay for goods and services and transact business using either the Euro or a legacy currency. Between January 1, 2002 and July 1, 2002, the participating countries will introduce Euro notes and coins and withdraw all legacy currencies so that they will no longer be available.

Lucent has begun planning for the Euro's introduction. For this purpose, Lucent has in place a joint European-United States team representing affected functions within the Company.

The Euro conversion may affect cross-border competition by creating cross-border price transparency. Lucent is assessing its pricing/marketing strategy in order to insure that it remains competitive in a broader European market. Lucent is also assessing its information technology systems to allow for transactions to take place in both the legacy currencies and the Euro and the eventual elimination of the legacy currencies, and reviewing whether certain existing contracts will need to be modified. Lucent's currency risk and risk management for operations in participating countries may be reduced as the legacy currencies are converted to the Euro. Final accounting, tax and governmental legal and regulatory guidance generally has not been provided in final form. Lucent will continue to evaluate issues involving introduction of the Euro. Based on current information and Lucent's current assessment, Lucent does not expect that the Euro conversion will have a material adverse effect on its business, results of operations, cash flows or financial condition.

### **Employee Relations:**

On September 30, 1998, Lucent employed approximately 141,600 persons, including 78.9% located in the United States. Of these domestic employees, about 40% are represented by unions, primarily the Communications Workers of America ("CWA") and the International Brotherhood of Electrical Workers ("IBEW"). Lucent signed new five-year agreements with the CWA and IBEW expiring May 31, 2003.

### Multi-Year Contracts:

Lucent has significant contracts for the sale of infrastructure systems to network operators which extend over a multi-year period, and expects to enter into similar contracts in the future, with uncertainties affecting recognition of revenues, stringent acceptance criteria, implementation of new technologies and possible significant initial cost overruns and losses. See also discussion above under FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES, and KEY BUSINESS CHALLENGES.

### Seasonality:

See discussion above under KEY BUSINESS CHALLENGES.

### **Future Capital Requirements:**

See discussion above under FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES.

### Growth Outside the United States, Foreign Exchange and Interest Rates:

Lucent intends to continue to pursue growth opportunities in markets outside the United States. In many markets outside the United States, long-standing relationships between potential customers of Lucent and their local providers, and protective regulations, including local content requirements and type approvals, create barriers to entry. In addition, pursuit of such growth opportunities outside the United States may require significant investments for an extended period before returns on such investments, if any, are realized. Such projects and investments could be adversely affected by reversals or delays in the opening of foreign markets to new competitors, exchange controls, currency fluctuations, investment policies, repatriation of cash, nationalization, social and political risks, taxation, and other factors, depending on the country in which such opportunity arises. Difficulties in foreign financial markets and economies, and of foreign financial institutions, could adversely affect demand from customers in the affected countries.

See discussion above under RISK MANAGEMENT with respect to foreign exchange and interest rates. A significant change in the value of the dollar against the currency of one or more countries where Lucent sells products to local customers or makes purchases from local suppliers may materially adversely affect Lucent's results. Lucent attempts to mitigate any such effects through the use of foreign currency contracts, although there can be no assurances that such attempts will be successful.

### Legal Proceedings and Environmental:

See discussion above under OTHER.

# REPORTS OF MANAGEMENT AND INDEPENDENT ACCOUNTANTS

Management is responsible for the preparation of Lucent Technologies Inc.'s consolidated financial statements and all related information appearing in this Annual Report. The consolidated financial statements and notes have been prepared in conformity with generally accepted accounting principles and include certain amounts which are estimates based upon currently available information and management's judgment of current conditions and circumstances.

To provide reasonable assurance that assets are safeguarded against loss from unauthorized use or disposition and that accounting records are reliable for preparing financial statements, management maintains a system of accounting and other controls, including an internal audit function. Even an effective internal control system, no matter how well designed, has inherent limitations-including the possibility of circumvention or overriding of controls-and therefore can provide only reasonable assurance with respect to financial statement presentation. The system of accounting and other controls is improved and modified in response to changes in business conditions and operations and recommendations made by the independent public accountants and the internal auditors.

The Audit and Finance Committee of the Board of Directors, which is composed of directors who are not employees, meets periodically with management, the internal auditors and the independent auditors to review the manner in which these groups of individuals are performing their responsibilities and to carry out the Audit and Finance Committee's oversight role with respect to auditing, internal controls and financial reporting matters. Periodically, both the internal auditors and the independent auditors meet privately with the Audit and Finance Committee and have access to its individual members.

Lucent engaged PricewaterhouseCoopers LLP, independent public accountants, to audit the consolidated financial statements in accordance with generally accepted auditing standards, which include consideration of the internal control structure. Their report appears on this page.

### To the Board of Directors and Shareowners of Lucent Technologies Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income and changes in shareowners' equity and of cash flows present fairly, in all material respects, the financial position of Lucent Technologies Inc. and its subsidiaries at September 30, 1998 and 1997, the results of their operations and their cash flows for each of the two years in the period ended September 30, 1998 and for the nine-month period ended September 30, 1996, in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards, which 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

Pricewaterhouse Coopers ILP

PricewaterhouseCoopers LLP New York, New York October 21, 1998

12ch Mc Ginn

Richard A. McGinn Chairman and Chief Executive Officer

Donald K Peterson

Donald K. Peterson Executive Vice President and Chief Financial Officer

# CONSOLIDATED STATEMENTS OF INCOME

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

				Year Ended September 30, (Twelve Months)	Nine Months Ended September 30,
REVENUES		1998	1997	1996	1996
				UNAUDITED	
	Revenues	\$30,147	\$26,360	\$23,286	\$15,859
	Costs	16,156	14,898	14,392	9,290
GROSS MARGIN					
	Gross margin	13,991	11,462	8,894	6,569
OPERATING EXPENSES					
	Selling, general and administrative	6,436	5,784	7,290	4,244
	Research and development	3,678	3,023	2,551	1,838
	Purchased in-process research and development	1,416	1,024	_	_
	Total operating expenses	11,530	9,831	9,841	6,082
OPERATING INCOME (LOS					
<b>\$</b>	Operating income (loss)	2,461	1,631	(947)	487
	Other income-net	163	141	218	96
	Interest expense	318	305	293	216
	Income (loss) before income taxes	2,306	1,467	(1,022)	367
	Provision (benefit) for income taxes	1,336	926	(229)	143
NET INCOME (LOSS)					
	Net income (loss)	\$ 970	\$ 541	\$ (793)	\$ 224
EARNINGS (LOSS) PER CO	OMMON SHARE				
	Earnings (loss) per common share-basic	\$ 0.74	\$ 0.42	\$ (0.69)	\$ 0.19
	Earnings (loss) per common share-diluted	\$ 0.73	\$ 0.42	\$ (0.69)	\$ 0.19
	Dividends per common share	\$ 0.155	\$0.1125	\$ 0.075	\$ 0.075

# CONSOLIDATED BALANCE SHEETS

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

		September 30,	September 30,
ASSETS		1998	1997
	Cash and cash equivalents	\$ 685	\$ 1,350
	Accounts receivable less allowances of \$390 in 1998 and \$352 in 1997	6,939	5,373
	Inventories	3,081	2,926
	Contracts in process (net of progress billings of \$3,036 in 1998 and \$2,003 in 1997)	1,259	1,046
	Deferred income taxes-net	1,623	1,333
	Other current assets	491	473
	TOTAL CURRENT ASSETS	14,078	12,501
	Property, plant and equipment-net	5,403	5,147
	Prepaid pension costs	3,754	3,172
	Deferred income taxes-net	750	1,262
	Capitalized software development costs	298	293
	Other assets	2,437	1,436
	TOTAL ASSETS	\$ 26,720	\$23,811
LIABILITIES			
	Accounts payable	\$ 2,040	\$ 1,931
	Payroll and benefit-related liabilities	2,511	2,178
	Postretirement and postemployment benefit liabilities.	187	239
	Debt maturing within one year	2,231	2,538
	Other current liabilities	3,459	3,852
	TOTAL CURRENT LIABILITIES	10,428	10,738
	Postretirement and postemployment benefit liabilities.	6,380	6,073
	Long-term debt.	2,409	1,665
	Other liabilities.	1,969	1,948
	TOTAL LIABILITIES	\$21,186	\$20,424
	Commitments and contingencies	φ21,100	\$20,424
SHAREOWNERS' EQUITY			
	Preferred stock-par value \$1 per share		
	Authorized 250,000,000 shares		
	Issued and outstanding shares: none	\$ -	\$ -
	Common stock-par value \$.01 per share	Ψ	Ŷ
	Authorized shares: 3,000,000,000		
	Issued and outstanding shares:		
	1,316,394,169 at September 30, 1998;		
	1,284,125,312 at September 30, 1997	13	13
	Additional paid-in capital	4,485	3,047
	Guaranteed ESOP obligation	(49)	(77)
	Foreign currency translation	(279)	(191)
		1,364	595
	Retained earnings	\$ 5,534	595 \$3,387
			<u> </u>
	TOTAL SHAREOWNERS EQUIT	φ J,JJ+	φ 0,007

50

# CONSOLIDATED STATEMENTS OF CHANGES IN SHAREOWNERS' EQUITY

(DOLLARS IN MILLIONS)

		Year Ended September 30, (Twelve Months)	Nine Months Ended September 30,
PREFERRED STOCK	1998	1997	1996
	\$ -	\$ -	\$ -
COMMON STOCK			
Balance at beginning of period	13	13	_
Issuance of common stock	_	-	6
Two-for-one common stock split	_	-	7
BALANCE AT END OF PERIOD	13	13	13
ADDITIONAL PAID-IN CAPITAL			
Balance at beginning of period	3,047	2,595	1,406
Issuance of common stock	608	260	2,881
Issuance of common stock for acquisitions	689	-	-
Conversion of stock options related to acquisitions	186	116	-
Net loss from 1/1/96 through 1/31/96	_	-	(72)
Dividends declared	_	-	(7)
Accounts receivable holdback by AT&T	_	-	(2,000)
Unrealized (loss) gain on investments	(37)	40	15
	_	-	120
Other contributions from AT&T	_	-	252
Other	(8)	36	-
BALANCE AT END OF PERIOD.	4,485	3,047	2,595
GUARANTEED ESOP OBLIGATION			
Balance at beginning of period	(77)	(106)	-
	_	-	(120)
Amortization of ESOP obligation	28	29	14
BALANCE AT END OF PERIOD.	(49)	(77)	(106)
FOREIGN CURRENCY TRANSLATION			
Balance at beginning of period	(191)	(16)	28
Translation adjustments	(88)	(175)	(44)
BALANCE AT END OF PERIOD.	(279)	(191)	(16)
RETAINED EARNINGS			. ,
Balance at beginning of period	595	200	
	970	541	_
Net income from 2/1/96 through 9/30/96         .          .	_	_	296
	_	_	(7)
	(201)	(146)	(89)
	1,364	595	200
	1,504		200
TOTAL SHAREOWNERS' EQUITY	\$5,534	\$3,387	\$2,686

# CONSOLIDATED STATEMENTS OF CASH FLOWS

(DOLLARS IN MILLIONS)

				Year Ended September 30, (Twelve Months)	Nine Months Ended September 30,
OPERATING ACTIVITIES		1998	1997	1996	1996
				UNAUDITED	
	Net income (loss)	\$ 970	\$ 541	\$ (793)	\$ 224
	Business restructuring (reversal) charge	(100)	(201) 81	2,515 293	(98) 105
	Depreciation and amortization	1,334	1,450	1,326	937
	Provision for uncollectibles	130	127	73	54
	Deferred income taxes	113	9	(996)	(251)
	Purchased in-process research and development.	1,416	1,024	-	-
	Increase in accounts receivable-net	(1,987)	(389)	(3,114)	(1,506)
	Increase in inventories and contracts in process	(365)	(273)	(309)	(524)
	Increase (decrease) in accounts payable	170	(16)	1,021	629
	Changes in other operating assets and liabilities	133	(315)	1,040	537
	Other adjustments for noncash items-net	(448)	(92)	(77)	(111)
	NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES	1,366	1,946	979	(4)
INVESTING ACTIVITIES					
	Capital expenditures	(1,626)	(1,635)	(1,432)	(939)
	plant and equipment	57	108	119	15
	Purchases of equity investments	(212)	(149)	(96)	(46)
	Sales of equity investments	71	12	102	102
	Dispositions of businesses	329	181	58	58
	Acquisitions of businesses-net of cash acquired	(1,347)	(1,568)	(234)	(234)
	Other investing activities-net.	(80)	(70)	(155)	(22)
	NET CASH USED IN INVESTING ACTIVITIES	(2,808)	(3,121)	(1,638)	(1,066)
FINANCING ACTIVITIES	Densyments of long term debt	(02)	(14)	(E2)	(20)
	Repayments of long-term debt	(93) 375	(16) 52	(53) 1,499	(39) 1,499
	Proceeds from issuance of common stock	608	260	2,887	2,887
	Dividends paid	(201)	(192)	(48)	(48)
	Increase (decrease) in short-term borrowings-net	149	191	(1,525)	(1,436)
	Repayments of debt sharing agreement-net.	_	_	(1,020) (67)	(1,100)
	Transfers (to) from AT&T	_	_	(190)	13
	NET CASH PROVIDED BY FINANCING ACTIVITIES	838	295	2,503	2,876
	Effect of exchange rate changes on cash and cash equivalents	(61)	(11)	(16)	(13)
	Net (decrease) increase in cash and cash equivalents	(665)	(891)	1,828	1,793
	Cash and cash equivalents at beginning of period	1,350	2,241	413	448
	CASH AND CASH EQUIVALENTS AT END OF PERIOD	\$ 685	\$ 1,350	\$ 2,241	\$ 2,241
Can Natao to Concellidated Einopoial Statements					

See Notes to Consolidated Financial Statements.

52

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

### 1. BACKGROUND AND BASIS OF PRESENTATION

#### BACKGROUND

Lucent Technologies Inc. ("Lucent" or the "Company") was formed from the systems and technology units of AT&T Corp. and the associated assets and liabilities of those units, including Bell Laboratories (the "Separation"). Lucent was incorporated on November 29, 1995 with 1,000 shares of common stock ("Common Stock"), authorized and outstanding, all of which were owned by AT&T. On April 2, 1996, AT&T obtained an additional 524,623,894 shares (pre-split basis) of Common Stock and on April 10, 1996, Lucent issued 112,037,037 shares (pre-split basis) in an Initial Public Offering. On September 30, 1996, AT&T distributed to its shareowners all of its remaining interest in Lucent (the "Distribution").

### **BASIS OF PRESENTATION**

The consolidated financial statements as of and for the nine months ended September 30, 1996, reflect the results of operations, changes in shareowners' equity and cash flows, and the financial position of the business that was transferred to Lucent from AT&T as if Lucent were a separate entity. The consolidated financial statements have been prepared using the historical basis of the assets and liabilities and historical results of operations of these businesses. Additionally, the aforementioned financial statements include an allocation of certain AT&T corporate headquarters assets, liabilities and expenses related to the businesses that were transferred to Lucent from AT&T. Management believes the allocations reflected in the consolidated financial statements are reasonable. The aforementioned financial statements may not necessarily reflect Lucent's consolidated results of operations, financial position, changes in shareowners' equity or cash flows in the future or what they would have been had Lucent been a separate, stand-alone company during such period.

On April 1, 1998, a two-for-one split of Lucent's common stock became effective. Shareowners' equity has been restated to give retroactive recognition to the stock split for all periods presented by reclassifying from retained earnings to common stock the par value of the additional shares arising from the split. In addition, all references in the financial statements and notes to number of shares, per share amounts, stock option data and market prices have been restated to reflect this stock split.

On November 19, 1998, Lucent sold \$500 (\$495 net of unamortized costs) of 10-year notes and reclassified the amount from debt maturing within one year to long-term debt. The proceeds were used to pay down a portion of Lucent's commercial paper during the first quarter of fiscal 1999.

### ACQUISITIONS

The following table presents information about certain acquisitions by Lucent in the fiscal years ended September 30, 1998 and 1997. All charges were recorded in the quarter in which the transaction was completed.

	JNA (1)	LANNET (2)	MASSMEDIA (3)	SDX (4)	YURIE (5)	OPTIMAY (6)	PROMINET (7)	LIVINGSTON (8)	OCTEL (9)
Acquisition Date	9/98	8/98	7/98	7/98	5/98	4/98	1/98	12/97	9/97
Purchase Price	\$67 cash	\$115 cash	N/S	\$207 cash	\$1,056 cash & options	\$64 cash	\$199 stock & options	\$610 stock & options	\$1,819 cash & options
Goodwill	37	2	1	96	292	1	35	114	181
Existing technology	18	15	-	16	40	18	23	69	186
Purchased in-process research & development costs (after tax)	3	67	8	82	620	48	157	427	945
Amortization period-goodwill (years)	10	7	5	10	7	5	5	5	7
Amortization period- existing technology (years)	10	5	N/A	5	5	5	6	8	5

(1) JNA Telecommunications Limited was an Australian telecom manufacturer, reseller and system integrator.

(2) LANNET, a subsidiary of Madge Networks N.V., was an Israeli-based supplier of Ethernet and asynchronous transfer mode ("ATM") switching solutions for local area networks.

(3) MassMedia Communications, Inc., was a privately held, start-up developer of highly-reliable, next-generation network interoperability software.

(4) SDX Business Systems plc was a United Kingdom-based provider of business communications systems.

(5) Yurie Systems, Inc. was a provider of ATM access technology and equipment for data, voice and video networking.

- (6) Optimay GmbH specialized in the development of software products and services for chip sets to be used for Global System for Mobile Communications cellular phones.
- (7) Prominet Corporation was a participant in the emerging Gigabit Ethernet networking industry. The merger involved \$164 of Lucent stock and options. In addition, under the terms of the agreement, Lucent had contingent obligations to pay former Prominet shareowners \$35 in stock. The \$35 of stock was paid by Lucent, in July 1998 and recorded primarily as goodwill.
- (8) Livingston Enterprises, Inc. was a global provider of equipment used by Internet service providers to connect their subscribers to the Internet.
- (9) Octel Communications Corporation was a provider of voice, fax and electronic messaging technologies.
- N/A Not Applicable
- N/S Not Significant

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

All the above acquisitions were accounted for under the purchase method of accounting. The fair market value of the assets and liabilities acquired were independently determined and included in the balance sheet as of the quarter in which the acquisition was completed.

For all the above acquisitions, the acquired technology valuation included both existing technology and purchased in-process research and development. The valuation of these technologies was made by applying the income forecast method, which considers the present value of cash flows by product lines.

Included in the purchase price for the above acquisitions, was purchased in-process research and development, which was a noncash charge to earnings as this technology had not reached technological feasibility and had no future alternative use. This technology will require varying additional development, coding and testing efforts over the next year before technological feasibility can be determined. The remaining purchase price was allocated to tangible assets and intangible assets, including goodwill and existing technology, less liabilities assumed.

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### BASIS OF CONSOLIDATION

The consolidated financial statements include all majority-owned subsidiaries in which Lucent exercises control. Investments in which Lucent exercises significant influence, but which it does not control (generally a 20%–50% ownership interest), are accounted for under the equity method of accounting. All material intercompany transactions and balances have been eliminated.

### USE OF ESTIMATES

The preparation of financial statements and related disclosures in conformity with generally accepted accounting principles 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 revenue and expenses during the period reported. Actual results could differ from those estimates. Estimates are used when accounting for long-term contracts, allowance for uncollectible accounts receivable, inventory obsolescence, product warranty, depreciation, employee benefits, taxes, restructuring reserves and contingencies, among others.

### FOREIGN CURRENCY TRANSLATION

For operations outside the United States that prepare financial statements in currencies other than the United States dollar, results of operations and cash flows are translated at average exchange rates during the period, and assets and liabilities are translated at end of period exchange rates. Translation adjustments are included as a separate component of shareowners' equity.

# **REVENUE RECOGNITION**

Revenue is generally recognized when all significant contractual obligations have been satisfied and collection of the resulting receivable is reasonably assured. Revenue from product sales of hardware and software is recognized at time of delivery and acceptance, and after consideration of all the terms and conditions of the customer contract. Sales of services are recognized at time of performance and rental revenue is recognized proportionately over the contract term. Revenues and estimated profits on long-term contracts are generally recognized under the percentage of completion method of accounting using either a units-of-delivery or a cost-to-cost methodology. Profit estimates are revised periodically based on changes in facts. Any losses on contracts are recognized immediately.

### **RESEARCH AND DEVELOPMENT COSTS**

Research and development costs are charged to expense as incurred. However, the costs incurred for the development of computer software that will be sold, leased or otherwise marketed are capitalized when technological feasibility has been established. These capitalized costs are subject to an ongoing assessment of recoverability based on anticipated future revenues and changes in hardware and software technologies. Costs that are capitalized include direct labor and related overhead.

Amortization of capitalized software development costs begins when the product is available for general release. Amortization is provided on a product-by-product basis on either the straight-line method over periods not exceeding two years or the sales ratio method. Unamortized capitalized software development costs determined to be in excess of net realizable value of the product are expensed immediately.

### CASH AND CASH EQUIVALENTS

All highly liquid investments with original maturities of three months or less are considered to be cash equivalents.

# INVENTORIES

Inventories are stated at the lower of cost (determined principally on a first-in, first-out basis) or market.

### CONTRACTS IN PROCESS

Contracts in process are valued at cost plus accrued profits less progress billings.

### PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at cost less accumulated depreciation. Depreciation is determined using primarily the unit and group methods. The unit method is used for manufacturing and laboratory equipment and large computer systems. The group method is used for other depreciable assets. When assets that were depreciated using the unit method are sold or retired, the gains or losses are included in operating results. When assets that were depreciated using the group method are sold or retired, the original cost is deducted from the appropriate account and accumulated depreciation. Any gains or losses are applied against accumulated depreciation.

The accelerated depreciation method is used for certain high technology computer processing equipment. All other facilities and equipment are depreciated on a straight-line basis over their estimated useful lives.

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the fair value is less than the carrying amount of the asset, a loss is recognized for the difference.

### FINANCIAL INSTRUMENTS

Lucent uses various financial instruments, including foreign currency exchange contracts and interest rate swap agreements to manage and reduce risk to Lucent by generating cash flows, which offset the cash flows of certain transactions in foreign currencies or underlying financial instruments in relation to their amount and timing. Lucent's derivative financial instruments are for purposes other than trading and are not entered into for speculative purposes. Lucent's nonderivative financial instruments include letters of credit, commitments to extend credit and guarantees of debt. Lucent generally does not require collateral to support its financial instruments.

### GOODWILL

Goodwill is the excess of the purchase price over the fair value of identifiable net assets acquired in business combinations accounted for as purchases. Goodwill is amortized on a straight-line basis over the periods benefited, principally in the range of 5 to 15 years. Goodwill is reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

### RECLASSIFICATIONS

Certain prior year amounts have been reclassified to conform to the 1998 presentation.

# 3. RECENT PRONOUNCEMENTS

In June 1998, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133"). SFAS 133 establishes new accounting and reporting standards for derivative financial instruments and for hedging activities. SFAS 133 requires an entity to measure all derivatives at fair value and to recognize them in the balance sheet as an asset or liability, depending on the entity's rights or obligations under the applicable derivative contract. Lucent will designate each derivative as belonging to one of several possible categories, based on the intended use of the derivative. The recognition of changes in fair value of a derivative that affect the income statement will depend on the intended use of the derivative. If the derivative does not qualify as a hedging instrument, the gain or loss on the derivative will be recognized currently in earnings. If the derivative qualifies for special hedge accounting, the gain or loss on the derivative will either (1) be recognized in income along with an offsetting adjustment to the basis of the item being hedged or (2) be deferred in other comprehensive income and relassified to earnings in the same period or periods during which the hedged transaction affects earnings. SFAS 133 will be effective for Lucent no later than the guarter ending December 31, 1999. SFAS 133 may not be applied retroactively to financial statements of prior periods. SFAS 133 is not expected to have a material impact on Lucent's consolidated results of operations, financial position or cash flows.

In February 1998, FASB issued SFAS No. 132, "Employers' Disclosures about Pensions and Other Postretirement Benefits" ("SFAS 132"). SFAS 132 revises employers' disclosures about pension and other postretirement benefit plans. SFAS 132 is effective for fiscal years beginning after December 15, 1997. Restatement of disclosures for earlier periods provided for comparative purposes is required unless the information is not readily available. Lucent is in the process of evaluating the disclosure requirements. The adoption of SFAS 132 will have no impact on Lucent's consolidated results of operations, financial position or cash flows.

In June 1997, FASB issued SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information" ("SFAS 131"). SFAS 131 establishes standards for the way that public business enterprises report information about operating segments in annual financial statements and requires that those enterprises report selected information about operating segments in interim financial reports issued to shareholders. It also establishes standards for related disclosures about products and services, geographic areas, and major customers. SFAS 131 is effective for financial statements for fiscal years beginning after December 15, 1997. Financial statement disclosures for prior periods are required to be restated. Lucent is in the process of evaluating the disclosure requirements. The adoption of SFAS 131 will have no impact on Lucent's consolidated results of operations, financial position or cash flows.

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

In June 1997, FASB issued SFAS No. 130, "Reporting Comprehensive Income" ("SFAS 130"). SFAS 130 establishes standards for reporting and display of comprehensive income and its components in the financial statements. SFAS 130 is effective for fiscal years beginning after December 15, 1997. Reclassification of financial statements for earlier periods provided for comparative purposes is required. Lucent is in the process of determining its preferred format. The adoption of SFAS 130 will have no impact on Lucent's consolidated results of operations, financial position or cash flows.

In March 1998, the American Institute of Certified Public Accountants (the "AICPA") issued Statement of Position 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use" ("SOP 98-1"). SOP 98-1 provides guidance on accounting for the costs of computer software developed or obtained for internal use. This pronouncement identifies the characteristics of internal use software and provides guidance on new cost recognition principles. SOP 98-1 is effective for financial statements for fiscal years beginning after December 15, 1998. Lucent currently expenses its costs of computer software developed or obtained for internal use and is evaluating the impacts of adopting SOP 98-1.

In October 1997, the AICPA issued Statement of Position 97-2, "Software Revenue Recognition" ("SOP 97-2"). SOP 97-2 provides guidance on when revenue should be recognized and in what amounts for licensing, selling, leasing or otherwise marketing computer software. SOP 97-2 is effective for financial statements for fiscal years beginning after December 15, 1997. During March 1998, the AICPA issued Statement of Position 98-4, "Deferral of the Effective Date of a Provision of SOP 97-2, Software Revenue Recognition," ("SOP 98-4"). SOP 98-4 defers for one year the limitation of what is considered vendor-specific objective evidence of the fair value of the various elements in a multiple-element arrangement, a requirement to recognize revenue for elements delivered early in the arrangement. Effective October 1, 1998, Lucent has adopted SOP 97-2 and the adoption is not expected to have a material impact on Lucent's consolidated results of operations, financial position or cash flows.

# 4. SUPPLEMENTARY FINANCIAL INFORMATION

### SUPPLEMENTARY INCOME STATEMENT INFORMATION

	Year Ender	d September 30, (Twelve Months)	Nine Months Ended September 30,
	1998	1997	1996
INCLUDED IN COSTS Amortization of software development costs	\$ 234	\$ 380	\$218
INCLUDED IN SELLING, GENERAL AND ADMINISTRATIVE EXPENSES Amortization of goodwill and existing technology	\$ 147	\$ 32	\$ 25
INCLUDED IN COSTS AND OPERATING EXPENSES Depreciation and amortization of property,	\$ 919	¢1.009	\$674
plant and equipment	\$ 919	\$1,008	\$074
OTHER INCOME-NET Interest income	\$ 83	\$ 132	\$ 71
Minority interests in earnings of subsidiaries	\$ 03 (24)	(35)	(21)
Net equity losses from investments	(209)	(64)	(26)
Increase in cash surrender value	(207)		(20)
of life insurance	52	54	35
Loss on foreign currency transactions	(44)	(12)	(4)
Gains on businesses sold	208	-	-
Miscellaneous-net	97	66	41
Other income-net	\$ 163	\$ 141	\$ 96
DEDUCTED FROM INTEREST EXPENSE			
Capitalized interest	\$ 17	\$ 14	\$ 14

### SUPPLEMENTARY BALANCE SHEET INFORMATION

		September 30,
	1998	1997
INVENTORIES		
Completed goods	\$ 1,578	\$ 1,611
Work in process and raw materials	1,503	1,315
Inventories	\$ 3,081	\$ 2,926
PROPERTY, PLANT AND EQUIPMENT-NET		
Land and improvements	\$ 301	\$ 299
Buildings and improvements.	3,130	2,852
Machinery, electronic and other equipment	8,354	8,403
Total property, plant and equipment	11,785	11,554
Less: Accumulated depreciation and amortization	(6,382)	(6,407)
Property, plant and equipment-net	\$ 5,403	\$ 5,147
OTHER CURRENT LIABILITIES		
Advance billings and customer deposits	\$ 515	\$ 844

#### SUPPLEMENTARY CASH FLOW INFORMATION

	Year Ended September 30, (Twelve Months)		Nine Months Ended September 30,
	1998	1997	1996
Interest payments, net of amounts capitalized	\$319	\$307	\$209
Income tax payments	\$714	\$781	\$142

	Year Ended September 30, (Twelve Months)		Nine Months Ended September 30,
	1998	1997	1996
ACQUISITIONS OF BUSINESSES			
Fair value of assets acquired	\$2,341	\$1,812	\$527
Less: Fair value of liabilities assumed	\$ 994	\$ 244	\$293
Acquisitions of businesses	\$1,347	\$1,568	\$234

On October 1, 1997, Lucent contributed its Consumer Products business to a new venture formed by Lucent and Philips Electronics N.V. in exchange for 40% ownership of Philips Consumer Comunications ("PCC"). For the year ended September 30, 1998, the statement of cash flows excludes Lucent's contribution of its Consumer Products business.

For the year ended September 30, 1998, Other income-net includes a charge of \$110 related to a write-down associated with Lucent's investment in the PCC venture. This charge was offset by gains of \$103, primarily related to the sale of an investment and the sale of certain business operations, including Bell Labs Design Automation Group.

For the year ended September 30, 1998, the statement of cash flows excludes the issuance of common stock related to the acquisitions of Livingston and Prominet and the

conversion of stock options related to the acquisitions of Livingston, Prominet, Yurie and Optimay. For the year ended September 30, 1997, the statement of cash flows excludes the conversion of stock options related to the acquisitions of Octel. For information on the 1998 and 1997 acquisitions, see Note 1.

For the year ended September 30, 1997, research and development costs include a \$127 write-down of special purpose Bell Labs assets no longer being used.

The statement of cash flows for the nine-month period ended September 30, 1996 excludes \$2,000 of customer accounts receivable retained by AT&T as well as net asset transfers of \$239 received from AT&T. These transactions have not been reflected on the consolidated statement of cash flows because they were noncash events accounted for as changes in paid-in capital.

### 5. EARNINGS PER COMMON SHARE

Year Ended

Basic earnings per common share was calculated by dividing net income by the weighted average number of common shares outstanding during the period. Diluted earnings per share was calculated by dividing net income by the sum of the weighted average number of common shares outstanding plus all additional common shares that would have been outstanding if potentially dilutive common shares had been issued.

Included in the calculation of the weighted-average shares is the retroactive recognition to January 1, 1996 of the 1,049.2 million shares (524.6 million shares on a pre-split basis) owned by AT&T. The following table reconciles the number of shares utilized in the earnings per share calculations:

	Year Ended September 30, (Twelve Months)				Nine Months Ended September 30,	
		1998		1997		1996
Net income	\$	970	\$	541	\$	224
Earnings per common share-basic	\$	0.74	\$	0.42	\$	0.19
Earnings per common share-diluted	\$	0.73	\$	0.42	\$	0.19
Number of shares (in millions)						
Common shares-basic Effect of dilutive securities:	1	,304.6	1	,278.4	1	,191.5
Stock options		26.8		9.9		0.0
Other		2.0		0.1		0.2
Common shares-diluted	1	,333.4	1	,288.4	1	,191.7

# 6. BUSINESS RESTRUCTURING AND OTHER CHARGES

In the fourth quarter of calendar year 1995, a pre-tax charge of \$2,801 was recorded to cover restructuring costs of \$2,613 and asset impairment and other charges of \$188. The restructuring plans included restructuring Lucent's Consumer Products business, including closing all of the Company-owned retail Phone Center Stores; consolidating and re-engineering numerous corporate and business unit operations; and selling the Microelectronics' interconnect and Paradyne businesses.

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

The 1995 business restructuring charge of \$2,613 included restructuring liabilities of \$1,774, asset impairments of \$497 and \$342 of benefit plan losses. Benefit plan losses were related to pension and other employee benefit plans and primarily represented losses in 1995 from the actuarial changes that otherwise might have been amortized over future periods.

The pre-tax total charge for restructuring, impairments and other charges of \$2,801 for 1995 was recorded as \$892 of costs, \$1,645 of selling, general and administrative expenses, and \$264 of research and development expenses. The charges included \$1,509 for employee separations; \$627 for asset write-downs; \$202 for closing, selling and consolidating facilities; and \$463 for other items. The total charges reduced net income by \$1,847.

The restructuring charge of \$2,613 incorporated the separation costs, both voluntary and involuntary, for nearly 22,000 employees. As of September 30, 1998, the work force had been reduced by approximately 19,900 positions due to business restructuring. In addition, approximately 1,000 employees left Lucent's work force as part of the sale of Paradyne in 1996. Actual experience in employee separations, combined with redeploying employees into other areas of the business, has resulted in lower separation costs than originally anticipated. Lucent expects employee reductions in positions to be substantially complete by September 1999.

The following table displays a rollforward of the liabilities for business restructuring from September 30, 1996 to September 30, 1998:

Type of Cost	September 30, 1996 Balance	1997 Deductions	September 30, 1997 Balance	1998 Deductions	September 30, 1998 Balance
Employee Separation	. \$ 766	\$(418)	\$348	\$(235)	\$113
Facility Closing	. 175	(109)	66	(23)	43
Other	. 348	(193)	155	(60)	95
TOTAL	. \$1,289	\$(720)	\$569	\$(318)	\$251

Management believes that the remaining reserves for business restructuring are adequate to complete its plan.

Total deductions to Lucent's business restructuring reserves were \$318 and \$720 for the years ended September 30, 1998 and 1997, respectively. Included in these deductions were cash payments of \$176 and \$483 and noncash related charges of \$42 and \$36 for the years ended September 30, 1998 and 1997, respectively. The noncash related charges were primarily associated with asset write-offs that were charged against the business restructuring reserves. In addition, Lucent reversed \$100 and \$201 of business restructuring reserves primarily related to favorable experience in employee separations for the years ended September 30, 1998 and 1997, respectively.

# 7. INCOME TAXES

The following table presents the principal reasons for the difference between the effective tax rate and the United States federal statutory income tax rate:

	Year Ended September 30, (Twelve Months)		Nine Months Ended September 30,	
	1998	1997	1996	
United States federal statutory income tax rate	35.0%	35.0%	35.0%	
State and local income taxes, net of federal income tax effect	3.2	5.4	1.4	
Foreign earnings and dividends taxed at different rates	1.1	0.9	4.1	
Research credits	(2.8)	(2.6)	(5.0)	
Other differences-net	(0.5)	(1.5)	3.5	
Effective income tax rate before purchased				
in-process research and development costs	36.0%	37.2%	39.0%	
Purchased in-process research and development costs .	21.9	25.9		
Effective income tax rate	57.9%	63.1%	39.0%	

The following table presents the United States and foreign components of income before income taxes and the provision for income taxes:

	Year Ended September 30, (Twelve Months)		Nine Months Ended September 30,
	1998	1997	1996
INCOME BEFORE INCOME TAXES			
United States	\$1,942	\$ 873	\$ 101
Foreign	364	594	266
Income before income taxes	\$2,306	\$1,467	\$ 367
PROVISION FOR INCOME TAXES			
CURRENT			
Federal	\$ 823	\$ 464	\$ 242
State and local	141	129	53
Foreign	205	226	98
Sub-Total	1,169	819	393
DEFERRED			
Federal	113	35	(198)
State and local	43	77	(45)
Foreign and other	11	(5)	(7)
Sub-Total	167	107	(250)
Provision for income taxes	\$1,336	\$ 926	\$ 143

As of September 30, 1998, Lucent had tax credit carryforwards of \$32 and federal, state and local, and foreign net operating loss carryforwards (tax effected) of \$179, all of which expire primarily after the year 2000.

The components of deferred tax assets and liabilities at September 30, 1998 and 1997 are as follows:

Se	eptember 30,	Septem	ber 30,
	1998		1997
DEFERRED INCOME TAX ASSETS			
Employee pensions and other benefits-net	\$1,510	\$	1,777
Business restructuring	165		112
Reserves and allowances	1,063		887
Net operating loss/credit carryforwards	211		107
Valuation allowance	(261)		(234)
Other	462		664
TOTAL DEFERRED INCOME TAX ASSETS	\$3,150	\$3	3,313
DEFERRED INCOME TAX LIABILITIES			
Property, plant and equipment	\$ 397	\$	478
Other	380		240
TOTAL DEFERRED INCOME TAX LIABILITIES	\$ 777	\$	718

Lucent has not provided for United States deferred income taxes or foreign withholding taxes on \$2,432 of undistributed earnings of its non-United States subsidiaries as of September 30, 1998, since these earnings are intended to be reinvested indefinitely.

# 8. DEBT OBLIGATIONS

Se	eptember 30,	September 30,
	1998	1997
DEBT MATURING WITHIN ONE YEAR		
Commercial paper (net of \$495* expected to be refinanced)	\$2,106	\$2,364
Long-term debt	39	25
Other	86	149
TOTAL DEBT MATURING WITHIN ONE YEAR	\$2,231	\$2,538
Weighted Average Interest Rates		
Commercial paper	5.6%	5.5%
Long-term debt and other	7.9%	6.3%

Lucent had revolving credit facilities at September 30, 1998 aggregating \$5,211 (a portion of which is used to support Lucent's commercial paper program), \$4,000 with domestic lenders and \$1,211 with foreign lenders. At September 30, 1998, \$4,000 with domestic lenders and \$855 with foreign lenders were available.

Se	eptember 30,	September 30,
	1998	1997
LONG-TERM DEBT		
6.90% notes due July 15, 2001	\$ 750	\$ 750
7.25% notes due July 15, 2006	750	750
6.50% debentures due January 15, 2028	300	-
Commercial paper expected to be refinanced	495*	-
Long-term lease obligations	1	2
Other	164	198
Less: Unamortized discount	12	10
Total long-term debt	2,448	1,690
Less: Amounts maturing within one year	39	25
NET LONG-TERM DEBT	\$2,409	\$1,665

Lucent has an effective shelf registration statement for the issuance of debt securities up to \$3,500, of which \$1,160\* remains available at September 30, 1998.

This table shows the maturities, by year, of the \$2,448 in total long-term debt obligations:

\$39	\$71	\$773	\$14	\$14	\$1,537*
1999	2000	2001	2002	2003	Later Years
0					September 30,

\*On November 19, 1998, Lucent sold \$500 (\$495 net of unamortized costs) of 10-year 5.5% notes due November 15, 2008 and reclassified the amount from debt maturing within one year to long-term debt. The proceeds were used to pay down a portion of Lucent's commercial paper during the first quarter of fiscal 1999.

# 9. EMPLOYEE BENEFIT PLANS

### PENSION AND POSTRETIREMENT BENEFITS

Lucent maintains noncontributory defined benefit pension plans covering the majority of its employees and retirees, and postretirement benefit plans for the majority of its retirees that include health care benefits and life insurance coverage. Prior to October 1, 1996, Lucent's financial statements reflect estimates of the costs experienced for its employees and retirees while they were included in AT&T pension and postretirement plans.

Pension-related benefits for management employees are based principally on careeraverage pay while benefits for nonmanagement employees are not directly pay-related. Pension contributions are determined principally using the aggregate cost method and are made primarily to trust funds held for the sole benefit of plan participants.

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

The following table shows the Lucent plans' funded status reconciled with amounts reported in Lucent's consolidated balance sheets, and the assumptions used in determining the actuarial present value of the benefit obligation:

		Pension Benefits September 30,	Postre	etirement Benefits September 30,
	1998	1997	1998	1997
Plan assets at fair value	\$36,191	\$36,204	\$ 3,959	\$ 4,152
Less: benefit obligation	27,846	23,187	9,193	7,939
Funded (Unfunded) status				
of the plan	8,345	13,017	(5,234)	(3,787)
Unrecognized prior service costs .	1,509	1,048	533	261
Unrecognized transition asset	(944)	(1,244)	_	-
Unrecognized net gain	(5,175)	(9,669)	(408)	(1,256)
Net minimum liability of				
nonqualified plans	(27)	(23)	_	-
Prepaid (Accrued) benefit cost	\$ 3,708	\$ 3,129	\$(5,109)	\$(4,782)
Accumulated pension benefit				
obligation	\$26,799	\$22,669	n/a	n/a
Vested pension benefit				
obligation	\$25,112	\$21,246	n/a	n/a
Accumulated postretirement				
benefit obligation:				
Retirees	n/a	n/a	\$ 6,662	\$ 5,902
Fully eligible active plan				
participants	n/a	n/a	1,131	777
Other active plan participants	n/a	n/a	1,400	1,260
Accumulated postretirement benefit				
obligation	n/a	n/a	\$ 9,193	\$ 7,939
Assumptions:				
Weighted average discount rate	6.00%	7.25%	6.00%	7.25%
Rate of increase in future				
compensation levels	4.50%	4.50%	n/a	n/a

Pension plan assets consist primarily of listed stocks (of which \$126 and \$73 represent Lucent common stock at September 30, 1998 and 1997, respectively). Postretirement plan assets include listed stocks (of which \$11 and \$2 represent Lucent common stock at September 30, 1998 and 1997, respectively). Assets in both plans also include corporate and governmental debt, and cash and cash equivalents. Pension plan assets also include real estate investments, and postretirement plan assets also include life insurance contracts.

The prepaid pension benefit costs shown above are net of pension liabilities for plans where accumulated plan benefits exceed assets. Such liabilities are included in other liabilities in the consolidated balance sheets.

The following table shows the components of pension and postretirement costs for the periods indicated:

	Year Ende	d September 30, (Twelve Months)	Nine Months Ended September 30,
	1998	1997	1996
PENSION COST			
Service cost-benefits earned during the period	\$ 331	\$ 312	\$ 277
Interest cost on projected benefit obligation	1,631	1,604	1,172
Expected return on plan assets <sup>(1)</sup>	(2,384)	(2,150)	(1,589)
Amortization of unrecognized prior service costs	164	149	113
Amortization of transition asset	(300)	(300)	(222)
Charges (credits) for plan curtailments <sup>(2)</sup>	_	56	(16)
NET PENSION CREDIT	\$ (558)	\$ (329)	\$ (265)
POSTRETIREMENT COST			
Service cost-benefits earned during the period Interest cost on accumulated	\$ 63	\$ 57	\$ 51
postretirement benefit obligation	540	554	408
Expected return on plan assets <sup>(3)</sup>	(263)	(264)	(189)
Amortization of unrecognized prior service costs.	53	35	53
Amortization of net loss (gain)	3	(15)	8
Charges (credits) for plan curtailments <sup>(2)</sup>	_	26	(2)
NET POSTRETIREMENT BENEFIT COST	\$ 396	\$ 393	\$ 329

(1) A 9.0% long-term rate of return on pension plan assets was assumed for 1998, 1997 and 1996. The actual return on plan assets was \$1,914 and \$8,523 for the years ended September 30, 1998 and 1997, respectively, and \$2,204 for the nine-month period ended September 30, 1996.

(2) The 1997 pension and postretirement charges for plan curtailments of \$56 and \$26, respectively, reflect the final determination of 1996 curtailment effects.

(3) A 9.0% long-term rate of return on postretirement plan assets was assumed for 1998, 1997 and 1996. The actual return on plan assets was \$349 and \$1,040 for the years ended September 30, 1998 and 1997, respectively, and \$219 for the nine-month period ended September 30, 1996.

Pension cost was computed using the projected unit credit method. Lucent is amortizing over approximately 16 years the unrecognized pension transition asset related to the adoption of SFAS No. 87, "Employers' Accounting for Pensions," in 1986. Prior service pension costs are amortized primarily on a straight-line basis over the average remaining service period of active employees.

For postretirement benefit plans, Lucent assumed a 5.5% annual rate of increase in the per capita cost of covered health care benefits (the health care cost trend rate) for 1999, gradually declining to 4.9% by the year 2005, after which the costs would remain level. This assumption has a significant effect on the amounts reported. Increasing the assumed trend rate by 1% in each year would increase Lucent's accumulated postretirement benefit obligation as of September 30, 1998 by \$358 and the interest and service cost by \$30 for the year then ended.

### SAVINGS PLANS

Lucent's savings plans allow employees to contribute a portion of their pre-tax and/or after tax income in accordance with specified guidelines. Lucent matches a percentage of employee contributions up to certain limits. Beginning in 1998, Lucent changed its savings plan for management employees to provide for both a fixed and a variable matching contribution. The fixed match is 50% of qualified management employee contributions and the variable match is based on Company performance. For 1998, Lucent's total match of qualified management employee contributions is 109% as compared with  $667/_{3}\%$  in prior years. Qualified nonmanagement employee contributions continued to be matched at a  $662/_{3}\%$  rate. Savings plan expense amounted to \$311 and \$180 for the years ended September 30, 1998 and 1997, respectively, and \$131 for the nine-month period ended September 30, 1996.

### EMPLOYEE STOCK OWNERSHIP PLAN

Lucent's leveraged Employee Stock Ownership Plan ("ESOP") funds the employer's contributions to the Long-Term Savings and Security Plan ("LTSSP") for nonmanagement employees. The ESOP obligation is reported as debt and as a reduction in shareowners' equity. Cash contributions to the ESOP are determined based on the ESOP's total debt service less dividends paid on ESOP shares. As of September 30, 1998, the ESOP contained 10.4 million shares of Lucent's common stock. Of the 10.4 million shares, 8.2 million have been allocated to the LTSSP Plan and 2.2 million were unallocated. As of September 30, 1998, the unallocated shares had a fair value of \$154.

### **10. STOCK COMPENSATION PLANS**

Lucent has stock-based compensation plans under which certain employees receive stock options and other equity-based awards. Effective October 1, 1996, any AT&T awards held by Lucent employees were replaced by substitute awards under the Lucent Technologies Inc. 1996 Long-Term Incentive Program ("1996 LTIP").

The 1996 LTIP provides for the grant of stock options, stock appreciation rights, performance awards, restricted stock awards and other stock unit awards. Awards under the 1996 LTIP are generally made to executives. Lucent also awards stock options to selected employees below executive levels under the Lucent Technologies Inc. 1997 Long-Term Incentive Plan ("1997 LTIP"). In addition, the Company has made special, broad-based grants under the Lucent Technologies Inc. Founders Grant Stock Option Plan ("FGP") (1996 world-wide option grants) and the Lucent Technologies Inc. 1998 Global Stock Option Plan ("GSOP") (1998 world-wide option grants to management employees).

Stock options are granted with an exercise price equal to or greater than 100% of market value at the date of grant, generally have a ten-year term and vest within four years from the date of grant. Subject to customary anti-dilution adjustments and certain exceptions, the total number of shares of Common Stock authorized for option grants under the 1996 LTIP is 64 million shares between February 1998 and February 2003. Under the 1997 LTIP, the number of shares authorized for option grants in each calendar

year is 1.3% of the total number of outstanding shares of Common Stock as of the first day of the calendar year. The total number of shares of Common Stock originally authorized for grant under the FGP and GSOP are 30 million and 18 million, respectively.

In connection with several of Lucent's acquisitions (see Note 1), outstanding stock options held by employees of acquired companies will become exercisable, according to their terms, for Lucent common stock effective at the acquisition date. The fair value of these options was included as part of the purchase price related to the acquisition. These options did not reduce the shares available for grant under any of Lucent's other option plans.

Lucent established an Employee Stock Purchase Plan (the "ESPP") effective October 1, 1996. Under the terms of the ESPP, eligible employees may have up to 10% of eligible compensation deducted from their pay to purchase Common Stock through June 30, 2001. On the date of exercise, which is the last trading day of each month, the per share purchase price is 85% of the average high and low per share trading price of Common Stock on the New York Stock Exchange on that date. The amount that may be offered pursuant to this plan is 100 million shares. In 1998 and 1997, 4.2 million and 6.2 million shares, respectively, were purchased under the ESPP at a weighted average price of \$49.02 and \$25.15, respectively.

Lucent has adopted the disclosure requirements of SFAS No. 123, "Accounting for Stock-Based Compensation" and, as permitted under SFAS No. 123, applies Accounting Principles Board Opinion ("APB") No. 25 and related interpretations in accounting for its plans. Compensation expense recorded under APB No. 25 was \$73 and \$36 for the years ended September 30, 1998 and 1997, respectively, and \$11 for the nine months ended September 30, 1996. If Lucent had elected to adopt the optional recognition provisions of SFAS No. 123 for its stock option plans and the ESPP, net income and earnings per share would have been changed to the pro forma amounts indicated below:

	Year Ended September 30, (Twelve Months)		Nine Months Ended September 30,
	1998	1997	1996
NET INCOME			
As reported	\$ 970	\$ 541	\$ 224
Pro forma	\$ 799	\$ 444	\$ 202
EARNINGS PER SHARE-BASIC			
As reported	\$0.74	\$0.42	\$0.19
Pro forma	\$0.61	\$0.35	\$0.17
EARNINGS PER SHARE-DILUTED			
As reported	\$0.73	\$0.42	\$0.19
Pro forma	\$0.58	\$0.34	\$0.17

Note: The pro forma disclosures shown include the incremental fair value of the Lucent stock options that were substituted for AT&T stock options at the time of the Distribution and may not be representative of the effects on net income and earnings per share in other years.

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

The fair value of stock options used to compute pro forma net income and earnings per share disclosures is the estimated fair value at grant date using the Black-Scholes option-pricing model with the following assumptions:

		Lucent		AT&T
WEIGHTED AVERAGE ASSUMPTIONS	(1)	(2)	(3)	(4)
Dividend yield	0.26%	0.65%	0.75%	2.4%
Expected volatility	28.2%	22.4%	22.4%	19.4%
Risk-free interest rate	5.5%	6.4%	6.1%	6.4%
Expected holding period (in years)	4.7	5.1	4.5	5.0

(1) Assumptions for Lucent options awarded during 1998.

(2) Assumptions for Lucent options awarded during 1997.

(3) Assumptions for Lucent options substituted for AT&T options effective October 1, 1996.

(4) Assumptions for AT&T options awarded in 1996.

Presented below is a summary of the status of Lucent stock options and the related transactions for the years ended September 30, 1998 and 1997. Also shown is a summary of the status of the AT&T stock options held by Lucent's employees and the related transactions for the nine months ended September 30, 1996.

	Shares (000's)	Weighted Average Exercise Price
AT&T options outstanding at December 31, 1995	12,784	\$23.72
Granted	3,380	32.91
Exercised	(366)	19.14
Forfeited/Expired	(6)	31.59
AT&T options outstanding at September 30, 1996	15,792	25.68
Lucent options substituted for AT&T options, and		
outstanding at October 1, 1996	19,572	20.72
Granted <sup>(1) (2)</sup>	51,245	23.19
Exercised	(4,044)	16.78
Forfeited/Expired	(1,960)	23.80
Lucent options outstanding at September 30, 1997	64,813	22.83
Granted <sup>(2) (3)</sup>	41,613	58.07
Exercised	(10,781)	17.63
Forfeited/Expired	(2,045)	24.12
Lucent options outstanding at September 30, 1998	93,600	\$39.06

(1) Includes options covering 25,506 shares of Common Stock granted under the FGP in 1996 (at a weighted average exercise price of \$22.31). No additional options will be granted under the FGP.

(2) Includes options covering 5, 192 and 4,942 shares of Common Stock, which resulted from the conversion of options of acquired companies for the years ended September 30, 1998 and 1997, respectively (at a weighted average exercise price of \$10.09 and \$20.00, respectively). No additional options will be granted under the converted plans of acquired companies.

(3) Includes options covering 16,178 shares of Common Stock granted under the GSOP on September 1, 1998 (at a weighted average exercise price of \$74.69).

The weighted average fair value of Lucent stock options, calculated using the Black-Scholes option-pricing model, granted during the years ended September 30, 1998 and 1997 is \$24.53 and \$7.30 per share, respectively. The weighted average fair value of AT&T stock options, calculated using the Black-Scholes option-pricing model, granted during the nine months ended September 30, 1996 is \$7.07 per share.

The following table summarizes the status of Lucent's stock options outstanding and exercisable at September 30, 1998:

				Stock Options Outstanding	Stock Options Exercisable
Range of Exercise Prices	Shares (000's)	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Shares (000's)	Weighted Average Exercise Price
\$ 0.04 to \$21.30	9,561	5.2	\$15.42	6,531	\$16.61
\$21.31 to \$22.28	32,218(1)	8.0	22.28	721	22.20
\$22.29 to \$26.28	10,587	7.9	25.01	1,200	24.73
\$26.29 to \$43.33	15,414	8.5	38.68	2,845	31.64
\$43.34 to \$91.66	25,820	9.9	74.75	79	61.62
TOTAL	93,600		\$39.06	11,376	\$21.89

(1) Note: One-half of the options granted to nonmanagement employees under the FGP, covering approximately 3,890 shares, became exercisable on October 1, 1998.

Other stock unit awards are granted under the 1996 LTIP. Presented below is the total number of shares of Common Stock represented by awards granted to Lucent employees for the years ended September 30, 1998 and 1997, and the total number of AT&T shares represented by awards granted to Lucent employees for the nine-month period ended September 30, 1996:

	Year Ended September 30, (Twelve Months)		Nine Months Ended September 30,
	1998	1997	1996
Lucent shares granted (000's)	795	4,282	n/a
AT&T shares granted (000's)	n/a	n/a	524
Weighted average market value of shares			
granted during the period	\$44.15	\$23.19	\$33.12

# 11. SEGMENT INFORMATION

### **INDUSTRY SEGMENT**

Lucent operates in the global communications networking industry segment. This segment includes wire-line and wireless systems, software and products used for voice, data and video communications.

### **GEOGRAPHIC SEGMENTS**

Transfers between geographic areas are on terms and conditions comparable with sales to external customers. The methods followed in developing the geographic segment data require the use of estimates and do not take into account the extent to which product development, manufacturing and marketing depend on each other. Thus, the information may not be indicative of results if the geographic areas were independent organizations.

Corporate assets are principally cash and temporary cash investments. Data on other geographic areas pertain to operations that are located outside the United States. Revenues from all international activities (other geographic areas revenues plus export revenues) provided 25.7% and 24.1% of consolidated revenues for the years ended September 30, 1998 and 1997, respectively, and 23.1% for the nine-month period ended September 30, 1996.

	Year Ended September 30, (Twelve Months)		Nine Months Ended September 30,
	1998	1997	1996
REVENUES			
United States	\$24,416	\$21,807	\$13,334
Other geographic areas	5,731	4,553	2,525
	\$30,147	\$26,360	\$15,859
TRANSFERS BETWEEN GEOGRAPHIC AREAS (Eliminated in Consolidation)			
United States	\$ 2,371	\$ 1,927	\$ 1,353
Other geographic areas	1,544	1,267	648
	\$ 3,915	\$ 3,194	\$ 2,001
OPERATING INCOME (LOSS)			
United States	\$ 2,328 <sup>(1)</sup>	\$ 1,514 <sup>(2)</sup>	\$ 940
Other geographic areas	525	410	(108)
Corporate, eliminations and nonoperating	(547)	(457)	(465)
Income before income taxes	\$ 2,306	\$ 1,467	\$ 367
ASSETS (End of Period)			
United States	\$19,665	\$17,054	\$16,492
Other geographic areas	6,755	5,600	3,912
Corporate assets	1,282	1,778	2,744
Eliminations	(982)	(621)	(522)
	\$26,720	\$23,811	\$22,626

(1) Includes charges of \$1,416 of purchased in-process research and development costs associated with the acquisitions of Livingston, Prominet, Optimay, Yurie, SDX, LANNET, MassMedia and JNA.

(2) Includes charges of \$1,024 of purchased in-process research and development costs associated with the acquisitions of Octel and Agile.

### CONCENTRATIONS

Historically, Lucent has relied on a limited number of customers for a substantial portion of its total revenues. In terms of total revenues, Lucent's largest customer has been AT&T, although other customers may purchase more of any particular system or product line. Revenues from AT&T were \$3,775 and \$3,731 for the years ended September 30, 1998 and 1997, respectively, and \$1,970 for the nine-month period ended September 30, 1996. Lucent expects that a significant portion of its future revenues will continue to be generated by a limited number of customers. The loss of any of these customers or any substantial reduction in orders by any of these customers could materially adversely affect Lucent's operating results. Lucent does not have a concentration of available sources of supply materials, labor, services or other rights that, if suddenly eliminated, could severely impact its operations.

### 12. FINANCIAL INSTRUMENTS

The carrying values and estimated fair values of financial instruments, including derivative financial instruments were as follows:

	Carrying Amount	Fair Value	Carrying Amount	Fair Value
		September 30,		September 30,
		1998		1997
ASSETS				
Derivative and Off Balance Sheet				
Instruments:				
Foreign currency forward exchange				
contracts/purchased options	\$ 26	\$ 4	\$ 28	\$ 54
Letters of credit	-	2	-	2
LIABILITIES				
Long-term debt <sup>(1) (2)</sup>	\$2,408	\$2,559	\$1,663	\$1,748
Derivative and Off Balance Sheet				
Instruments:				
Foreign currency forward exchange				
contracts/purchased options	25	(4)	31	36

<sup>(1)</sup> Excluding long-term lease obligations of \$1 at September 30, 1998 and \$2 at September 30, 1997.

(2) Reflects the reclassification from debt maturing within one year to long-term debt as a result of the November 19, 1998 sale of \$500 (\$495 net of unamortized costs) of 10-year notes.

The following methods were used to estimate the fair value of each class of financial instruments:

Valuation Method
Market quotes for instruments with similar terms
and maturities
Market quotes
Fees paid to obtain the obligations

The carrying values of cash and cash equivalents, accounts receivable and debt maturing within one year contained in the consolidated balance sheets approximate fair value.

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

### CREDIT RISK AND MARKET RISK

By their nature, all financial instruments involve risk, including credit risk for nonperformance by counterparties. The contract or notional amounts of these instruments reflect the extent of involvement Lucent has in particular classes of financial instruments. The maximum potential loss may exceed any amounts recognized in the consolidated balance sheets. However, Lucent's maximum exposure to credit loss in the event of nonperformance by the other party to the financial instruments for commitments to extend credit and financial guarantees is limited to the amount drawn and outstanding on those instruments.

Lucent seeks to reduce credit risk on financial instruments by dealing only with financially secure counterparties. Exposure to credit risk is controlled through credit approvals, credit limits and monitoring procedures. Lucent seeks to limit its exposure to credit risks in any single country or region.

All financial instruments inherently expose the holders to market risk, including changes in currency and interest rates. Lucent manages its exposure to these market risks through its regular operating and financing activities and when appropriate, through the use of derivative financial instruments.

### DERIVATIVE FINANCIAL INSTRUMENTS

Lucent conducts its business on a multi-national basis in a wide variety of foreign currencies. Consequently, Lucent enters into various foreign exchange forward and purchased option contracts to manage its exposure against adverse changes in those foreign exchange rates. The notional amounts for foreign exchange forward and purchased option contracts represent the U.S. dollar equivalent of an amount exchanged. Generally, foreign currency forward exchange contracts are designated for firmly committed or forecasted sales and purchases that are expected to occur in less than one year. Gains and losses on firmly committed transactions are deferred in other current assets and liabilities and are not material to the consolidated financial statements at September 30, 1998 and 1997. Gains and losses on foreign currency exchange contracts that are designated for forecasted transactions are recognized in other income as the exchange rates change. The following table presents the gross notional amounts of these derivative financial instruments in U.S. dollars:

	Gross Notional Amount September 30,
1998	1997
FOREIGN EXCHANGE FORWARD CONTRACTS	
Singapore dollars \$ 247	\$ 59
Deutsche marks	558
British pounds 185	136
Australian dollars	1
Japanese yen 120	249
Spanish pesetas 113	109
Dutch guilders 110	186
Brazilian reals	58
French francs	116
Other 186	270
TOTAL	\$1,742
FOREIGN EXCHANGE PURCHASED OPTION CONTRACTS	
Canadian dollars \$ 66	\$ -
Singapore dollars	-
Other 4	
TOTAL \$ 130	\$ -

Lucent enters into certain interest rate swap agreements to manage its risk between long-term fixed rate and short-term variable rate instruments. Interest rate swap agreements were not material during 1998 and 1997.

### NONDERIVATIVE AND OFF BALANCE SHEET INSTRUMENTS

Requests for providing commitments to extend credit and financial guarantees are reviewed and approved by senior management. Management regularly reviews all outstanding commitments, letters of credit and financial guarantees, and the results of these reviews are considered in assessing the adequacy of Lucent's reserve for possible credit and guarantee losses. At September 30, 1998 and 1997, in management's opinion, there was no significant risk of loss in the event of nonperformance of the counterparties to these financial instruments.

The following table presents the contract amount of Lucent's nonderivative and off balance sheet instruments and the amounts drawn down on such instruments. These instruments may exist or expire without being drawn upon. Therefore, the total contract amount does not necessarily represent future cash flows.

		Contract Amount		Amounts Drawn Down and Outstanding
		September 30,		September 30,
	1998	1997	1998	1997
Letters of credit	\$ 804	\$ 832	\$ -	\$ -
Commitments to extend credit	2,312	1,898	399	25
Guarantees of debt	292	309	205	118

### LETTERS OF CREDIT

Letters of credit are purchased guarantees that ensure Lucent's performance or payment to third parties in accordance with specified terms and conditions.

### COMMITMENTS TO EXTEND CREDIT

Commitments to extend credit to third parties are legally binding, conditional agreements generally having fixed expiration or termination dates and specific interest rates and purposes.

Lucent may enter into credit agreements to provide long-term financing for customers. In October 1996, Lucent entered into an agreement to extend \$1,800 of longterm financing to Sprint Spectrum Holdings LP ("Sprint PCS") for its purchase of Lucent's equipment and services for its nationwide personal communication services ("PCS") network. In 1997, Lucent closed transactions under this facility to lay off \$500 of loans and undrawn commitments and \$300 of undrawn commitments to a group of institutional investors and Sprint Corporation (a partner in Sprint PCS), respectively. In 1998, Lucent sold \$645 of loans in a private sale. As of September 30, 1998 and 1997, the balance of these commitments not yet drawn down by Sprint PCS were \$253 and \$146, respectively, and the total drawn loans due were \$226 and \$17, respectively.

As part of the revenue recognition process, Lucent has assessed the collectibility of the accounts receivable relating to the Sprint PCS purchase contract in light of its financing commitment to Sprint PCS. Lucent has determined that the receivables under the contract are reasonably assured of collection based on various factors among which was the ability of Lucent to sell the loans and commitments without recourse. Lucent intends to continue pursuing opportunities for the sale of future loans and commitments.

In addition, Lucent also entered into agreements with others to extend credit up to an aggregate of approximately \$1,371 in 1998 and \$850 in 1997 for possible future sales.

### **GUARANTEES OF DEBT**

From time to time, Lucent guarantees the financing for product purchases by customers and the debt of certain unconsolidated joint ventures. Requests for providing such guarantees are reviewed and approved by senior management. Certain financial guarantees are backed by amounts held in trust for Lucent or assigned to a third party reinsurer.

# 13. COMMITMENTS AND CONTINGENCIES

In the normal course of business, Lucent is subject to proceedings, lawsuits and other claims, including proceedings under government laws and regulations related to environmental and other matters. Such matters are subject to many uncertainties, and outcomes are not predictable with assurance. Consequently, the ultimate aggregate amount of monetary liability or financial impact with respect to these matters at September 30, 1998 cannot be ascertained. While these matters could affect the operating results of any one quarter when resolved in future periods and while there can be no assurance with respect thereto, management believes that after final disposition, any monetary liability or financial impact to Lucent beyond that provided for at September 30, 1998 would not be material to the annual consolidated financial statements.

In connection with the Separation and Distribution, Lucent, AT&T and NCR Corporation executed and delivered the Separation and Distribution Agreement, dated as of February 1, 1996, as amended and restated (the "Separation and Distribution Agreement"), and certain related agreements. The Separation and Distribution Agreement, among other things, provides that Lucent will indemnify AT&T and NCR for all liabilities relating to Lucent's business and operations and for all contingent liabilities relating to Lucent's business and operations or otherwise assigned to Lucent. In addition to contingent liabilities relating to AT&T's discontinued computer operations (other than those of NCR) were assigned to Lucent. The Separation and Distribution Agreement provides for the sharing of contingent liabilities not allocated to one of the parties, in the following proportions: AT&T: 75%, Lucent: 22%, and NCR: 3%. The Separation and Distribution Agreement also provides that each party will share specified portions of contingent liabilities related to the business of any of the other parties that exceed specified levels.

### ENVIRONMENTAL MATTERS

Lucent's current and historical operations are subject to a wide range of environmental protection laws. In the United States, these laws often require parties to fund remedial action regardless of fault. Lucent has remedial and investigatory activities underway at numerous current and former facilities. In addition, Lucent was named a successor to AT&T as a potentially responsible party ("PRP") at numerous "Superfund" sites pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA") or comparable state statutes. Under the Separation and Distribution Agreement, Lucent is responsible for all liabilities primarily resulting from or relating to the operation of Lucent's business as conducted at any time prior to or after the Separation including related businesses discontinued or disposed of prior to the Separation, and Lucent's assets including, without limitation, those associated with these sites. In addition, under such Separation and Distribution Agreement, Lucent is required to pay a portion of contingent liabilities paid out in excess of certain amounts by AT&T and NCR, including environmental liabilities.

(DOLLARS IN MILLIONS, EXCEPT PER SHARE AMOUNTS)

It is often difficult to estimate the future impact of environmental matters, including potential liabilities. Lucent records an environmental reserve when it is probable that a liability has been incurred and the amount of the liability is reasonably estimable. This practice is followed whether the claims are asserted or unasserted. Management expects that the amounts reserved will be paid out over the periods of remediation for the applicable sites which range from 5 to 30 years. Reserves for estimated losses from environmental remediation are, depending on the site, based primarily upon internal or third-party environmental studies, and estimates as to the number, participation level and financial viability of any other PRPs, the extent of the contamination and the nature of required remedial actions. Accruals are adjusted as further information develops or circumstances change. The amounts provided for in Lucent's consolidated financial statements for environmental reserves are the gross undiscounted amount of such reserves, without deductions for insurance or third-party indemnity claims. In those cases where insurance carriers or third-party indemnitors have agreed to pay any amounts and management believes that collectibility of such amounts is probable, the amounts are reflected as receivables in the financial statements. Although Lucent believes that its reserves are adequate, there can be no assurance that the amount of capital expenditures and other expenses which will be required relating to remedial actions and compliance with applicable environmental laws will not exceed the amounts reflected in Lucent's reserves or will not have a material adverse effect on Lucent's financial condition, results of operations or cash flows. Any amounts of environmental costs that may be incurred in excess of those provided for at September 30, 1998 cannot be determined.

### LEASE COMMITMENTS

Lucent leases land, buildings and equipment under agreements that expire in various years through 2016. Rental expense under operating leases was \$408 and \$324 for the years ended September 30, 1998 and 1997, respectively, and \$182 for the nine-month period ended September 30, 1996. The table below shows the future minimum lease payments due under noncancelable operating leases at September 30, 1998. Such payments total \$876.

					Year I	Ended September 30,
	1999	2000	2001	2002	2003	Later Years
Operating leases	\$250	\$188	\$113	\$74	\$55	\$196

### 14. QUARTERLY INFORMATION (UNAUDITED)

				FISCAL YI	EAR QUARTERS
	FIRST	SECOND	THIRD	FOURTH	TOTAL
YEAR ENDED					
SEPTEMBER 30, 1998					
Revenues	\$ 8,724	\$6,157	\$7,228	\$ 8,038	\$30,147
Gross margin	4,205	2,724	3,279	3,783	13,991
Net income (loss)	792 <sup>(a)</sup>	23 <sup>(b)</sup>	(233) <sup>(c)</sup>	388 <sup>(d)</sup>	970 <sup>(a,b,c,d)</sup>
Earnings (loss) per					
common share-basic	\$ 0.62 <sup>(a)</sup>	\$ 0.02 <sup>(b)</sup>	\$ (0.18) <sup>©</sup>	\$ 0.30 <sup>(d)</sup>	\$ 0.74 <sup>(a,b,c,d)</sup>
Earnings (loss) per					
common share-diluted	\$ 0.61 <sup>(a)</sup>	\$ 0.02 <sup>(b)</sup>	\$ (0.18) <sup>©</sup>	\$ 0.29 <sup>(d)</sup>	\$ 0.73 <sup>(a,b,c,d)</sup>
Dividends per share	\$ 0.075	\$ 0.00	\$ 0.04	\$ 0.04	\$ 0.155
Stock price: <sup>(f)</sup>					
High	45¾ <sub>32</sub>	641/8	<b>83</b> <sup>1</sup> <b>/</b> <sub>16</sub>	1081/2	1081/2
Low	363/16	<b>36</b> <sup>23</sup> / <sub>32</sub>	64	68¾	<b>36</b> <sup>3</sup> / <sub>16</sub>
Quarter-end close	<b>39</b> <sup>15</sup> / <sub>16</sub>	<b>63</b> <sup>15</sup> / <sub>16</sub>	<b>83</b> <sup>3</sup> / <sub>16</sub>	691/4	691/4
YEAR ENDED					
SEPTEMBER 30, 1997					
Revenues	\$ 7,938	\$ 5,149	\$ 6,340	\$ 6,933	\$ 26,360
Gross margin	3,642	2,168	2,600	3,052	11,462
Net income (loss)	859	66	213	(597) <sup>(e)</sup>	541 <sup>(e)</sup>
Earnings (loss) per					
common share-basic	\$ 0.67	\$ 0.05	\$ 0.17	\$ (0.47) <sup>(e)</sup>	\$ 0.42 <sup>(e)</sup>
Earnings (loss) per				-	

Earnings (loss) per \$ 0.05 \$ 0.17 \$ (0.47)<sup>(e)</sup> \$ 0.42<sup>(e)</sup> common share-diluted \$ 0.67 Dividends per share .... \$0.0375 \$ 0.000 \$0.0375 \$0.0375 \$ 0.1125 Stock price:(f) 26%16 305/16 37 3/32  $45^{3}/_{8}$  $45^{3}/_{8}$ High .... 22 3/8 211/16 24<sup>15</sup>/16 363/32 211/16 Low . . . . . . . . . . . . . . Quarter-end close 231/8 261/4 361/32  $40^{11}/_{16}$ 4011/16

(a) As a result of the 1998 acquisition of Livingston, Lucent recorded a non-tax charge of \$427 in the first quarter for purchased in-process research and development.

(b) As a result of the 1998 acquisition of Prominet, Lucent recorded a non-tax charge of \$157 in the second quarter for purchased in-process research and development.

(c) As a result of the 1998 acquisitions of Yurie and Optimay, Lucent recorded a non-tax charge of \$668 in the fourth quarter for purchased in-process research and development.

(d) As a result of the 1998 acquisitions of SDX, MassMedia, LANNET and JNA, Lucent recorded a charge of \$164 (\$160 after tax) in the fourth quarter for purchased in-process research and development.

(e) As a result of the 1997 acquisition of Octel, Lucent recorded a charge of \$979 (\$966 after tax) in the fourth quarter for purchased in-process research and development and other charges.

(f) Obtained from the Composite Tape. Stock prices have been restated to reflect the two-for-one split of the Company's common stock effective April 1, 1998.

# 15. SUBSEQUENT EVENTS

### Quadritek Systems, Inc.

On October 1, 1998, Lucent acquired Quadritek Systems, Inc. for approximately \$50 in cash. Quadritek is a privately held start-up company which develops next-generation Internet Protocol ("IP") network administration software solutions. The acquisition will be accounted for using the purchase method of accounting.

Included in the purchase price was approximately \$21 (\$13 after tax) of in-process research and development which will result in a noncash charge to earnings in the quarter ending December 31, 1998. The remaining purchase price will be allocated to tangible assets and intangible assets, including goodwill and existing technology, less liabilities assumed.

### **Philips Consumer Communications**

On October 22, 1998, Lucent and Philips announced their intention to end the PCC venture. On October 1, 1997, Lucent contributed its consumer products business in exchange for 40% ownership of the PCC venture. It is expected Lucent and Philips will each regain control of their original businesses by November 30, 1998. Lucent plans to close down the wireless handset business it previously contributed to PCC and to sell the remaining businesses. Lucent expects that these activities will be completed during the first calendar quarter of 1999.

### WinStar Communications, Inc.

On October 22, 1998, Lucent announced that it had entered into a five-year agreement with WinStar Communications, Inc. to provide WinStar with a fixed wireless broadband telecommunications network in major domestic and international markets. In connection with this agreement, Lucent entered into a credit agreement with WinStar to provide up to \$2,000 in equipment financing to fund the buildout of this network. The maximum amount of credit that Lucent is obligated to extend to WinStar at any one time is \$500.

# SOCIAL RESPONSIBILITY

### LUCENT TECHNOLOGIES FOUNDATION

The Lucent Technologies Foundation, with an annual budget of about \$32 million, helps young people around the world realize their highest potential through programs such as:

- Project GRAD (Graduation Really Achieves Dreams), which aims to raise student achievement in reading, writing and math at Newark, N.J., schools and thereby increase the number of high school graduates and college enrollees.
- Outreach grants for colleges and universities seeking to improve kindergarten through 12th grade education in partnership with public schools.
- Funding to identify best practices for teacher development through peer mentoring relationships.
- Awards and other support for students who are top achievers in science and math.
- Lucent Links, which creates opportunities for young people of diverse backgrounds to work together so they can learn how to thrive in a diverse world.
- Our matching gifts program, which provides a dollar-for-dollar match for the gifts our employees make to education around the world, and to arts and culture organizations in the United States.

### DIVERSITY

Lucent deeply values diversity in its work force, suppliers and global customers, recognizing that diversity provides a competitive business advantage. Through our Minority and Women's Business Enterprises (MWBE) initiative, we ensure that we provide maximum opportunity to qualified minority- and women-owned businesses to participate as suppliers, contractors and subcontractors of goods and services to us. You may view Lucent's latest MWBE report at: www.lucent.com/mwbe





More than 13,000 Lucent employees, retirees and friends made Lucent's third annual Global Days of Caring on September 26 and 27 a success. They volunteered at nearly 300 community projects in 20 different countries, including an elementary school in Plainfield, N.J.

### ENVIRONMENT, HEALTH AND SAFETY

Lucent Technologies has established aggressive goals for protecting and preserving the environment and the health and safety of our employees. By 2000 we will:

- Have in place environment, health and safety management systems, based on recognized standards, for at least 95 percent of our products, services, operations and facilities.
- Reduce our lost workday accident rate by 30 percent as we move toward our long-term objective of zero on-the-job injuries.
- Develop and apply Design for Environment criteria to produce competitive, environmentally preferable products and services.
- Improve the energy efficiency of our operations to prevent the emission of at least 135,000 metric tons of greenhouse gases.
- Recycle at least 70 percent of our wastepaper.

In support of these goals, we will continue to recognize our employees' achievements at work and in their communities through Lucent's Environmental Heroes program.

For more information, please view our most recent Environment, Health and Safety Report at: www.lucent.com/environment

# INFORMATION FOR OUR INVESTORS

### SHAREOWNER SERVICES

If you are a registered shareowner and have a question about your account, or you would like to report a change in your name or address, please call Lucent's shareowner services and transfer agent, The Bank of New York, toll-free at 1 888 LUCENT6 (1 888 582-3686). If you are outside the United States, call collect at 973 357-7230. If you use a telecommunications device for the deaf (TDD) or a teletypewriter (TTY), call 1 800 711-7072. Customer service representatives are available Monday through Friday from 8 a.m. to 6 p.m. Eastern time. During dividend payment months (December, March, June and September), customer service representatives are available Monday through Friday from 8 a.m. to 8 p.m. and Saturday from 9 a.m. to 3 p.m. Shareowners also may send questions electronically to the e-mail address at The Bank of New York: lu-shareholders-svcs@email.bony.com

Or you may write to:

Lucent Technologies, c/o The Bank of New York, P. O. Box 11009, Church Street Station, New York, NY 10286-1009

### ANNUAL SHAREOWNERS' MEETING

The 1999 annual meeting of shareowners will be held at 9 a.m. Wednesday, Feb. 17, 1999, at The Playhouse Theatre, DuPont Building, 10th and Market streets, Wilmington, Del. As a convenience, shareowners of record may vote their proxies via the Internet at http://lucent.proxyvoting.com. Or to vote by phone, call toll-free 1 800 293-5876. If a brokerage firm holds your shares, you may also be able to vote over the Internet or by telephone. To find out how, please consult the information from your broker.

### QUARTERLY EARNINGS

Lucent usually reports its earnings during the third week of January, April, July and October. Also, Lucent distributes a quarterly shareowners' report in conjunction with three of its four dividend distributions, on the first day of March, June and September.

### STOCK DATA

Lucent stock is traded in the United States on the New York Stock Exchange under the ticker symbol LU. Shares outstanding as of October 1, 1998: 1,316,414,445. Shareowners of record as of October 1, 1998: 1,801,538.

### DIVIDEND REINVESTMENT PLAN

The BuyDIRECT\* dividend reinvestment and direct stock purchase plan provides a convenient way to reinvest dividends and purchase initial/additional shares of Lucent stock. You may call The Bank of New York directly at 1 888 LUCENT6 (1 888 582-3686) for a plan brochure and enrollment form or write directly to the address above. Also, please visit The Bank of New York's stock transfer Web site to view the plan brochure online or to download an enrollment form: http://stock.bankofny.com/lucent

### **COPIES OF REPORTS**

If you would like to order additional copies of this report, please call 1 888 LUCENT6 (1 888 582-3686). To view this report and investor highlights online, or to order copies of our latest filings with the U.S. Securities and Exchange Commission, please visit our Investor Relations Web site at: http://www.lucent.com/investor

### **OTHER INFORMATION**

#### Headquarters:

Lucent Technologies, 600 Mountain Avenue, Murray Hill, NJ 07974-0636

For information about products and services, call our special toll-free number: 1 888 4LUCENT (1 888 458-2368).

### VISIT US ON THE WEB AT www.lucent.com

Investor Information www.lucent.com/investor

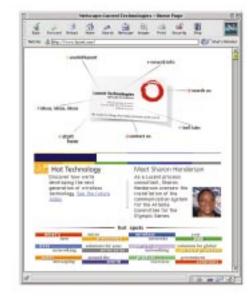
Customer Information *www.lucent.com/what* 

Products and Services www.lucent.com/product

Latest News www.lucent.com/press

Employment www.lucent.com/work

Technology E-zine www.lucent.com/context



While you were reading this annual report (about half an hour), 2,800 people logged onto the Internet for the first time, 4,000 new customers signed up for cellular phone service, 19 million voice-mail messages were left and 154 million e-mails were sent. (Looks like 1999 is going to be another busy year.)

