



## Annual General Meeting

The Annual General Meeting will be held in the Berwald Hall, Strandvägen 69, Stockholm, at 5.00 p.m. Tuesday, May 8, 1990. For further information, see page 57.

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### Cover

The U.S.A. is one of Ericsson's most important markets for cellular mobile telephone systems. Nearly every fourth mobile subscriber in the U.S.A. is calling in a system from Ericsson. The systems consist of radio base stations which are tied together by AXE switches. This radio base station operates in Los Angeles.

### Fact panels

This annual report has been written for a broad target group of shareholders, including both those who have, and those who lack professional background knowledge. A number of technical and economic terms in the text are explained in special side bars in order to make this report easier to read. Explanations of this sort cannot always be complete, however, for which we request your indulgence. If you would like further information, please feel free to contact the Ericsson Investor Relations functions. (See page 56)



# Telefonaktiebolaget LM Ericsson

Annual Report 1989

(SEK m. = millions of Swedish kronor)

## Highlights

	1989	1988	Percent change
	SEK m.	SEK m.	
Net sales	39,549	31,297	26
Order bookings	42,045	35,633	18
Order backlog at year-end	29,426	26,876	9
Income before appropriations and taxes	3,715	1,840	102
Adjusted net income per share after taxes paid, SEK after full conversion	58.34	27.06	116
Adjusted net income per share after paid and estimated deferred taxes on appropriations, SEK after full conversion	55.35	24.07	130
Dividend per share, SEK	53.81	31.29	72
	51.18	27.79	84
	14.00*	10.50	33

\* For 1989, proposed by the Board of Directors

ISDN (Integrated Services Digital Network) installed by Jydsk Telefoni A/S in Århus, Denmark. Practical experiments with this type of simultaneous transmission of voice and data are under way in many parts of the world.



## Net income doubled

Consolidated net income before appropriations and taxes doubled, compared with 1988, following a substantial increase in net sales and a simultaneous improvement in margins. As a result of continuing improvements in operating efficiency, general expenses as a percentage of sales declined slightly despite increasing technical development costs. A positive cash flow made it possible to reduce net interest expense sharply, and further strengthened Ericsson's equity ratio.

## Continuing internationalization, with Europe as a domestic market

The increase in Ericsson's net sales resulted from larger volumes of business, notably in Western Europe but also in North America, Australia and certain Asian countries. At the same time, the volume of sales in Sweden was largely unchanged. This represented a continued internationalization of operations, with a further shift of emphasis towards activities in markets outside Sweden. Net sales in Sweden in 1989 amounted to 15.7 percent of total invoicing, compared with 19.2 percent a year earlier. Nearly half of Ericsson's net sales were in European markets, excluding Sweden. All of Europe has thereby become more and more Ericsson's actual home market.

## AXE and other Ericsson systems gain larger market shares

During 1989, a total of 5.3 million lines of local switching equipment based on Ericsson technology, equal to 13 percent of the world market, were installed. In the preceding year, 3.9 million lines, which then accounted for a 10-percent market share, were installed. Installations of AXE equipment for transit traffic and for special applications in networks also increased.

Ericsson maintained its leading position in the world as a supplier of systems for mobile telephony. As of January 1, 1990, 40 percent of the 6.5 million mobile telephones in service, were linked to Ericsson systems.

A total of 3.1 million lines of Ericsson's MD110 digital subscriber exchange system have now been installed of which 800,000 during 1989. An additional 300,000 lines of smaller subscriber exchanges were also installed. In all, Ericsson had an 8.5 percent share of this market, compared with 7.5 percent in 1988.

## Breakthrough for AXE in the U.S.

1989 was a breakthrough year for the AXE system in the important market for local exchanges in the United States. At the beginning of 1990 Ericsson had the status of approved vendor to three of the seven regional Bell operating companies.

## Joint venture with General Electric

Ericsson's marketing prospects in the U.S. were further strengthened through a joint-venture agreement with General Electric Company (GE) in the field of mobile communications. Ericsson GE Mobile Communications, in which Ericsson holds a 60-percent interest and GE 40 percent, makes Ericsson the world's second-largest supplier in the field of mobile communications.



## Ericsson in Brief

Ericsson is an international leader in telecommunications. Ericsson is recognized for its advanced systems and products for wired and mobile communications in public and private networks. Ericsson is also a leading supplier of electronic defense systems.

The Parent Company, Telefonaktiebolaget LM Ericsson, and Ericsson's world headquarters are located in Stockholm, Sweden.

Ericsson has 70,000 employees and operations in 80 countries.

Expenditures for research and development (R&D) during 1989 amounted to SEK 4.3 billion, corresponding to 11 percent of net sales.

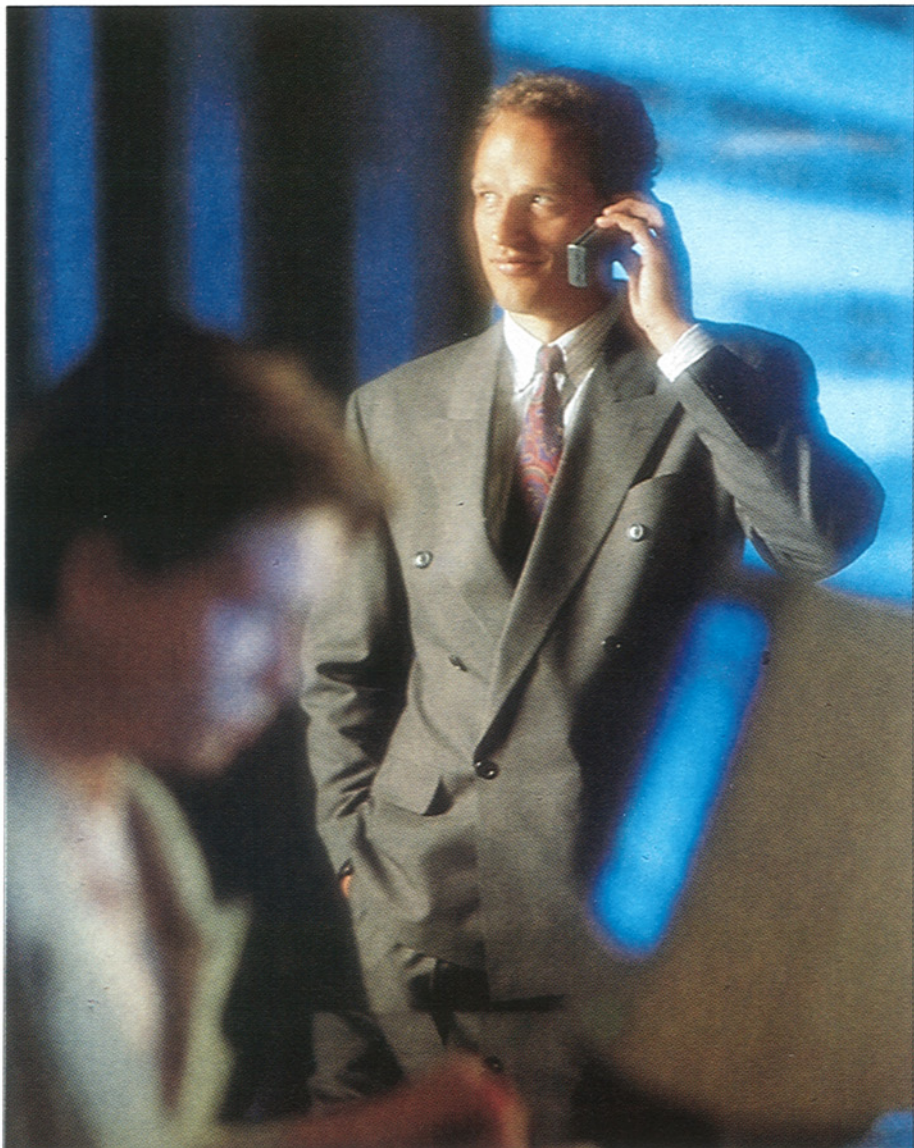
The share capital of the Parent Company at December 31, 1989 was SEK 2,049 m., represented by 40,974,934 shares, each with a par value of SEK 50. Shareholders outside Sweden own approximately 25 percent of the shares.

Ericsson's operations are organized in six business areas: Public Telecommunications, Radio Communications, Business Communications, Cable and Network, Components, and Defense Systems.

Activities are focused on geographical areas in which Ericsson can achieve major market shares. Ericsson operates as a local company in each market, often establishing local production and technical development facilities.

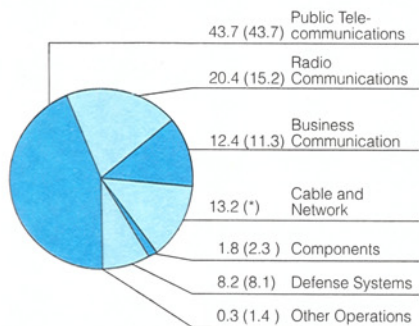
Ericsson's sales in 1989 amounted to SEK 39,549 m.

Development of a new cordless telephone, the DCT 900, was completed in 1989. With this instrument, which will be introduced in 1990, employees in a company or other organization can move about freely in an office building or plant and still make and receive calls via a subscriber exchange.

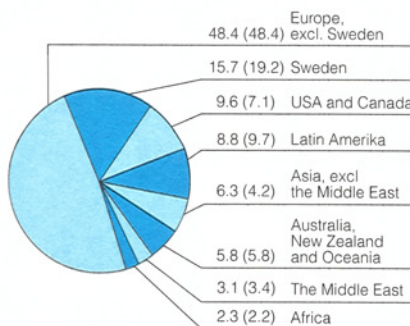




Sales to external customers, by Business Area, percent

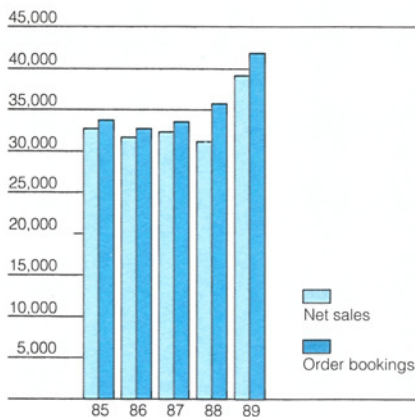


Geographic distribution of sales, percent



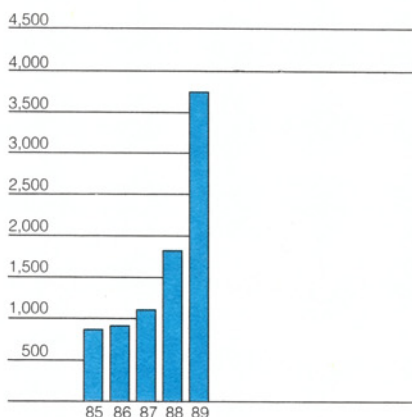
\* Compared with 18 percent in 1988.

Net sales/Order bookings, SEKm



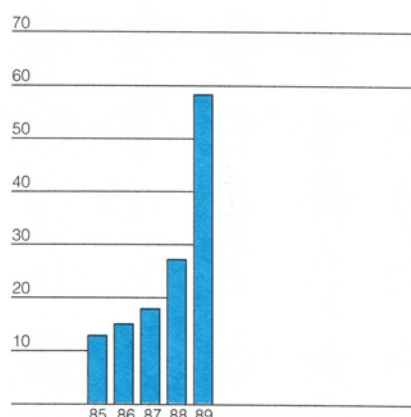
Sales increased 26 percent. Units added in connection with an agreement with GE were consolidated in Ericsson's accounts. Sales of comparable units rose 25 percent. Order bookings increased 18 percent. For comparable units, the increase was 13 percent.

Income before appropriations and taxes, SEKm



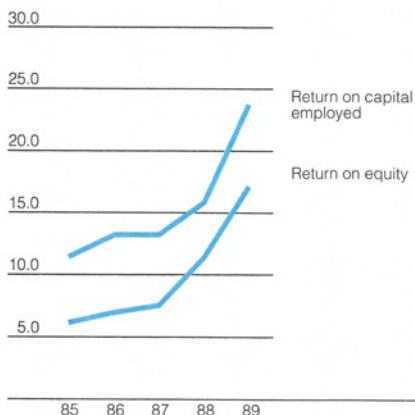
Income more than doubled, amounting to SEK 3,715m. (1,840).

Adjusted net income per share after actual taxes, SEK



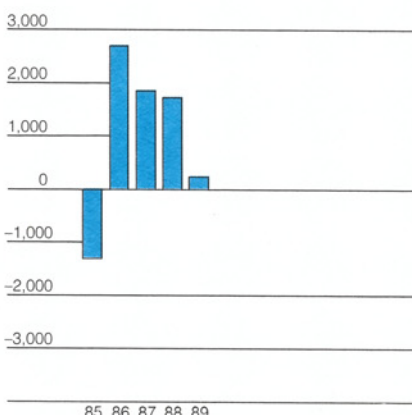
Profit per share rose as a result of the improvement in income and a reduction in tax rates.

Return on equity and capital employed, %



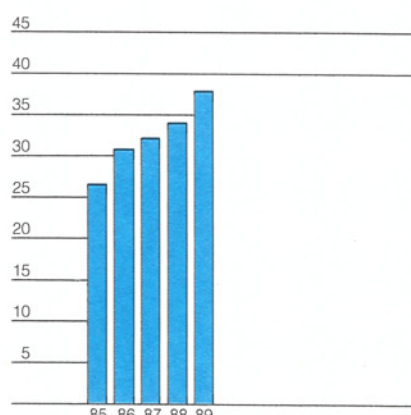
The return on equity improved sharply 17.3 (11.5) percent. Capital Employed increased from 16 percent in 1988 to 23.8 percent in 1989.

Cash flow before external financing, SEKm



Cash flow was positive and amounted to MSEK 229.

Equity ratio



The improvement in Ericsson's equity ratio continued during 1989 and increased from 33.7 percent to 37.8 percent.



## Chief Executive Officer's Comments A Solid Platform for the Nineties



Björn Svedberg

For Ericsson, the decade of the Eighties was an eventful one, with challenges and major and important changes. It was a decade with a great many trials, but also many successes.

Data processing and information technologies, earlier exclusively the province of specialists, were adopted widely throughout society. It was possible to computerize everything, and computerization was something everyone would be able to handle.

Data communications became an increasing part of telecommunications traffic. It was natural for telecommunications companies to participate in this development and shape the standards that would apply later. Viewed in retrospect, it was a useful experience for us, but rather costly.

The monopolies in the telecommunications field began to disappear and the pace of deregulation accelerated. We acquired a new category of customers, with many operating companies alongside the traditional telecom administrations. More markets were opened, users imposed new demands, and competition stiffened.

It was clearly important for Ericsson to enter the new markets where the greater part of the growth would occur, and where customers demand would be the driving force behind tomorrow's telecommunications.



The concentrated marketing investments we made in Western Europe, North America and Australia, together with the continuing programs in expanding markets in other parts of the world, were important investments in the future. Today, they constitute an essential part of Ericsson's platform.

Ericsson's AXE switching system had been launched during the Seventies and had rapidly become a technological success. The challenge in the Eighties was to not lose our lead in development work but, rather to anticipate future customer needs and allocate adequate resources for continuing development programs.

Viewed in today's perspective, it was essential that our investments in technical development never decreased, but instead increased, during the Eighties, despite some difficult years.

A firm strategy, coupled with a flexible organization that makes it possible to take advantage of opportunities that arise, are other important parts of Ericsson's platform for the Nineties. Our clear concentration on telecommunications, with the focus on advanced systems, is making us highly competitive today. We can offer complete solutions in both fixed and radio-based communications via public and private networks.

There are today 70,000 employees within Ericsson. We are all proud to be participating actively in the development of society throughout the world, since there is a direct connection between the expansion of a country's telecommunications system and its economic, social and industrial development.

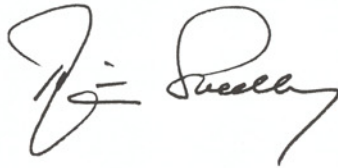
To further strengthen Ericsson, we have devoted much effort to matters involving corporate culture and values, areas in which the key concepts are professionalism, respect and perseverance. Continuing success depends on our being part of a team, on working well together, and on having strong faith in the future.

We have this strong faith in the future. And we know that our solid platform for the competitive Nineties is being created through common efforts.

We are entering the last decade of the century as a much stronger company. We are established in most of the fastest-growing markets. We are well equipped in terms of our future offerings of systems and products. And our financial position provides the staying power that is required.

Lars Ramqvist has been designated as my successor as President in connection with my nomination to become Chairman of Ericsson. It is exceptionally gratifying to me to be able to pass the baton to a person who has worked in our various operations for a long time. I am convinced that he will move Ericsson forward with a firm and dynamic hand.

Ericsson has every prerequisite to become an even stronger enterprise during the Nineties.



Björn Svedberg



## The Telecommunications Industry

### Continued growth – but at a slower rate

Telecommunications has always been an industry with stable growth, even if there have occasionally been exceptions in certain product areas or geographical markets. The industry's total sales increased ten percent annually during the latter part of the Eighties.

Increased investments in communications continued to be made in Western Europe, notably in such important markets for Ericsson as Spain, Italy and The Netherlands. At the same time, there were also countries in which all or parts of the market decreased. The market for telephone exchanges in the United States is one example.

Growth will continue during the Nineties, but most forecasts indicate a lower rate of increase. This applies primarily to investments in public switching segment, which today accounts for one fourth of the industry's total sales. Much more rapid growth is foreseen for data communications and mobile communications, fields that are currently relatively small but which will constitute an increasing percentage of the total market in the future.

### A 700-billion kronor market

Total investments in the telecommunications field throughout the world amounted to around SEK 700 billion in 1989. In addition to capital expenditures for telecommunications networks, this includes all types of systems and equipment connected to networks.

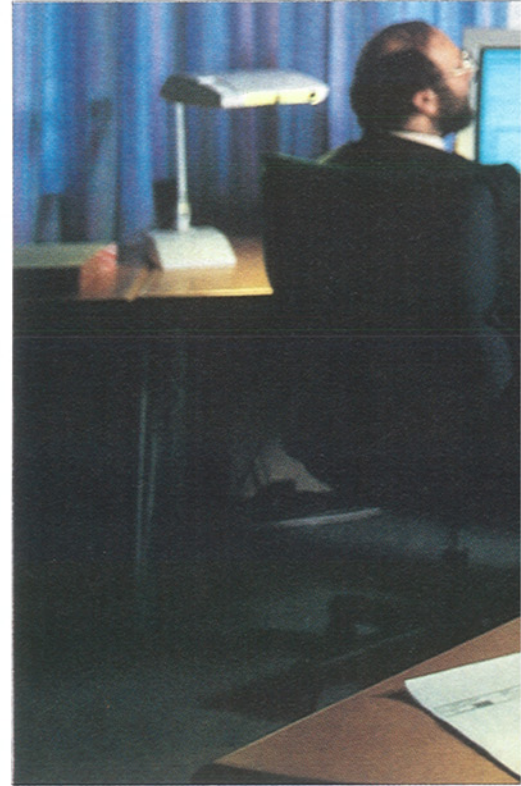
As the decade of the Nineties opened, the worldwide telecommunications network had been expanded to comprise telephone exchanges with about 500 million subscriber lines. To these lines are connected telephones, subscriber exchanges and such other equipment as telefax machines and data terminals. Common voice communication is still totally dominant in telecom networks, however, and will continue to be for the foreseeable future.

Slightly more than 60 percent of the 41 million local lines installed in 1989 represent expansion of service to new subscribers. The remainder involved changeovers from older technologies to new digital technology with higher capacity and a greater variety of services.

In certain countries with high telephone densities and strong customer demand, the replacement market is already larger than the market for new installations. Customers are demanding that networks not only offer capacity for ordinary voice communication but for many other telecommunications services as well, and not least for data transmission by companies.

### The technology is available – the market controls

Technical development has today reached the stage where it is possible to meet all the



#### Local line/subscriber line

The connection between the subscriber's terminal, usually a telephone instrument, and the end station (local exchange) to which the subscriber is linked. The statement that "5.3 million local lines were installed" means that local exchanges with a capacity to connect 5.3 million subscribers were installed.

#### Digital technology

Handling of information that has been converted to a code that normally consists of a sequence of zeroes and ones. This technology makes it possible to transmit voice, images and data over the same line.

#### Fiber optics

A technique for transmitting light signals via fibers made of transparent materials such as glass or plastics. Fiber optic cables are used to transmit digital signals representing voice, images or data. The light source is often a laser. Fibers permit high transmission capacity.

#### Broadband

The term indicates a network having a high capacity, e.g. for handling high speed data transport or television.

#### Megabit/second

A measurement of the transmission capacity of, for example, a transmission line. A capacity of 140 Mbit/second is adequate to transmit 1,980 voice channels simultaneously.

#### ISDN

A digital telecommunications network, designed to international standards, in which voice and data services can be transmitted via the same subscriber line.

#### Intelligent network

A telecommunications network in which certain types of services can be programmed by the telephone operating company and made available rapidly to users.

demands the market poses. One of the most important tasks for communications companies is to create practical and economical solutions in order to utilize this technology in the best possible manner. Subscribers want new services that are as inexpensive as possible, and operating companies want cost-effective networks and organizations.

Fiber optics is one example of a technology that is reducing costs. Because it offers extremely high transmission capacity, it will gradually become cheaper to build networks with fiber optic cable.

Apart from the fact that networks must be steadily expanded, it is also necessary to continuously increase transmission speeds in order to obtain the capacity to transmit ever-increasing amounts of information. Broadband networks, which are coming during the Nineties, are being built to handle 140 Megabit /second, making it possible to transmit both voice and images simultaneously over the same line.

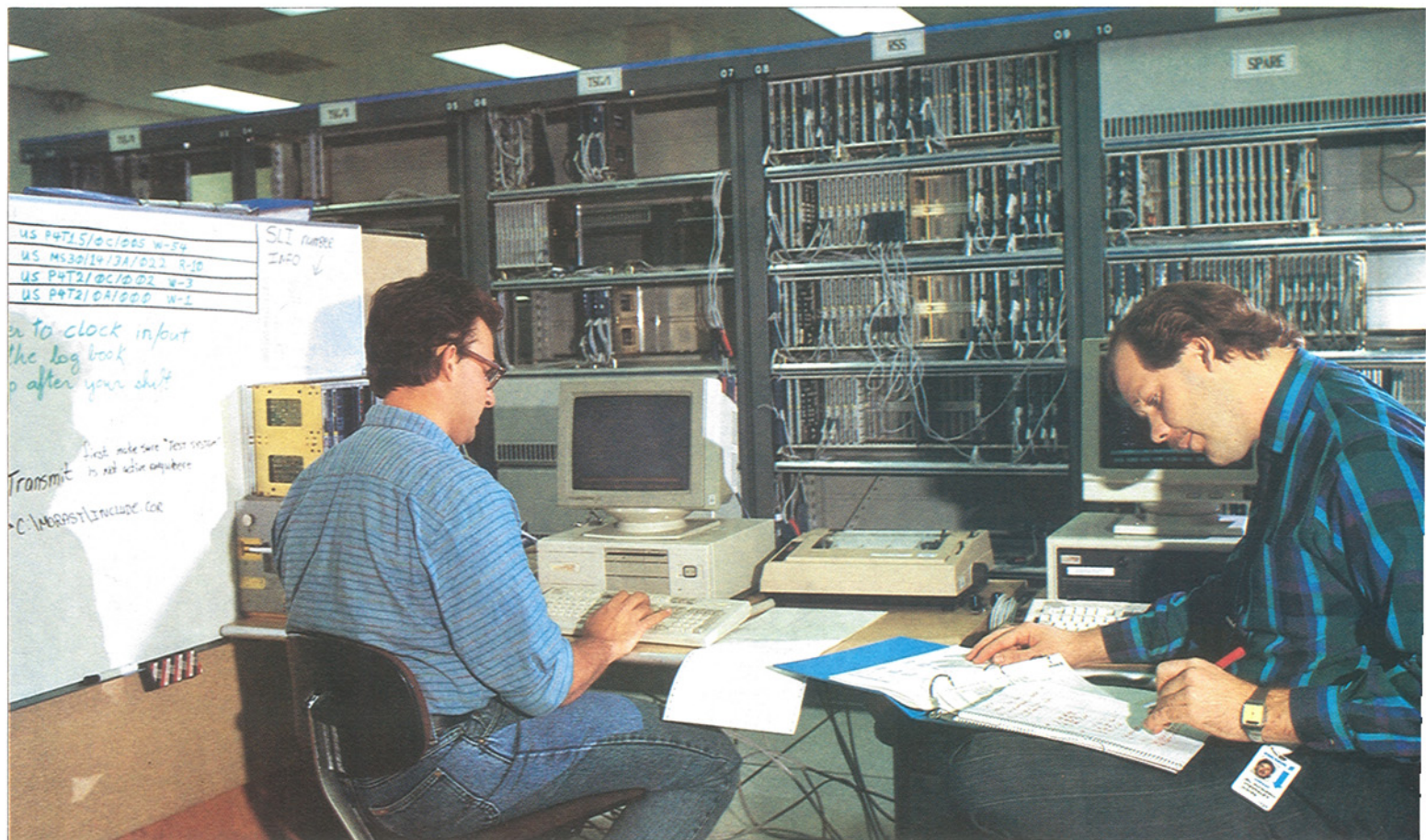
ISDN (Integrated Services Digital Network) is a first step towards broadband networks. Practical experiments with this type of simultaneous transmission of voice and data are under way in many countries.

Intelligent network is another term used in telecommunications. Via a telephone, a subscriber can have access to many extra services through a central data base. Such services may range from booking tickets to checking credit cards, or specifying the incoming calls a person wants to accept.



Demonstration room for DCC (Digital Cross Connect) systems in Stockholm. DCC systems enable telecom administrations to control and monitor an entire network from a central location. Installed capacity can thereby be utilized more efficiently and, in the event of damage to parts of a network, traffic can be redirected without interrupting service. DCC can also link up leased digital lines automatically from a central point.

Development of software for the AXE-switch is carried out in many places in the world, e.g. in Richardson, Texas. Here in cooperation between engineers from the U.S.A. and Sweden. (lower photo)





### Rapid development of mobile communications

Radio technology has made it possible to be mobile and still be able to communicate. In cellular mobile telephony, this technology is being applied in a practical manner that satisfies users' requirements.

In January 1990 there were 6.5 million subscribers in mobile telephone systems, five times more than three years earlier. The rate of increase is expected to continue to rise in the future as systems are expanded and larger volumes result in lower costs for subscribers.

The ability to use the same telephone for communications spanning large geographical areas is the next step, and this will be possible in Europe in a few years. Procurement of equipment for the Pan-European digital mobile telephone system that will begin to be placed in service in 1991 started during 1989. Nearly all countries in Western Europe are participating in this project.

Comparable digital systems covering large geographical areas are being planned in other parts of the world, including North America where a common standard has also been adopted.

The most recent generations of mobile telephones are pocket-size and have an effective talk time that would not have seemed possible a few years ago.

### Pocket phones for the office

As a complement to cellular mobile telephones that are designed for use during rapid movement over large areas, simpler and less expensive personal telephones are being introduced in the early Nineties. They weigh half as much as today's lightest mobile telephones and they have considerably longer talk time per battery charge. They also cost less and are cheaper to use.

The cordless personal telephones are initially designed to be used via subscriber exchanges as a means of giving employees greater mobility in their places of work. A common European standard for this type of telephone is being developed by ETSI (European Telecommunications Standards Institute). This standard, designated DECT (Digital European Cordless Telecommunications), is expected to be ready in 1992. It will then be possible, via special base stations, to also use the personal telephones in locations outside a company's premises.

### Need for common standards

Technology is not a limiting factor where communications systems of the future are concerned, nor is the ability to develop and manufacture products that satisfy customers' wants. In contrast, a lack of common standards can be restrictive when new areas are involved. Accordingly, a number of organizations in Europe and other parts of the world are working on these matters.

The communications world recognized the need for a common standard at an early



stage. Today, nearly everywhere, a person can lift a telephone receiver and establish direct contact with any part of the world. The world's telephone network is actually the largest globally linked machine that Man has produced, and there are virtually no limits to the expansion of this machine.

## Ericsson's Direction

### Consistent strategy

Ericsson has a consistent and long-term strategy for achieving its objective to become the leading international supplier of advanced systems and services for telecommunications networks. This strategy is deeply rooted in the organization and permeates all internal activities.

The most important element in the strategy is the concentration on telecommunications.

Ericsson's management has elected to operate in a committed manner within one single industry. This is especially important in the complex telecommunications business, where technical development and change occur more rapidly than in most other fields.

Systems know-how, international experience and customer-orientation are important key concepts when it comes to further strengthening Ericsson's position in the world market.

The restructuring of Ericsson that has taken place in recent years, and which accounts for the sharply improved trend of income, has been fully in line with the long-term strategy. And this work is not complete; it is, rather, a continuing process.

### Cellular mobile telephony

Mobile telephone systems consisting of radio base stations that are linked together by means of special telephone exchanges. Each base station covers a geographical area called a "cell". When a subscriber moves from one cell to another in a cellular mobile telephone system, the call is automatically transferred to the "new" cell via the base station there.



All trading on the Amsterdam Stock Exchange is still conducted on the floor of the Exchange. Communications is handled via an MD110 Financial Systems exchange. Ericsson has installed ERIPAX data networks in the stock exchanges in London, Stockholm, Helsinki, Milan and Frankfurt am Main.





Ericsson is conducting intensive research in the fiber optics field. Absolutely pure quartz glass, heated to 2,100 Centigrade, is produced at Ericsson Cables' laboratory in Hudiksvall. The glowing rods are drawn to form 40-kilometer long glass fibers as thin as a human hair.



### Customer-orientation

Truly listening to customer demands is a basic prerequisite for the foresight that is required in planning and development. It is also important for a system supplier to have long-term relations with customers in order to be able to assume responsibility for total communications approaches.

It is more a matter of marketing a cooperation that extends over a number of years than of marketing individual products. Most contracts that a company signs are follow-up orders for expansions of existing systems.

Ericsson is the company with the broadest international platform and has, as a consequence, a comprehensive installed base upon which to build. This offers the best prospects for increased volumes of business in both public telecommunications and mobile telephony, and now, to an increasing degree, in business communications as well.

### Market development

During the latter part of the Eighties Ericsson has achieved an ever-stronger position in the industrialized portion of the world where the largest investments in telecommunications are being made. This is a result of deliberate efforts and investments.

### Major successes in the U.S.

Ericsson has recorded major successes in the field of mobile telephony in the U.S. in recent years. During 1989, important breakthroughs were also achieved in public telecommunications. Ericsson's long-term investments are now yielding results and there is every prospect for good profitability. The joint venture agreement with GE in the field of mobile communications further strengthens Ericsson's position.

During the autumn and around the end of 1989 contracts were signed covering deliveries of telephone exchanges for the local-exchange market to three Bell operating companies. Ericsson's status as vendor to three of the seven Bell companies has not only yielded important initial orders but, most important, offers continuing opportunities to bid in these important markets. Calculated in terms of installed lines, all seven Bell companies rank among the world's 15 largest telephone administrations and operating companies.

In addition to AXE orders for the American local-exchange market, Ericsson also received important contracts for AXE switching systems for special services. These included an order from Ameritech for an AXE-based SCP (Service Control Point) for central control of advanced telecom services in intelligent networks.

Ericsson's largest market for mobile telephone systems is the U.S. Half of the world's mobile phones are in this region, and there is strong demand for expansion.

Marketing prospects will be further improved as a result of the cooperation with GE. The production of base stations for the American market will be transferred to the U.S. production unit that is part of the joint venture.

The U.S. is also an important market for business communications systems. The MD110 subscriber exchange has proved to be especially suitable for companies and organizations with widely dispersed operations, but which still require a central exchange.

### The European Community (EC)

Ericsson systematically strengthened its position within the European Community during the Eighties. This occurred through acquisitions of companies and marketing investments in various forms. The strong growth in the area of telecommunications in EC countries provided the background for these efforts.

This trend will continue when the Single Market becomes a reality. In this process, telecommunications is playing an ever-greater role in removing boundaries and barriers to trading in goods and services, and in promoting freedom of movement of labor and capital.

Ericsson had sales of SEK 16.5 billion, or about 40 percent of its total invoicing, within the EC in 1989. Nearly 20,000 of Ericsson's 70,000 employees are located in the EC.

Ericsson, with 18 plants in eight EC countries, has made major investments in development programs, production and marketing in the 12 member nations. Most of the

#### Installed base

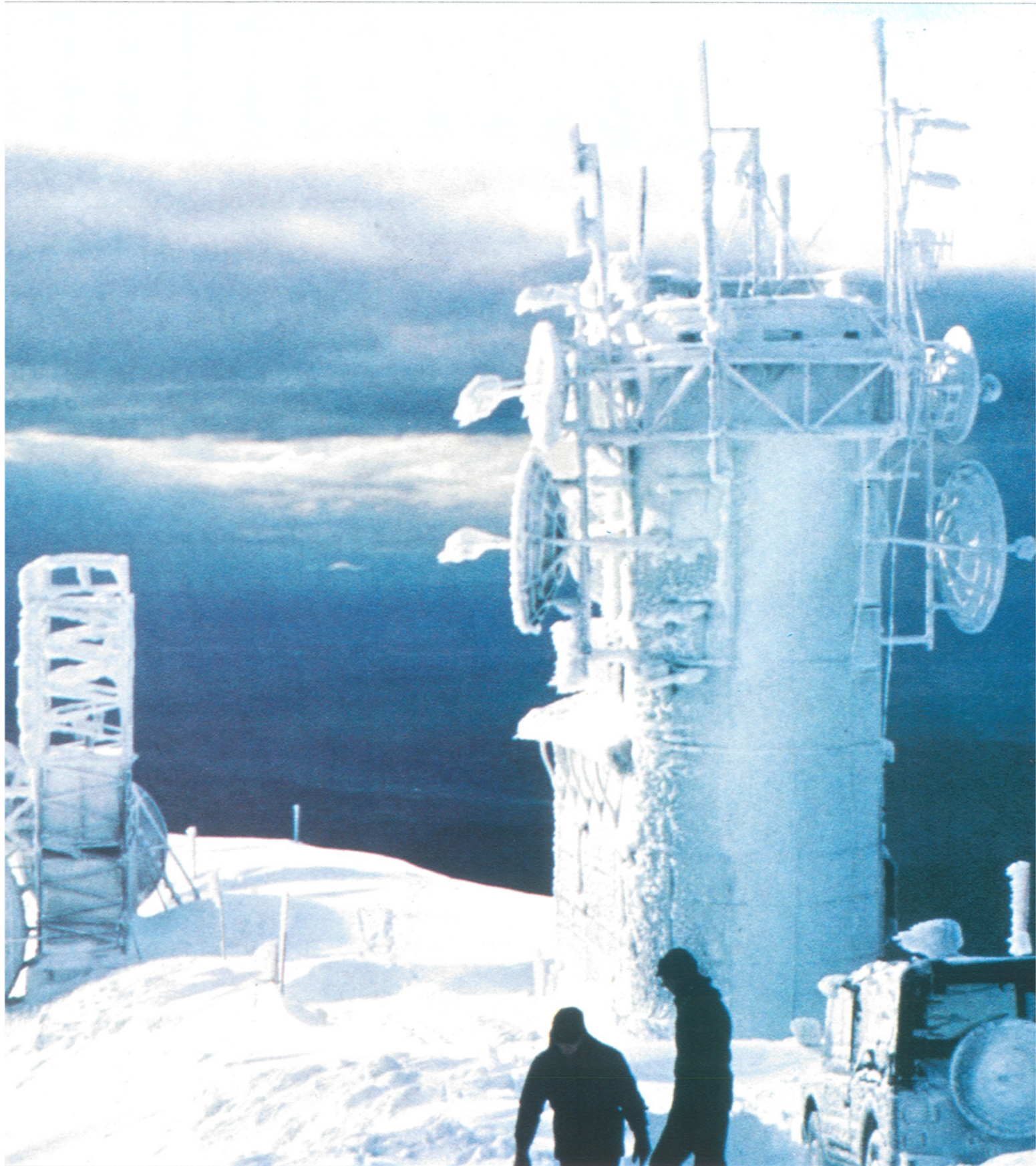
The total number of products or systems of a certain type that have been installed.

#### SCP

Centrally located computer equipment containing the program, network and subscriber data required to enable the network to offer a broad range of services in the intelligent network.

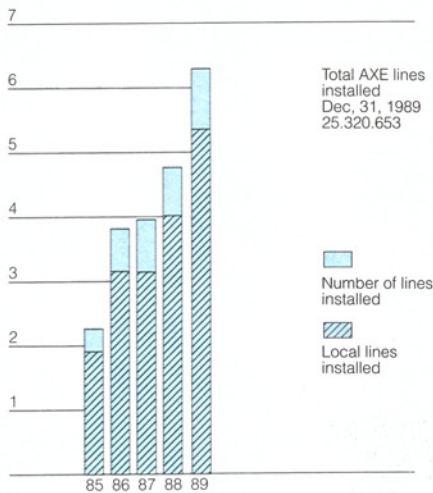


SIELTE, one of Ericsson's Italian subsidiaries, has installed microwave equipment in an advanced military communications network in the Italian Alps.





AXE, world survey.  
Number of local and transit lines installed per annum (excl. cellular), millions.



products sold to EC customers are also produced within the Community. A substantial percentage of components are purchased from subsuppliers within the EC. Capital expenditures for property, plant and equipment in the EC account for more than 30 percent of Ericsson's total investments.

The investments in research, development and training have been increasing sharply. Substantial R&D programs, in which a total of 2,200 persons are involved, are under way in Denmark, France, Ireland, Italy, The Netherlands, Spain and Great Britain.

Ericsson's training centers in Great Britain, Ireland, Denmark and Italy have the capacity of providing instruction for 2,500 students annually from both customers and Ericsson companies.

Ericsson's position as one of the leading telecommunications companies within the European Community is also confirmed by its participation in 17 different projects within the framework of the EC's RACE (Research in Advanced Communications in Europe) program for broadband communications of the future. Ericsson has primary responsibility for seven of these projects, in which its subsidiaries in five EC countries are working with administrations, universities and competitors.

The need for more rapid production of well-defined standards underlay the formation of ETSI, in which Ericsson is participating actively in work on new standards for the "European telecommunications networks." Ericsson is also participating in the ECMA (European Computer Manufacturers Association) program for standardization in business communications and the ESPA (Association of European Manufacturers of Pocket Communication Systems) program for standardization in the area of the personal paging systems and cordless personal telephones.

#### New market situation in Eastern Europe

Political changes in Eastern Europe have also altered market conditions for telecommunications. There are a total of 50 million installed lines in all of Eastern Europe, and another 100 million lines would be required to achieve the same telephone density as in Western Europe.

Expansion today is at the rate of three million lines a year, but there are plans to increase this to eight million in 1995.

AXE switching systems have already been installed in Hungary, where Ericsson will also supply a cellular mobile telephone system. AXE has been installed in Czechoslovakia and the Soviet Union via Ericsson's licensee, Nicola Tesla, in Yugoslavia. The MD110 subscriber exchange has been ordered in Poland and Czechoslovakia.

Ericsson is actively exploring opportunities to increase business with the countries in Eastern Europe, now that the COCOM regulations that hampered the export of modern technology to Eastern Europe are being liberalized. Financing is a problem in these countries, however.

Comprehensive planning is required in connection with the construction of a mobile telephone network. Computer-produced maps, below, show the location of various radio base stations in Los Angeles and the areas (cells) they cover.



#### Australia - Important technology center

Ericsson has been well established in Australia for many years. The subsidiary there operates in all respects as a domestic company. There is comprehensive cooperation and exchange of information at the university level, which facilitates Ericsson's recruiting of qualified personnel. Important company-wide research projects are also assigned to Ericsson in Australia.

Ericsson has for many years cooperated with Australian Telecom on a nationwide ISDN project. This has provided valuable experience that is applicable in other markets, particularly with respect to determining the amount of demand on the part of subscribers and the type of services desired.

#### Widespread international presence

Ericsson has substantial operations in Asia and Latin America, as well as in a number of African countries, primarily in North Africa.

Southeast Asia is a rapidly expanding region in which Ericsson has always had a broad market presence. After having participated in building up the wired telecommunications network in the region, Ericsson has been entrusted to continue with networks for mobile telephony in many of these countries. There are also many important markets for Ericsson in Latin America - Mexico and Brazil in particular.

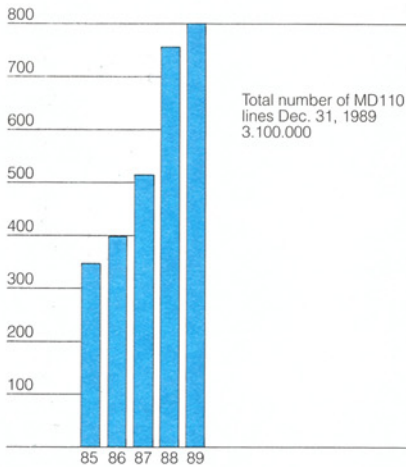


Mobile data communications via Mobitex, a system jointly developed by the Swedish Telecommunications Administration and Ericsson. This system is in operation in Sweden, Finland and Norway, and large country wide systems will soon open up in Canada, the U.S.A. and Great Britain.  
(lower photo)

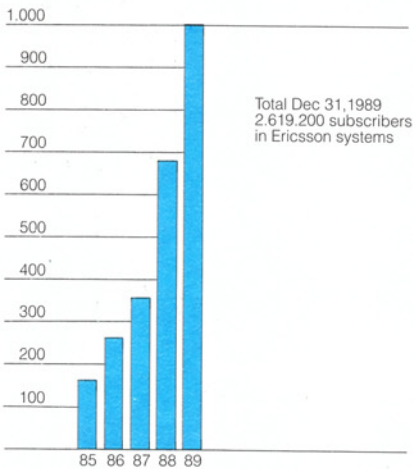




MD110, world survey.  
Number of lines installed, per annum, thousands.



Cellular mobile telephone systems, world survey. Subscribers in Ericsson system, per annum, thousands.



#### Transit exchange

Transit, or trunk, exchanges are used to connect calls between communities in the same country, while international exchanges set up calls to and from communities in other countries.

#### STP

A switching exchange that handles the network's signaling traffic – the signals that control connections and disconnections within the network – among other functions.

#### Microwave link

A radio link by means of which information is transmitted, using radio waves with extremely short wavelengths, so-called microwaves.

#### Increased market share for AXE

During 1989, 5.3 million local lines, equal to 13 percent of the world market, were installed. A year earlier, 3.9 million lines, which then represented a 10-percent share of the market, had been installed. The most important reason why Ericsson succeeded in increasing its share of the market more than any other competitor lies in the broad international acceptance of the AXE system and the lack of dependence on individual, dominant markets.

Ericsson's principal competitors in this field include AT&T (U.S.), Northern Telecom (Canada) and Alcatel (France), all of which have larger market shares than Ericsson. NEC (Japan) and Siemens (West Germany) are competitors with smaller shares of the market.

AXE exchanges are also installed for use as transit exchange, international exchange and for such special telecom network applications as STP (Signaling Transfer Point) and SCP (Service Control Point) functions. Substantial volumes of AXE equipment are also installed as exchanges in mobile telephone systems.

#### Mobile telephony – Continued rapid expansion

The market for mobile telephony continues to grow at a very rapid rate. The number of subscribers served by these systems, based on figures compiled in January of each year, were as follows: 1987, 1.3 million; 1988, 2.3 million; 1989, 3.9 million; and 1990, 6.5 million. Ericsson has succeeded in maintaining a 40-percent share of this fast-growing market and has thereby retained its world leadership position in the systems field.

Ericsson's special strength lies in its mastery of the entire field, from the exchanges (AXE) at the core of the system, through the radio base stations to telephone instruments themselves. None of its competitors have the same broad expertise.

The most important competitors in this systems field are the two American companies, Motorola and AT&T, and NEC, the Japanese company.

#### 800,000 MD110 lines installed in 1989

The digital MD110 subscriber exchange now has an installed base of 3.1 million lines. A total of 800,000 lines were installed during 1989, an increase compared with 1988 installations. An additional 300,000 lines of smaller exchanges were also installed.

Throughout the world, a total of 13 million lines were installed, which gives Ericsson an 8.5-percent share of the market, compared with 7.5 percent a year earlier.

This market continues to be highly competitive, with small and medium-size suppliers being forced out. The main competitors in Europe are Siemens and Alcatel. Ericsson also competes with Northern Telecom, AT&T and NEC in the rest of the world market. Ericsson's strength is its ability to deliver

GIRAFFE is the designation for a family of Ericsson mobile air defense search radars. This version, the GIRAFFE 50AT (All Terrain), was developed for the Norwegian Air Defense. Various versions of GIRAFFE have been delivered to about fifteen countries.



complete solutions to the communications requirements of large companies and organizations. The MD110 and the Eripax data network allow great flexibility in link-ups with other products. Strong demand for subscriber exchanges in combination with cordless personal telephones – a development for which the MD110 exchange is equipped – is foreseen during the Nineties. Already in 1990, Ericsson will introduce the DCT 900, a cordless telephone weighing 190 grams and offering six hours of talk time.

#### Ericsson systems complement each other

Public telecommunications, mobile telephony and business communications are fields which now increasingly complement each other. Today, companies and organizations can choose between installing their own exchanges or obtaining the same services with a Centrex system via the public AXE network.

As fixed public networks are being expanded, radio technology is beginning to be used to an increasing degree instead of traditional cable-laying. Radio technology is also being used for transmission via microwave links.

Networks for mobile communications are controlled through AXE exchanges. In the new networks for personal telephones – the



DCT 900 and the DECT system that will come later – the MD110 subscriber exchange will be the key unit.

In the deregulated market, the same operators often turn to suppliers of public systems, private systems and radio-based systems.

Ericsson's great strength is based on its expertise in all these systems. The various system areas within the organization work together. There is a common Ericsson resource for the supply of components and there is also a business area that specializes in network planning, construction and installation. This business area is also responsible for the production of cable, including fiber optical cable.

Thus, Ericsson can assume full responsibility for a project. A customer has to deal with only a single company in order to obtain efficient telecommunications systems.

## Trend of Corporate Finances

### Strong increase in volume and improved margins

Sharply rising demand for Ericsson's products, notably in Western Europe, resulted in a substantial increase in net sales. Despite the severe competition in the telecommunications market, Ericsson succeeded in raising its margins. This was due primarily to very high utilization of plant capacity combined with continuing increases in the efficiency of production processes and procurement routines.

General expenses for technical development work rose more sharply than other general costs as a result of the ever-greater demands imposed on Ericsson products by customers. Overall, however, general expenses as a percentage of sales were reduced slightly, thanks to continuing intensive programs to improve cost-effectiveness.

### Continued financial improvement

The determined efforts to improve the rate of capital turnover continued, resulting in a positive cash flow despite the strong expansion. Net financial expense was thereby reduced sharply and the equity ratio was further strengthened, providing a sound base for Ericsson's continued growth.

An important Ericsson objective is to achieve a good return on shareholders' equity. This will be accomplished by generating income and cash flow that permits sound financing of growth.

Income per share must make an investment in Ericsson attractive. A favorable trend of earnings should therefore be reflected in higher dividends to shareholders.

### Development of the finance function

The deregulation of currency controls in Sweden, together with Ericsson's continuing strong liquidity, resulted in increased lending to subsidiaries and to a corresponding repayment of external bank loans. This financing has been channelled largely through

wholly or partially owned finance companies in Ireland, Switzerland and Italy.

In order to improve efficiency in handling liquidity and currency matters, the Corporate Treasury staff at the Head Office in Stockholm was reorganized during the year. A separate profit center, Ericsson Treasury Services, was formed. This unit provides internal banking services and financial counselling to Ericsson companies on commercial terms. The unit reported favorable results.

With a view to coordinating Ericsson's insurance programs and benefitting from pending EC regulations, a wholly owned direct-writing insurance company was formed in Ireland during the autumn. This company will primarily insure Ericsson companies in Europe against risks of property damage, consequential loss, transport and installation losses, and liability claims. Ericsson has had a wholly-owned reinsurance company in Luxembourg for some time.

### Project and export financing

Various types of project financing, amounting to about SEK 3,000 m., have been arranged in support of Ericsson's export programs. Among other transactions, financing packages involving leasing were arranged successfully for customers in certain countries. The associated finance company, LM Ericsson Finans AB, played an active role in these projects. Leasing contracts totaling nearly SEK 700 m. were signed during the year.

In export sales to certain countries, demands are made for counter-trade in the form of barter and other reciprocal agreements. To manage these requirements effectively, a coordinating group of experts has been established within Corporate Treasury.

Due to the limited scope of the Swedish Government's export guarantee system (EKN), bids on export projects by manufacturing subsidiaries outside Sweden have to an increasing degree been made by utilizing export support programs in the host countries.

### Currency exposure

Ericsson's policy is to do the utmost to eliminate its exposure to currency risks – which are inherent in its commercial transactions – through such financial activities as coordinating currency flows, matching short-term currency borrowing, arranging forward contracts, etc. Because trading between the Swedish and foreign companies takes place in the currency of each country, currency exposure within Ericsson is centralized in Sweden to a high degree. The Swedish companies clear their positions by means of internal currency forward contracts with Ericsson Treasury Services which, in turn, covers net exposures through external contracts.

## Ericsson's Corporate Culture

### Shared values

To perform as a unified, competitive enterprise, Ericsson must possess a sense of solidarity. There must be a strong corporate culture that creates shared values.

This is also important to facilitate the rotation of managers between various units within Ericsson, and to ensure the efficiency of joint development projects.

Intensive programs dealing with these matters have been conducted within Ericsson in recent years. The basic approach has been to identify the best common characteristics and to then seek to reinforce them.

Professionalism, respect and perseverance are key concepts for Ericsson's employees. Getting all employees – wherever they may be throughout the world – to identify with these values is extremely important for Ericsson's future.

One of the most important tasks in the Nineties will be to win the competition for the most skilled employees, not merely when external recruiting is involved but, most important of all, when it comes to retaining and developing all the personnel resources that are already available within Ericsson.

#### Rate of capital turnover

Shows how many times per year that average interest-bearing capital is turned over.

#### Cash flow

Indicates the surplus or deficit from ongoing operations, calculated in monetary terms for a given period.

#### Equity ratio

A measurement of a company's financial strength. It indicates the percentage of a company's total capital that is shareholders' equity (owed to the shareholders).

#### Direct-writing insurance

An insurance company issues policies in its own name and consequently assumes liability for any risk.

#### Reinsurance

An insurance company reduces risks it has assumed through reinsurance in the international market.

#### Associated company

A company in which Ericsson has at least 20 percent of the voting rights, but not more than 50 percent.

#### Currency forward contracts

A contract to buy or sell foreign currency on a specified date, at a price agreed in advance.



## Board of Directors' Report

# Income before appropriations and taxes doubled

### Sales and order bookings

Ericsson's consolidated sales in 1989 amounted to SEK 39,549 m. (1988: SEK 31,297 m.), an increase of 26 percent. Additional units under an agreement with General Electric Company (GE) in the United States have been consolidated from July 1, 1989. Consolidated sales on a comparable basis rose 25 percent. Movements in foreign exchange rates affected reported sales only to an insignificant degree. Sales to customers outside Sweden accounted for 84 (81) percent of total invoicing.

Order bookings increased 18 percent, from SEK 35,633 m. in 1988 to SEK 42,045 m. in 1989. The increase on a comparable basis was 13 percent. The order backlog at year-end was SEK 29,426 m. (26,876).

### Income

Consolidated income before appropriations and taxes more than doubled, amounting to SEK 3,715 m. (1,840). Of this, net capital gains in connection with the divestment of shares and fixed assets accounted for SEK 3 m., as against a net capital loss of SEK 5 m. in 1988.

Operating income after depreciation was SEK 4,557 m. (2,678). Ericsson's share in earnings of associated companies rose sharply, to SEK 398 m. (241). The increase is attributable mainly to an improvement in net financial items in Ericsson do Brasil Comércio e Indústria. General expenses, which contain an increasingly larger percentage of technical development costs, rose in line with sales, while depreciation increased somewhat more rapidly as a result of increased investment in assets with shorter economic lives.

Ericsson's net financial expense continued to decline in 1989, to SEK 431 m., compared with SEK 553 m. in 1988. The primary factor in the improvement was the continued favorable cash flow as a consequence of the high rate of capital turnover. This has made it

possible to further reduce external borrowing.

Minority interest in income before appropriations and taxes amounted to SEK 411 m. (285). Ericsson's partly-owned subsidiaries in Italy, in particular, reported improved earnings. Minority interests in partly-owned companies in the Radio Communications business area, which are 40-percent owned by GE, have been accounted for in the second half of 1989.

The return on capital employed, 23.8 (16.0) percent, rose sharply for the fourth year in a row. This was due to improvements in both profit margins and the rate of capital turnover.

The return on shareholders' equity, after tax, 17.3 (11.5) percent also improved sharply, despite an increase in shareholders' equity resulting from conversions. Actual taxes paid relative to income before appropriations and taxes declined to 37.2 (43.9) percent.

Income per share after actual taxes paid and after full conversion increased to SEK 55.35 (24.07), due partly to the improvement in income and, partly, to the relative reduction in taxes paid.

*Public Telecommunications* reported a strong improvement in income again in 1989. Sales volumes rose strikingly, primarily in Western Europe, and the world-leading position of the AXE switching system was further consolidated. Despite severe price competition, it was possible to improve margins. Utilization of plant capacity was very high.

The growth in volume was particularly strong in *Radio Communications*. As a result, operating income improved significantly. Operations in the field of mobile telephony developed especially favorably, with major successes in the North American market in particular. However, the profitability in the mobile radio and defense communications sectors was unsatisfactory.

*Business Communications* achieved a sharp improvement in both sales and operating income. Major sales successes were

recorded for the MD110 subscriber exchange, mainly in Western Europe and Mexico.

Operating income of *Cable and Network*, a merger of the former Network Engineering and Construction and Cables, declined as a result of the divestment of certain operations, combined with unsatisfactory profitability in the Swedish network construction company. However, the cable business in Sweden and Svenska Elgrossist AB (SELGA), in which Ericsson has a two-thirds interest, developed very favorably.

*Components* again reported improved operating income. The power supply business developed especially favorably.

*Defense Systems* reported a loss. Some improvement was noted for the Swedish defense electronics company, despite high costs for the Swedish JAS military aircraft project. The trend of business in Italy weakened.

### Financing

Ericsson's cash flow amounted to SEK 229 m. (1,728) and was positive for the fourth year in a row, resulting in a further decrease in net interest expense. The rate of capital turnover increased to 1.05 (0.90), which was due primarily to a relative decrease in accounts receivable to 32 (34) percent of sales. Inventories declined to 24 (26) percent of sales.

The strengthening of Ericsson's equity ratio that has occurred in recent years continued during 1989. At year-end, the ratio was 37.8 (33.7) percent. The conversion of debentures equivalent to 2,760,210 shares pertaining to the convertible debenture loans issued in U.S. dollars and Swiss francs in 1987 was a strong contributing factor. The entire U.S. dollar loan and nearly all of the Swiss franc loan have thereby been redeemed. Between January 1, 1990 and February 15, 1990, debentures equivalent to 18,689 shares were converted. These shares carry rights to dividends in 1990.

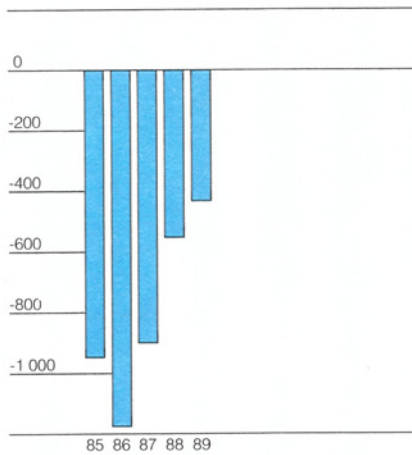
### Sales to external customers, by business area

	1989	1988	Pct. change
Public Telecommunications	17,280	13,677	26
Radio Communications <sup>1)</sup>	8,062	4,745	69
Business Communications	4,912	3,540	39
Cable and Network <sup>1)</sup>	5,220	5,643	-7
Components	716	707	1
Defense Systems	3,252	2,548	28
Other operations	107	437	-76
Total	39,549	31,297	26

<sup>1)</sup> Figures for preceding year are not comparable, due to organizational changes.



Financial net, SEKm.



The convertible debenture loan in the amount of SEK 626 m. issued to employees in the autumn of 1987 was listed on the Stockholm Stock Exchange in February 1990.

### Research and Development

Ericsson's total expenditures for research and development in 1989, including costs related to customer orders, amounted to SEK 4,329 m. (3,529), or 11 (11) percent of sales.

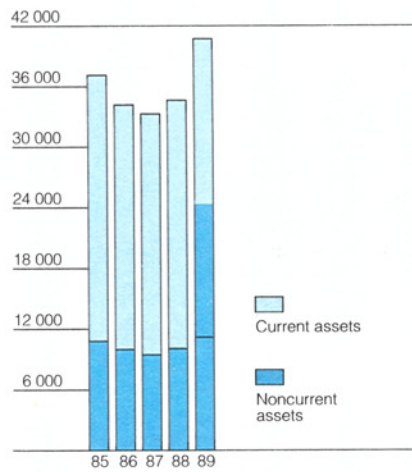
### Capital Expenditures

Capital expenditures for property, plant and equipment amounted to SEK 2,672 m. (1,739) in 1989. Of this amount, SEK 287 m. was attributable to the consolidation of GE operations. Capital expenditures in Sweden accounted for SEK 1,043 m. (739) of the total.

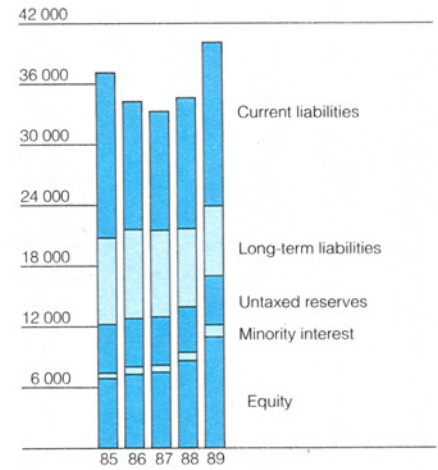
### Personnel

At year-end 1989, 69,229 persons were employed within Ericsson, an increase of 6 percent compared with the preceding year. Of this increase, units acquired during the year accounted for 3,922.

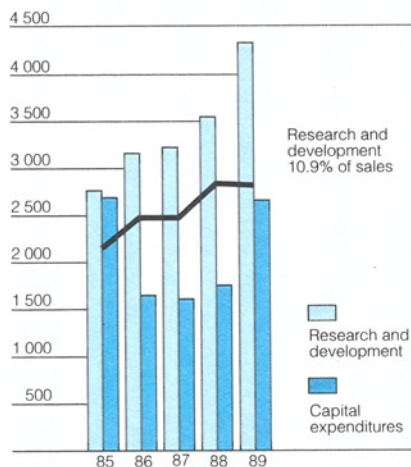
Assets, SEKm.



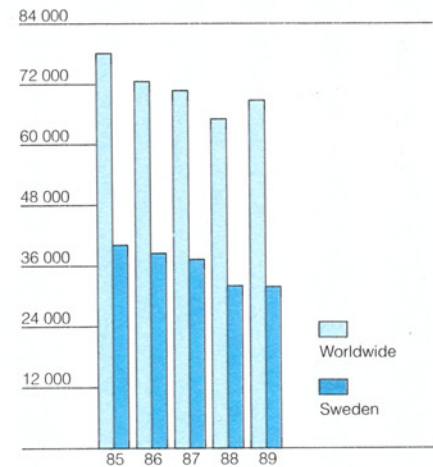
Liabilities and equity, SEKm.



Research and Development Capital expenditures, SEKm.



Number of employees



### Personnel

	1989-12-31	1988-12-31
Number of employees		
Sweden		
Parent Company	14,144	13,654
Other companies	18,082	18,440
	32,226	32,094
Europe (excluding Sweden)	20,762	19,362
North America	4,232	1,820
Latin America	8,523	8,686
Other countries	3,486	3,176
Total	69,229	65,138



Wages, salaries and social costs amounted to SEK 9,499 m. (8,349). Sales per employee were equal to SEK 571,000 (480,000). Supplementary information on the average number of employees and on wages, salaries and other remuneration appears in a note to the financial statements.

#### Significant Changes within Ericsson

In order to take maximum advantage of the synergies inherent in the former Business Area Network Engineering and Construction and Business Area Cables, the two were merged to form a new business area, under the name Cable and Network, during the year.

In the beginning of the year, the agreement in principle signed with Elektrisk Bureau A/S in 1988 covering the acquisition of telecommunications operations in Norway was implemented. A new wholly owned subsidiary, Ericsson Telecom A/S, was formed January 1, 1989. The sale of the Railway Signaling and Highway Signaling Divisions to Elektrisk Bureau A/S was also completed.

Effective July 1, 1989, a cooperation agreement was reached with GE covering

the formation of a jointly-owned company in the mobile communications field. Ericsson owns 60 percent of the company, Ericsson GE Mobile Communications Holding Inc., and GE holds 40 percent. Under terms of the agreement, the new company has acquired a company owned by GE in the U.S., as well as companies owned by Ericsson in the U.S., Sweden, Norway, Denmark, Finland and Spain. Also in accordance with the agreement, a jointly owned company has been formed in Canada, with Ericsson owning 60 percent of the shares and GE 40 percent.

At the end of the year an agreement was reached in principle covering the sale of the marketing company Ericsson Sverige AB to the Swedish Telecommunications Administration.

An agreement has also been reached with Forsheda AB on the sale of the subsidiary Töcksfors Verkstads AB, which was part of the Cable and Network business area.

Also at the end of the year, an agreement was signed with Bofors AB covering a merger of Bofors Electronics AB (BEAB) and the division for command and control systems in Ericsson Radar Electronics AB, a subsidiary

within the Defense Systems business area. Under terms of the agreement, BEAB is acquiring the Command and Control Systems Division and Ericsson is acquiring a 20-percent interest in BEAB. The agreement became effective January 1, 1990.

The Parent Company's holding in the associated Brazilian company, Ericsson do Brazil Comércio e Indústria S.A., was reduced through the sale of shares during the year. The Parent Company's remaining holding amounts to 50.5 percent.

Hans Werthén, Chairman of the Board of Directors, has announced that he wishes to retire on the date of the Company's Annual General Meeting. Björn Svedberg will be proposed as the new Chairman. The Board intends to appoint Lars Ramqvist, currently head of the Radio Communications Business Area, as the new President, effective on the same date.

#### Outlook

It is anticipated that the good level of profitability can be maintained in 1990 and that income will continue to improve somewhat.

#### Proposed Disposition of Earnings in the Parent Company

The sum of SEK 1,696,042,345 is available for disposition by the shareholders at the Annual General Meeting. The Board of Directors and the President propose that these unappropriated earnings be distributed as follows:

<i>That</i> a dividend of SEK 14.00 per share be paid to stockholders duly registered on the record date;	SEK	573,910,722
<i>That</i> the remainder be retained in the business	SEK	1,122,131,623
	SEK	1,696,042,345

Stockholm, March 1990

HANS WERTHÉN  
Chairman

JAN WALLANDER  
Deputy Chairman

PETER WALLENBERG  
Deputy Chairman

GEORG KARNSUND

TOMMY LINDBOHM

SVEN LJUNGBERG

SVEN OLVING

STANLEY OSCARSSON

STEN WIKANDER

SVEN ÅGRUP

BJÖRN SVEDBERG  
President



# Consolidated Income Statement

Telefonaktiebolaget LM Ericsson and consolidated subsidiaries

Years ended December 31, SEK m.	1989	1988	1987
Net sales .....	39,549	31,297	32,400
Cost of sales (exclusive of depreciation shown separately below) .....	20,978	17,579	17,952
Share in earnings of associated companies .....	18,571	13,718	14,448
Other operating revenues..... note 1	398	241	166
	411	452	730
	19,380	14,411	15,344
Selling, research and development, general and administrative expenses .....	13,529	10,762	11,946
Depreciation .....	1,294	971	1,213
<b>Operating Income after depreciation</b> ..... note 3	4,557	2,678	2,185
Financial income..... note 4	779	666	661
Financial expenses .....	1,210	1,219	1,556
<b>Income after financial income and expenses</b> .....	4,126	2,125	1,290
Minority interest in income before appropriations and taxes .....	-411	-285	-182
<b>Income before appropriations and taxes</b> .....	3,715	1,840	1,108
Appropriations to untaxed reserves			
Depreciation in excess of standard depreciation .....	-298	-24	-125
Changes in other untaxed reserves .....	-191	+260	+ 172
Minority interest in appropriations .....	-3	+44	+4
	-492	+280	+51
<b>Income before taxes</b> .....	3,223	2,120	1,159
Income taxes .....	1,546	880	488
Minority interest in taxes .....	+166	+73	+64
<b>Reported net income</b> .....	1,843	1,313	735
Adjusted net income per share, SEK .....			
– after actual taxes paid .....	58.34	27.06	17.90
– after full conversion .....	55.35	24.07	17.79
– after actual and estimated deferred taxes .....	53.81	31.29	19.26
– after full conversion .....	51.18	27.79	19.09



# Consolidated Balance Sheet

Telefonaktiebolaget LM Ericsson and consolidated subsidiaries

December 31, SEK m.	1989	1988	
<b>Assets</b>			
<b>Current assets</b>			
Cash, bank deposits and short-term cash investments .....	note 7	5,120	3,780
Notes and accounts receivable – trade (less allowance for doubtful accounts, 239 at December 31, 1989 and 173 at December 31, 1988) .....	note 8	12,242	10,159
Inventories (less advance and progress payments, 2,059 at December 31, 1989 and 2,130 at December 31, 1988) .....		9,647	8,171
Other current assets .....	note 9	2,606	2,487
		<u>29,615</u>	<u>24,597</u>
<b>Deposits related to untaxed reserves</b> .....	note 5	72	57
<b>Investments and other noncurrent assets</b>			
Notes and accounts receivable – trade .....	note 8	433	458
Investments in associated companies, at equity .....	note 21	931	826
Other investments .....		211	304
Other noncurrent assets .....	note 11	1,818	1,704
		<u>3,393</u>	<u>3,292</u>
<b>Property, plant and equipment</b> .....	note 12		
Cost .....		14,811	12,191
Accumulated standard depreciation .....		7,528	6,026
		<u>7,283</u>	<u>6,165</u>
Revaluation adjustments, net of accumulated standard depreciation .....		493	514
		<u>7,776</u>	<u>6,679</u>
<b>Assets pledged as collateral</b> .....	note 19		
		1,148	1,043
<b>Total assets</b> .....		<u>40,856</u>	<u>34,625</u>



December 31, SEK m. 1989      1988

**Liabilities and stockholders' equity**

**Current liabilities**

Accounts payable – trade .....	3,513	2,727
Advances from customers .....	3,354	2,986
Accrued taxes .....	1,115	611
Short-term borrowings .....	note 13	1,100      621
Current maturities of long-term debt .....	note 15	671      674
Other current liabilities .....	note 14	6,658      5,329
	<u>16,411</u>	<u>12,948</u>

**Long-term liabilities**

Debentures .....	note 15	1,467	1,524
Convertible debentures .....	note 16	656	1,528
Pension liabilities .....	note 17	3,729	3,437
Other long-term liabilities .....	note 15	1,146	1,251
		<u>6,998</u>	<u>7,740</u>

**Untaxed reserves**

Reserve for accounts receivable and intercompany profits .....	2,287	1,289	
Inventory reserve .....	454	1,101	
Reserves for future capital expenditures .....	368	528	
Accumulated depreciation in excess of standard depreciation .....	note 12	1,886	1,588
	<u>4,995</u>	<u>4,506</u>	

**Minority interest in equity of consolidated subsidiaries** ..... 1,423      804

**Stockholders' equity** ..... note 18

Capital stock .....	2,049	1,911
Reserves not available for distribution .....	5,878	5,078
	<u>7,927</u>	<u>6,989</u>
Retained earnings .....	3,102	1,638
	<u>11,029</u>	<u>8,627</u>

**Contingent liabilities** 1989 1988  
2,071 1,694 ..... note 20

**Total liabilities and stockholders' equity** ..... 40,856      34,625



## Consolidated Statement of Changes in Financial Position

Years ended December 31, SEK m.	1989	1988	1987
<b>Cash at January 1</b> .....	3,780	3,391	3,091
<b>Cash provided from operations</b>			
Net income .....	1,843	1,313	735
Minority interest in net income .....	248	168	114
Depreciation .....	1,294	971	1,213
Gains (-) / losses on sale of property, plant and equipment .....	66	30	-165
Increase (-) / decrease in bank deposits related to untaxed reserves .....	-15	21	96
Appropriations from (-) / to untaxed reserves .....	489	-236	-48
	3,925	2,267	1,945
<b>Translation adjustments not affecting income statement</b> .....	82	84	-265
<b>Sale of property, plant and equipment</b> .....	261	941	398
	343	1,025	133
<b>Changes in working capital (excl. cash)</b>			
Notes and accounts receivable – trade .....	-2,083	76	-747
Inventories .....	-1,476	184	1,166
Other current assets .....	-119	-632	294
Current liabilities, noninterest-bearing .....	2,987	1,697	430
	-691	1,325	1,143
<b>Changes in other assets</b>			
Additions to property, plant and equipment .....	-2,672	-1,739	-1,592
Translation adjustments in property, plant and equipment .....	-46	-47	205
Investments, net .....	-12	-162	37
Other noncurrent assets .....	-89	-540	346
	-2,819	-2,488	-1,004
<b>Dividends paid</b> .....	-529	-401	-372
<b>Cash flow</b> .....	229	1,728	1,845
<b>Cash provided from financial transactions</b>			
Changes in short-term liabilities .....	476	-522	-1,287
Changes in long-term liabilities .....	-742	-808	-220
Conversion of debentures .....	899	19	0
Additional capital contributed by minority .....	478	-28	-38
	1,111	-1,339	-1,545
<b>Cash at December 31</b> .....	5,120	3,780	3,391



# Parent Company Income Statement

Telefonaktiebolaget LM Ericsson

Years ended December 31, SEK m.	1989	1988	1987
Net sales .....	11,041	9,211	8,120
Cost of sales (exclusive of depreciation shown separately below) .....	5,158	4,425	4,067
	5,883	4,786	4,053
Other operating revenues ..... note 1	687	667	579
	6,570	5,453	4,632
Selling, research and development, general and administrative expenses .....	5,055	4,051	3,697
Depreciation ..... note 2	235	198	213
<b>Operating income after depreciation</b> .....	1,280	1,204	722
Financial income ..... note 4	1,154	699	823
Financial expenses ..... note 4	819	755	608
<b>Income before appropriations and taxes</b> .....	1,615	1,148	937
Appropriations to (-) / from untaxed reserves			
Changes in depreciation in excess of standard depreciation ..... note 2	-234	109	24
Changes in other untaxed reserves ..... note 5	-748	113	-2
	-982	222	22
Contributions from / to (-) subsidiary companies .....	354	-733	-412
<b>Income before taxes</b> .....	987	637	547
Income taxes .....	109	59	52
<b>Reported net income</b> .....	878	578	495



# Parent Company Balance Sheet

Telefonaktiebolaget LM Ericsson

December 31, SEK m.	1989	1988
<b>Assets</b>		
<b>Current assets</b>		
Cash, bank deposits and short-term cash investments .....	note 7 380	2,107
Notes and accounts receivable from subsidiary companies .....	note 8 4,427	1,588
Notes and accounts receivable – trade (less allowance for doubtful accounts, 68 at December 31, 1989 and 82 at December 31, 1988) .....	note 8 1,647	1,468
Inventories (less advance and progress payments, 51 at December 31, 1989 and 61 at December 31, 1988) .....	2,331	1,896
Other current assets .....	note 9 1,056	1,200
	9,841	8,259
<b>Deposits related to untaxed reserves</b> .....	note 5 40	15
<b>Investments and other noncurrent assets</b>		
Notes and accounts receivable – trade .....	note 8	
Subsidiary companies .....	–	89
Other .....	265	341
Other accounts receivable from subsidiary companies .....	823	503
Investments .....	note 10	
Subsidiary companies .....	6,477	5,080
Associated companies .....	236	195
Other investments .....	31	49
Other noncurrent assets .....	475	859
	8,307	7,116
<b>Property, plant and equipment</b> .....	note 12	
Cost .....	3,368	2,660
Accumulated standard depreciation .....	1,564	1,411
	1,804	1,249
Revaluation adjustments, net of accumulated standard depreciation .....	246	260
	2,050	1,509
<b>Assets pledged as collateral</b> .....	1989 270	1988 270
		note 19
<b>Total assets</b> .....	20,238	16,899



December 31, SEK m.

1989

1988

**Liabilities and stockholders' equity****Current liabilities**

Accounts payable – trade .....	846	471
Advances from customers .....	121	193
Short-term borrowings .....	285	9
Current maturities of long-term debt .....	437	424
Accounts payable to subsidiary companies .....	2,526	1,697
Other current liabilities .....	1,390	1,317
	<u>5,605</u>	<u>4,111</u>

**Long-term liabilities**

Debentures .....	note 15	1,360	1,575
Convertible debentures .....	note 16	657	1,557
Pension liabilities .....	note 17	1,337	1,210
Payables to subsidiary companies .....		1,304	631
Other long-term liabilities .....	note 15	5	199
		<u>4,663</u>	<u>5,172</u>

**Untaxed reserves**

Reserve for accounts receivable and intercompany profits .....		1,445	682
Inventory reserve .....		948	948
Reserves for future capital expenditures .....		141	156
Accumulated depreciation in excess of standard depreciation .....	note 12	617	383
		<u>3,151</u>	<u>2,169</u>

**Stockholders' equity** .....

Capital stock .....	note 18	2,049	1,911
Reserves not available for distribution .....		3,074	2,313
		<u>5,123</u>	<u>4,224</u>
General reserve .....		100	100
Retained earnings .....		718	545
Net income .....		878	578
		<u>6,819</u>	<u>5,447</u>

	1989	1988	
<b>Contingent liabilities</b> .....	2,547	2,383	note 20

<b>Total liabilities and stockholders' equity</b> .....		<u>20,238</u>	<u>16,899</u>
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# Parent Company Statement of Changes in Financial Position

Years ended December 31, SEK m.	1989	1988	1987
<b>Cash at January 1</b> .....	2,107	1,865	1,795
<b>Cash provided from operations</b>			
Net income .....	878	578	495
Depreciation .....	235	198	213
Gains (-) / losses on sale of property, plant and equipment .....	-94	69	-136
Increase (-) / decrease in bank deposits related to untaxed reserves .....	-25	-2	87
Appropriations to untaxed reserves and Parent Company contributions to subsidiary companies .....	628	511	381
	<u>1,622</u>	<u>1,354</u>	<u>1,040</u>
<b>Sale of property, plant and equipment</b> .....	<u>26</u>	<u>74</u>	<u>208</u>
<b>Changes in working capital (excl. cash)</b>			
Notes and accounts receivable – trade .....	-3,018	713	7
Inventories .....	-435	359	89
Other current assets .....	144	-575	77
Current liabilities, noninterest-bearing .....	1,205	170	-730
	<u>-2,104</u>	<u>667</u>	<u>-557</u>
<b>Changes in other assets</b>			
Additions to property, plant and equipment .....	-708	-233	-200
Investments, net .....	-1,420	-573	-1,104
Other noncurrent assets .....	229	-474	1,362
	<u>-1,899</u>	<u>-1,280</u>	<u>58</u>
<b>Contributions from / to (-) subsidiary companies</b> .....	<u>354</u>	<u>-733</u>	<u>-412</u>
<b>Dividends paid</b> .....	<u>-405</u>	<u>-344</u>	<u>-344</u>
<b>Cash flow</b> .....	<u>-2,406*</u>	<u>-262</u>	<u>-7</u>
<b>Cash provided from financial transactions</b>			
Changes in short-term liabilities .....	289	367	-230
Changes in long-term liabilities .....	-509	118	307
Conversion of debentures .....	899	19	0
	<u>679</u>	<u>504</u>	<u>77</u>
<b>Cash at December 31</b> .....	<u>380</u>	<u>2,107</u>	<u>1,865</u>

\*) Of this amount, SEK -2,478 m. represents transfer of Parent Company holdings of securities to LM Ericsson Kapitalmarknad AB, a subsidiary.



# Notes to the Financial Statements

In millions of Swedish kronor (except per share amounts)  
Years ended December 31

## General

In the Annual Report, the Company has given due consideration to the recommendations given in the "Declaration and Decisions on International Investment and Multinational Enterprises" of the Organization for Economic Cooperation and Development (OECD). The Company also follows the guidelines relative to multinational companies and the labor market developed by the International Labor Organization (ILO), the United Nations organization dealing with labor matters.

Generally, the same prices established for sales to external customers are applied in intercompany sales, except that consideration is given to the absence of certain costs in intercompany transactions.

## Accounting Policies

The consolidated financial statements of Telefonaktiebolaget LM Ericsson and its subsidiaries (the "Company") have been prepared in accordance with accounting principles generally accepted in Sweden. These accounting principles differ in certain important respects from accounting principles generally accepted in the United States. For a description of the differences and their approximate related effect on consolidated income and stockholders' equity, see Note 22.

### (a) Principles of Consolidation

The consolidated financial statements include the accounts of the Parent Company and all of its subsidiary companies. All significant transactions between these companies have been eliminated.

The consolidated financial statements have been prepared in accordance with the purchase method, whereby consolidated stockholders' equity includes equity in subsidiary and associated companies arising following their acquisition only.

Material investments in associated companies (see Note 21) in which the Company's voting stock interest is at least 20 percent but not over 50 percent are accounted for according to the equity method. Minor investments in associated companies and all other investments are accounted for as Other investments, and carried at the lower of cost or net realizable value.

Material investments in associated companies are shown at equity after adjustments for unrealized intercompany profits and unamortized goodwill or negative goodwill (see (b) below). In determining the equity of associated companies, untaxed reserves are added back to equity after provision for deferred taxes.

### (b) Goodwill and Negative Goodwill

Goodwill (excess of cost over net assets of acquired companies) and negative goodwill (excess of net assets acquired over cost) are normally amortized over a ten-year period. However, the goodwill attributable to the purchase of the associated company MET S.A. is being amortized at a rate of 5 percent per year since the investment is of such strategic value that a longer amortization period is more appropriate.

### (c) Sales Recognition

Sales are recorded upon shipment of products and represent amounts realized, excluding value added tax, and are net of goods returned, trade discounts and allowances.

Income from large long-term contracts is accounted for in accordance with the percentage-of-completion method. If costs required to complete such contracts are estimated to exceed remaining revenues, a provision is made for estimated losses.

### (d) Translation of Amounts in Foreign Currency

The Company applies the Statement of Financial Accounting Standards No. 52 issued by the Financial Accounting Standards Board of the United States (SFAS 52) for the translation to Swedish kronor of the financial statements of foreign subsidiaries and associated companies.

For many subsidiary and associated companies, generally those with manufacturing operations, which are located in Western Europe, the United States, Australia and Malaysia, the currency in which those companies primarily generate and expend cash is their functional (business) currency. Their balance sheet items (assets and liabilities) are

translated to Swedish kronor at year-end exchange rates and their Income Statement items are translated at average rates of exchange during the year. The resulting translation adjustments are accumulated under stockholders' equity. When a company accounted for in accordance with these principles is sold, the accumulated translation adjustments are included in income.

The financial statements of subsidiary and associated companies, generally without manufacturing operations, having such close relations with the Swedish operations that their functional currency is considered to be the Swedish krona, have been included in the consolidated financial statements to give approximately the same results as if their activities had been carried out in a Swedish enterprise. The adjustments arising from the remeasurement of these subsidiary and associated companies' financial statements are included in the consolidated income statement.

Effective January 1, 1986, the financial statements of all subsidiary and associated companies operating in countries with highly inflationary economies, and whose functional currency is considered to be the U.S. dollar, have been translated in two steps. In the first, the translation to dollars has been made to give approximately the same results in dollars as if the activities of the companies had been carried out in an American enterprise. The adjustments resulting from this remeasurement are included in the consolidated income statement. In the second step, from U.S. dollars to Swedish kronor, balance sheet items are translated at year-end exchange rates, and income statement items at the average rates of exchange during the year. The resulting translation adjustments are accumulated under stockholders' equity.

Gains and losses on foreign exchange include both remeasurement adjustments and gains and losses on foreign currency transactions. These are divided into operational and financial gains and losses on foreign exchange.

Net operational gains and losses on foreign exchange, mainly related to accounts receivable and payable are included in Cost of sales.

Financial gains and losses on foreign exchange are mainly related to liquid funds and loans. Gains and losses attributable to liquid funds for subsidiaries operating in countries with highly inflationary economies, and whose functional currency is considered to be the U.S. dollar, are included in financial income whereas gains and losses attributable to loans are included in financial expenses.

Financial gains and losses on foreign exchange for other companies are included net in financial expenses (see Note 4).

In the consolidated financial statements, receivables and liabilities in foreign currencies have been translated at year-end exchange rates. This means that in certain cases receivables are given a higher value and liabilities are given a lower value than if the receivables and liabilities had been translated at the lowest or highest of year-end exchange rate and historical exchange rate, respectively. Since 1988, the difference resulting from applying the two valuation methods described above is included in untaxed reserves and the change during the period is included in appropriations to untaxed reserves (see Note 5). If this method had also been applied 1987, consolidated income before appropriations and taxes would have been reduced by SEK 169 m.

Effective in 1988, Parent Company receivables in foreign currencies have been valued at the lowest of year-end exchange rate and historical exchange rate, whereas liabilities in foreign currencies have been valued at the highest of year-end exchange rate and historical exchange rate. In previous years, unrealized foreign exchange gains have been offset against unrealized foreign exchange losses and if the net result has been a foreign exchange gain, such gain has not been included in income.

The rates of forward exchange contracts are used for valuing receivables and liabilities covered by such contracts.

Consolidated nonrestricted stockholders' equity has from 1989 been translated at year-end exchange rates.



### (e) Research and Development Costs

Research and development costs are expensed as incurred. Costs based on orders from customers are included in cost of goods and services sold.

### (f) Inventories

Inventories are stated at standard cost, which approximates cost on a first-in, first-out (FIFO) basis. Cost includes materials, labor and manufacturing overhead. Write-downs have been made in cases where the sales value of goods, after deduction of estimated selling costs, is lower than historical cost.

Intercompany profits that were not realized through the sale of goods to customers have been eliminated, as has also been done in the case of associated companies which are accounted for by the equity method.

### (g) Taxes and Untaxed Reserves

In accordance with accounting principles generally accepted in Sweden, no provision has been made for deferred taxes, except in certain foreign subsidiaries (see Note 5).

The Company is allowed to claim tax deductions by developing appropriations and accumulating them in accounts for untaxed reserves; such amounts are taxed only when the untaxed reserves are reduced.

For additional information on untaxed reserves, see Note 5.

In certain cases, the differences between valuations of income statement and balance sheet items in the local financial statements and the consolidated statement have been treated as appropriations in the consolidated income statement and as untaxed reserves in the consolidated balance sheet. For certain companies, the tax expense has been reduced by adjustments in the company's tax return. In these cases, income and stockholders' equity at the Company level have been adjusted as if appropriations and untaxed reserves are reported in accordance with the Swedish method.

### (h) Leases

Leased property is normally expensed over the term of the lease. Certain types of contracts are capitalized and reported as an acquisition of a fixed asset.

### (i) Property, Plant and Equipment

Property, plant and equipment are stated at cost except for revaluation adjustments of certain land and buildings. The revaluation adjustments are allowed under certain circumstances in accordance with accounting principles generally accepted in Sweden and in certain other countries.

### (j) Depreciation

The Company normally claims the maximum depreciation deduction allowable for tax purposes, using accelerated techniques applicable in various countries, thus minimizing the use of corporate funds for tax payments.

The annual depreciation is reported on two levels of the income statement: (1) standard depreciation, generally on the straight-line method, using estimated useful lives of, in general, 40 years on buildings, 25 years on telephone plants, 20 years on land improvements, 5 to 10 years on machinery and equipment, and up to 5 years on rental equipment, which is reported as an operating expense, and (2) depreciation in excess of standard depreciation which is reported as Appropriations to untaxed reserves.

During 1989 certain telephone exchange equipment was leased to customers; in this connection, the cost of the assets was shown in the consolidated accounts as Other long-term assets and Other short-term assets. Depreciation of these assets for tax purposes is shown as Depreciation in excess of standard depreciation. The assets are included in Machinery and equipment in the Parent Company accounts.

Depreciation in excess of standard depreciation also includes the share of excess depreciation attributable to partnerships partly owned by Ericsson.

### (k) Adjusted Net Income per Share

Adjusted net income per share is based upon the average weighted number of common shares outstanding during each year as well as the average weighted number of common shares including the effect of the conversion of all convertible debentures.

The calculation of adjusted net income per share is not based on reported net income, the amount of which is affected by appropriations deductible for tax purposes, but on income before appropriations and taxes less either of the following:

- (1) Actual taxes paid as reported.
- (2) Actual taxes paid as reported and less deferred taxes determined as an estimated tax on appropriations to untaxed reserves, which tax is adjusted for minority interests.

The effect of these methods is that two amounts of adjusted net income per share are shown before and after conversion, respectively:

- (1) Adjusted net income per share after actual taxes paid.
- (2) Adjusted net income per share after actual and estimated deferred taxes.

For reference to net income per share in accordance with accounting principles generally accepted in the United States, see Note 22.

## Note 1 Other Operating Revenues

Consolidated	1989	1988	1987
Gains/losses (-) on sale of property, plant and equipment	-66	-30	165
Gains on sale of investments and operations	69	25	212
Commissions, license fees and other operating revenues	408	457	353
	411	452	730
<b>Parent Company</b>			
Gains/losses (-) on sale of property, plant and equipment	-11	-69	136
Gains on sale of investments	105	258	115
Commissions, license fees and other operating revenues	593	478	328
	687	667	579

## Note 2 Depreciation

Consolidated	1989	1988	1987
<i>Total depreciation</i>			
Land improvements	3	-39	41
Buildings	154	46	172
Telephone plants	43	36	41
Machinery and equipment	1,396	993	1,064
Revaluation adjustments	21	25	30
	1,617	1,061	1,348
Less - Depreciation in excess of standard depreciation related to assets sold	25	66	10
Total depreciation	1,592	995	1,338
<i>Standard depreciation</i>			
Land improvements	2	-38	42
Buildings	85	64	68
Telephone plants	43	36	41
Machinery and equipment	1,143	884	1,032
Revaluation adjustments	21	25	30
Total standard depreciation	1,294	971	1,213
Depreciation in excess of standard depreciation	-298	-24	-125
<b>Parent Company</b>			
<i>Total depreciation</i>			
Land improvements	-	-	-
Buildings	6	6	46
Machinery and equipment	458	144	166
Revaluation adjustments	14	14	14
	478	164	226



Less – Depreciation in excess of standard depreciation related to assets sold	9	75	37
Total depreciation	469	89	189
<i>Standard depreciation</i>			
Land improvements	1	1	1
Buildings	15	15	16
Machinery and equipment	205	168	182
Revaluation adjustments	14	14	14
Total standard depreciation	235	198	213
Changes in depreciation in excess of standard depreciation	-234	+109	+24

### Note 3 Operating Income, by Business Area (Not subject to audit)

	1989	1988	1987
Public Telecommunications	3,539	1,929	1,359
Radio Communications	692	264	210
Business Communications	252	155	-2
Cable and Network Components	350	490	397
Defense Systems	142	113	88
	-46	-87	182
Other operations, capital gains and corporate expenses	-372	-186	-49
Ericsson, total	4,557	2,678	2,185

### Note 4 Financial Income and Expenses

Consolidated	1989	1988	1987
<i>Financial income</i>			
Interest income	776	663	654
Dividends	3	3	7
Total financial income	779	666	661
<i>Financial expenses</i>			
Interest expenses	1,100	1,164	1,586
Gains and losses on foreign exchange, net	71	40	-105
Other financial expenses	39	15	75
Total financial expenses	1,210	1,219	1,556
Financial net	-431	-553	-895

#### Parent Company

<i>Financial income</i>			
Interest income	662	488	525
Dividends from subsidiaries	448	183	268
Dividends from others	44	28	30
Total financial income	1,154	699	823
<i>Financial expenses</i>			
Interest expenses	844	671	639
Gains and losses on foreign exchange, net	-47	80	-77
Other financial expenses	22	4	46
Total financial expenses	819	755	608
Financial net	335	-56	215

Swedish companies' interest on the pension liabilities is included in the interest expenses shown above.

For Latin American subsidiaries operating in countries with highly inflationary economies, and whose functional currency is the U.S. dollar, financial gains and losses on foreign exchange in 1989 and 1988 have reduced interest income by SEK 135 m. (SEK 10 m.) while interest expenses have been reduced by SEK 266 m. (SEK 258 m.). Financial exchange differences for 1989 and 1988 are divided into interest income and interest expenses. In 1987, these items were included in gains and losses on foreign exchange.

## Note 5 Income Taxes, Appropriations and Untaxed Reserves

### Income Taxes

As explained under Accounting Policies (g), the Company has not, in accordance with accounting principles generally accepted in Sweden, provided for deferred income taxes. Under tax regulations in Sweden, the Company is allowed to claim tax deductions by developing appropriations to certain reserves, and the provision for income taxes is determined by taking such tax relief into account.

The Swedish national tax rate is 40 percent.

The profit-sharing tax is a corporate tax that was levied in Sweden for the first time in 1984. The tax, borne by legal entities individually, is based on nominal income readjusted to income in real terms. Thus, in determining the profit-sharing base, the rate of inflation is taken into account. The tax is 20 percent of the profit sharing base, and the tax is deductible the following year in determining both the corporate income tax and the profit-sharing tax.

A special profit tax of 15 percent, calculated on the same basis as the profit-sharing tax, was levied in 1989. No deduction is allowed for this tax.

Certain subsidiaries, mainly based in the United States and Argentina, had at December 31, 1989 tax loss carry-forwards, that can be utilized to reduce future taxable income, amounting to approximately SEK 1,041 m. Such loss carry-forwards expire as follows (in millions):

Year of expiration	Amount
1990	18
1991	15
1992	3
1993	4
1994	25
1995	3
1996	0
1997	187
1998	257
1999 or later	529
	1,041

In addition, the Parent Company had at December 31, 1989 unutilized tax deduction benefits related to its dividend payments.

As proposed in a report of the Swedish Drafts Legislation Advisory Committee, a new corporate tax system will be introduced in Sweden, effective in 1991. Under the proposal, deductions for dividends paid will be permitted in line with current rules up to and including 1995. Thereafter, a deduction of 60 percent will be allowed on the remaining unutilized portion of deductions in the tax years 1997–2000. With a dividend of SEK 14 per share on the current capital stock, the deduction between now and the year 2000 may be estimated at approximately SEK 1,326 m.

The Parent Company also has unutilized tax deduction benefits of SEK 234 m. related to capital losses that can be offset against capital gains in determining tax payments in future years.

### Appropriations and Untaxed Reserves

The reserve for accounts receivable and intercompany profits principally represents appropriations based on certain receivables and intercompany profits.

Appropriations to the inventory reserves are, within specified limits, deductible for income tax purposes. The inventory reserve may amount to 40 percent of the inventory value, determined according to the first-in, first-out (FIFO) method. To the extent that the inventory reserve is released, it becomes taxable income.

The possibility, available earlier, of allocating a certain portion of income for the year to the General reserve for future capital expenditures has been terminated.

In Sweden, a temporary regulation was in force concerning appropriations of 1985 income to a Development reserve. Swedish corporations were required to deposit 10 percent of annual income, determined in the same way as for appropriations to the General reserve for future capital expenditures, in a noninterestbearing development account in the Bank of Sweden. The Development reserve may be utilized to cover employee training expenses and for research and development activities. The company's employees must be given the opportunity to express their view on applications to utilize funds from the reserve. In 1989, the Swedish Ericsson companies have utilized this reserve.



In connection with the sale of commercial property, Swedish companies may defer payment of the capital gains tax by making an appropriation to a Replacement reserve. The amount appropriated may not exceed the capital gain realized on the sale of property. The Replacement reserve may be used to depreciate replacement property acquired within a period of three years. Under special circumstances, this period may be extended for a maximum of three additional years.

In accordance with the proposed new corporate tax system, it will be possible to utilize the reserves for their stated purposes in the future. Reserves not utilized at the time of 1996 taxation may be recovered as taxable income without surcharge.

#### Appropriations to Other Untaxed Reserves

Consolidated	1989	1988	1987
Appropriations to Reserve for receivables and intercompany profits	-998	-187	-117
Transfer from Inventory reserve	+647	+641	+265
Transfer from General and Compulsory reserves for future capital expenditures, net	+66	+2	+24
Transfer from / to Currency Exchange reserve	+94	-196	-
	-191	+260	+172

#### Parent Company

Appropriations to (-) / transfer from (+) Reserve for receivables and intercompany profits	-763	-1	+30
Transfer from Inventory reserve	-	+134	+15
Appropriations to (-) / transfer from (+) General and Compulsory reserves for future capital expenditures, net	+15	-20	-47
	-748	+113	-2

#### Changes in General Reserve for Future Capital Expenditures, Development Reserve and Replacement Reserve

	Consolidated			Parent Company		
	1989	1988	1987	1989	1988	1987
<i>Appropriations to Reserves</i>						
General reserve for future capital expenditures	-	35	2	-	35	-
Development reserve	-	-	-	-	-	-
Replacement reserve	-	-	127	-	-	110
	-	35	129	-	35	110
<i>Transfer from Reserves</i>						
General reserve for future capital expenditures	14	15	119	13	-	45
General reserve for future capital expenditures transferred to Swedish subsidiaries	-	-	-	-	8	10
Development reserve	14	22	34	6	15	4
Development reserve transferred to Swedish subsidiaries	-	-	-	-4	-8	4
Replacement reserve	38	-	-	-	-	-
	66	37	153	15	15	63
Appropriations, net	+66	+2	+24	+15	-20	-47

#### Central Bank Deposits Related to Untaxed Reserves

	Consolidated		Parent Company	
	1989	1988	1989	1988
Account for General reserve for future capital expenditures	45	17	35	6
Account for Development reserve	27	40	5	9
	72	57	40	15

#### Note 6 Adjusted Net Income per Share

Consolidated	1989	1988	1987
Income before appropriations and taxes	3,715	1,840	1,108
Actual income taxes paid as reported *	-1,546	-880	-488
Minority interest in taxes paid	+166	+73	+64
Adjusted net income (after actual taxes paid)	2,335	1,033	684
Per share	58.34	27.06	17.90
Adjusted net income (after actual taxes paid)	2,335	1,033	684
Interest expenses on convertible debentures net of income taxes	+44	+55	+12
Foreign exchange differences on convertible debentures, net	+25	-42	+13
Adjusted net income (after actual taxes paid) after full conversion	2,404	1,046	709
Per share	55.35	24.07	17.79

#### Consolidated

Adjusted net income (after actual taxes paid)	2,335	1,033	684
Estimated deferred taxes on appropriations	-179	+140	+45
Minority interest in estimated deferred taxes	-2	+22	+7
Adjusted net income (after actual and estimated deferred taxes)	2,154	1,195	736
Per share	53.81	31.29	19.26
Adjusted net income (after actual and estimated deferred taxes)	2,154	1,195	736
Interest expenses on convertible debentures net of income taxes	+44	+55	+12
Foreign exchange differences on convertible debentures, net	+25	-42	+13
Adjusted net income (after actual and estimated deferred taxes) after full conversion	2,223	1,208	761
Per share	51.18	27.79	19.09

\* Actual taxes paid in 1988 include estimated deferred taxes of SEK 115 m. attributable to untaxed reserves in companies sold.

Weighted average number of shares outstanding:

1989 - 40,027,009  
1988 - 38,166,746  
1987 - 38,162,382

Weighted average number of shares outstanding after full conversion:

1989 - 43,434,473  
1988 - 43,434,582  
1987 - 39,863,788

#### Note 7 Cash, Bank Deposits and Short-Term Cash Investments

	Consolidated		Parent Company	
	1989	1988	1989	1988
Cash and bank deposits	2,158	1,608	380	267
Short-term cash investments	2,962	2,172	-	1,840
	5,120	3,780	380	2,107



**Note 8 Notes and Accounts Receivable – Trade**

	Consolidated		Parent Company	
	1989	1988	1989	1988
<i>Due within 12 months</i>				
Subsidiary companies				
Accounts receivable	-	-	4,347	1,504
Notes receivable	-	-	80	84
	-	-	4,427	1,588
<i>Other</i>				
Accounts receivable	12,196	10,084	1,599	1,412
Notes receivable	46	75	48	56
	12,242	10,159	1,647	1,468
<i>Due after 12 months</i>				
Subsidiary companies				
Accounts receivable	-	-	-	89
Notes receivable	-	-	-	-
	-	-	-	89

**Note 10 Investments**

The following listing shows certain shareholdings owned directly and indirectly by the Parent Company.

A complete listing of shareholdings, prepared in accordance with the Swedish Companies Act and filed with the Swedish Patent and

**Shares directly owned by the Parent Company**

			Percentage of ownership	Par value	Carrying value
<b>Subsidiaries</b>					
<b>Sweden</b>					
IV	ELLEMTTEL Utvecklings AB	Sweden	50	SEK 5	6
I	Ericsson Business Communications AB	Sweden	100	SEK 360	335
I	Ericsson Cables AB	Sweden	100	SEK 140	140
I	Ericsson Components AB	Sweden	100	SEK 58	49
I	Ericsson Radar Electronics AB	Sweden	100	SEK 30	128
I	Ericsson Radio Systems AB	Sweden	100	SEK 50	154
I	Ericsson Network Engineering AB	Sweden	100	SEK 25	26
I	Ericsson Telecom AB	Sweden	100	SEK -	-
I	Radiosystem Sweden AB	Sweden	100	SEK 20	20
	Other		-	SEK -	317
<b>Europe (excluding Sweden)</b>					
V	Ericsson Treasury Services	Ireland	100	IEP -	300
V	Ericsson Treasury Ireland Ltd	Ireland	100	USD 81	508
III	LM Ericsson Holdings Ltd	Ireland	100	IEP 2	14
III	SETEMER S.p.A.	Italy	71	ITL 15,259	97
III	Ericsson Holding International B.V.	The Netherlands	100	NLG 57	667
III	Swedish Ericsson Company Ltd	United Kingdom	100	GBP 15	599
	Other		-	-	23
<b>U.S.A. and Canada</b>					
I	Ericsson Communications Inc.	Canada	100	CAD n.p.v.	57
III	Ericsson North America Inc	United States	100	USD n.p.v.	540
III	Ericsson GE mobile Communications Holding Inc	United States	60	USD -	1,984
	Other		-	-	1
<b>Latin America</b>					
II	Cía Argentina de Teléfonos S.A.	Argentina	78	ARA 59	24
I	Cía Ericsson S.A.C.I.	Argentina	100	ARA 5	3
I	Ericsson de Colombia S.A.	Colombia	92*	COP 221	27
I	Teleindustria Ericsson S.A.	Mexico	72	MXP n.p.v.	278
I	Cía Anónima Ericsson	Venezuela	100	VEB 10	10
	Other		-	-	53
<b>Other Countries</b>					
III	Teleric Pty. Ltd	Australia	100	AUD 20	99
I	Ericsson Telecommunications Sdn Bhd	Malaysia	70	MYR 2	4
	Other		-	-	14
				Total	6,477
<b>Associated Companies</b>					
I	Ericsson do Brasil Comércio e Indústria S.A.	Brazil	51**	NCZ 24	82
I	MET S.A.	France	20****	FRF 50	53
I	Perwira Ericsson Sdn Bhd	Malaysia	40	MYR 2	5
I	Oriental Telecommunication Company Ltd	Republic of Korea	50	KRW 3,000	29
V	AB LM Ericsson Finans	Sweden	90***	SEK 24	40
	Other		-	-	27
				Total	236
<b>Other Companies</b>					
	Other		-	-	31
				Total	31

Consolidated 1989 1988 Parent Company 1989 1988

Other				
Accounts receivable	236	273	118	186
Notes receivable	197	185	147	155
	433	458	265	341

The allowance for doubtful accounts which has reduced the amounts shown above includes allowances for estimated losses based on commercial risk evaluations. The allowance does not include provisions for potential losses of a political nature.

**Note 9 Other Current Assets**

	Consolidated		Parent Company	
	1989	1988	1989	1988
Prepaid expenses and accrued revenues	572	575	153	195
Advances to suppliers	224	251	-	-
Other current assets	1,810	1,661	903	1,005
	2,606	2,487	1,056	1,200



**Shares owned by the subsidiaries**

			Percentage of ownership
<b>Subsidiaries Sweden</b>	I	Ericsson Radio Systems Sverige AB .....	Sweden 60
	I	Svenska Elgrossist AB, SELGA .....	Sweden 67
	I	Ericsson Mobile Communications AB .....	Sweden 60
<b>Europe (excluding Sweden)</b>	I	Ericsson Business Communications NV/SA .....	Belgium 100
	I	LM Ericsson A/S .....	Denmark 100
	I	Oy LM Ericsson Ab .....	Finland 100
	I	LM Ericsson Ltd .....	Ireland 100
	I	FATME S.p.A. ....	Italy 71
	I	FIAR S.p.A. ....	Italy 45
	I	SIELTE S. p.A. ....	Italy 71
	III	Ericsson Holding A/S .....	Norway 100
	I	Ericsson Telecom A/S .....	Norway 100
	I	Industrias de Telecomunicación S.A. (Intelsa) .....	Spain 100
	I	Ericsson Telecommunicatie B.V. ....	The Netherlands 100
I	Ericsson Paging Systems B.V. ....	The Netherlands 100	
I	Ericsson Ltd .....	United Kingdom 100	
<b>U.S.A. and Canada</b>	I	Ericsson GE Mobile Communications Inc .....	Canada 60
	I	Ericsson GE Mobile Communications Inc .....	USA 60
	III	Ericsson GE Holding Inc .....	USA 60
	I	Ericsson Radio Systems Inc .....	USA 60
	I	Ericsson Cables Inc .....	USA 100
	I	Ericsson Business Communications Inc .....	USA 100
	I	Ericsson Network Systems Inc .....	USA 100
<b>Latin America</b>	I	Industrias Eléctricas de Quilmes S.A. ....	Argentina 100
	I	Fábricas Colombianas de Materiales Eléctricos Facomec S.A. ....	Colombia 100
	I	Ericsson de Guatemala S.A. ....	Guatemala 71
	I	Telecomponentes Ericsson S.A. de C.V. ....	Mexico 72
<b>Other Countries</b>	I	LM Ericsson Pty. Ltd .....	Australia 100
	I	Ericsson Network Engineering Pty. Ltd .....	Singapore 100
	I	Ericsson Sebeke Insaati A.S. ....	Turkey 100
<b>Associated Companies</b>	I	Fios e Cabos Plasticos do Brasil S.A. ....	Brazil 30
	I	Conductores Latincasa S.A. de C.V. ....	Mexico 36

<b>Key to functions of companies</b>	I	Manufacturing and distributing companies
	II	Telephone operating companies
	III	Holding companies
	IV	Development companies
	V	Finance companies

- \* Through subsidiary holdings, total holdings amount to 100% of Ericsson de Colombia S.A.
- \*\* The voting shares total 26%
- \*\*\* The voting shares total 40%
- \*\*\*\* Including holdings of associated companies, total holdings in MET S.A. amount to 26%

**Note 11 Other Noncurrent Assets**

Consolidated	1989	1988
<i>Goodwill, net</i>		
Balance, January 1	475	150
Aquisitions/divestments	-3	388
Depreciation	-63	-63
Net carrying value, December 31	409	475
Other noncurrent assets	1,409	1,229
	1,818	1,704

**Note 12 Property, Plant and Equipment**

Property, plant and equipment is recorded at cost, including freight, customs duties and construction or installation costs (including labor and related overhead). However, certain assets have been revalued in accordance with accounting principles generally accepted in Sweden and in certain other countries.

Standard depreciation is based on historical cost and revaluation adjustments. Such depreciation is based on the estimated useful lives of the assets and the accumulated amounts are deducted from the value of the assets.

Total accumulated depreciation in excess of the accumulated standard depreciation, is reported under Untaxed reserves in the balance sheet.

**Note 12 Property, Plant and Equipment (cont.)**

	Consolidated		Parent Company	
	1989	1988	1989	1988
<i>Cost</i>				
Land	123	116	31	31
Land improvements	23	18	19	19
Buildings	2,608	2,202	643	635
Telephone plants	1,055	973	-	-
Machinery and equipment	10,454	8,221	2,542	1,849
Constructions in progress	548	661	133	126
	14,811	12,191	3,368	2,660
<i>Accumulated standard depreciation</i>				
Land improvements	25	22	10	10
Buildings	854	661	260	245
Telephone plants	435	390	-	-
Machinery and equipment	6,214	4,953	1,294	1,156
	7,528	6,026	1,564	1,411
<i>Net carrying value</i>	7,283	6,165	1,804	1,249



	Consolidated		Parent Company	
	1989	1988	1989	1988
<i>Accumulated total depreciation</i>				
Land improvements	44	41	16	15
Buildings*	1,335	1,097	280	274
Telephone plants	435	390	–	–
Machinery and equipment	7,600	6,086	1,885	1,505
	9,414	7,614	2,181	1,794
<i>Accumulated depreciation in excess of standard depreciation</i>	1,886	1,588	617	383
*) After transfer of accumulated depreciation in excess of standard depreciation to Revaluation reserve of	386	386	303	303
<i>Revaluation adjustments</i>				
Land	186	192	148	148
Buildings	594	589	336	336
Machinery and equipment	151	148	–	–
	931	929	484	484
<i>Less – Accumulated depreciation</i>				
Buildings	320	298	238	224
Machinery and equipment	118	117	–	–
	438	415	238	224
Net carrying value	493	514	246	260
<i>Tax assessment values (Sweden)</i>				
Land and land improvements	474	472	321	321
Buildings	1,323	1,305	791	791

### Note 13 Short-Term Borrowings

Short-term borrowings consist of bank overdrafts, bank loans and other short-term financial loans.

The unused portion of lines of credit for the Company amounted to SEK 2,360 m. In addition, the Parent Company had unused long-term lines of credit amounting to SEK 622 m.

### Note 14 Other Current Liabilities

	Consolidated		Parent company	
	1989	1988	1989	1988
Accrued expenses and prepaid revenues	3,930	3,287	1,060	946
Other	2,728	2,042	330	371
	6,658	5,329	1,390	1,317

### Note 15 Debentures and Other Long-Term Liabilities

Debentures and other long-term liabilities, except convertible debentures and pension liabilities, include the following:

Parent Company	1989	1988
	<i>(excl. liabilities to subsidiary companies)</i>	
Debentures (maturing from 1990 to 2004), bearing interest from 7.3% to 13% at December 31, 1989	1,590	1,654
Other long-term loans (maturing from 1990 to 2004), bearing interest from 7.3% to 13.2% at December 31, 1989	207	422
Other long-term liabilities	5	122
	1,802	2,198
Less – Current maturities	437	424
Total Parent Company	1,365	1,774
Remeasurement using year-end exchange rate*	–66	–75

\* When revalued at year-end exchange rate, short-term portion is SEK 0 m. (SEK 50 m.)

Subsidiaries	1989	1988
Mortgage and other collateralized loans (maturing from 1990 to 2004), at December 31, 1989	604	633
Other long-term loans (maturing from 1990 to 2013) at December 31, 1989	648	477
Other long-term liabilities	296	266
	1,548	1,376
Less – Current maturities	234	300
Total Subsidiaries	1,314	1,076
Total	2,613	2,775

Maturities of consolidated long-term debenture loans and other long-term loans, excluding other long-term liabilities in subsidiaries with deduction of short-term portion of SEK 14 m., at December 31, 1989 were as follows:

1991	903
1992	213
1993	157
1994	219
1995	71
1996 and thereafter through 2013	768
	2,331

Debentures and other long-term loans, excluding other long-term liabilities in subsidiaries, were repayable in the following currencies:

USD	940
SEK	760
ITL	223
NOK	110
FIM	108
GBP	92
ESP	71
CHF	12
Other currencies	15
	2,331

### Note 16 Convertible Debentures

The Parent Company issued three convertible debenture loans during 1987. The first was in an amount of CHF 135 m., with a maturity of 15 years and interest of 2.75 percent. The debentures are convertible up to and including February 1, 2002 at a conversion price of SEK 326 per B share. During 1989 debentures in the amount of CHF 123.5 m. were converted to 1,587,300 B shares.

The second loan was in the amount of USD 60 m., with interest of 6.875 percent and a maturity of 15 years. On May 31, 1989, the Company called for early redemption of this loan on June 30, 1989. Under terms of the loan agreement, holders of the convertibles had the right to convert these debentures prior to the latter date. The entire amount of the loan, except for USD 10,000, was converted to 1,172,910 B shares. The debentures in the amount of USD 10,000 were redeemed for cash.

The third loan, offered exclusively to Ericsson employees, was in the amount of SEK 626.4 m., with interest of 11.25 percent, a maturity of 5 years and a conversion price of SEK 265. The debentures were convertible beginning December 18, 1989. During 1989, debentures in the amount of SEK 26,500 were converted to 100 B shares.

The number of Ericsson shares outstanding increased by a total of 2,760,310 through conversion of debentures during 1989. The capital stock thereby increased to SEK 2,049 m. and the number of shares outstanding to 40,974,934.

Upon conversion of all convertible debentures outstanding, the number of shares will be further increased by 2,459,430.

During the period beginning January 1, 1990 through February 15, 1990, additional debentures were converted to 18,689 B shares; as a result the total number of shares carrying rights to dividends as of the record date is 40,993,623.

### Note 17 Pension Liabilities

The pension liabilities, SEK 3,729 m., include the Parent Company's and the Swedish companies' obligations in the amount of SEK 2,772 m. in 1989 and SEK 2,567 m. in 1988 in accordance with an agreement with the Pension Registration Institute (PRI).



The Parent Company's pension liabilities, SEK 1,337 m., include an obligation in the amount of SEK 1,239 m. in 1989 and SEK 1,116 m. in 1988 in accordance with its agreement with PRI.

## Note 18 Stockholders' Equity

Capital Stock at December 31, 1989 consisted of the following:

	Number of shares out- standing	Aggregate par value
A shares (par value SEK 50)	3,728,515	186
B shares (par value SEK 50)	37,246,419	1,863
	40,974,934	2,049

The capital stock of the Company is divided into two classes: Class A shares (par value SEK 50) and Class B shares (par value SEK 50). Both classes have the same rights of participation in the net assets and earnings of the Company; however, Class A shares are entitled to one vote per share while Class B shares are entitled to 1/1000th of one vote per share.

### Reserves not Available for Distribution

In accordance with statutory requirements in Sweden and certain other countries in which the Company is operating, the Parent Company and its subsidiaries and associated companies maintain reserves that are not available for distribution.

Generally, investments in subsidiaries and associated companies and property, plant and equipment may be revalued in accordance with the Swedish Accounting Act. Revaluation adjustments to property, plant and equipment must be depreciated when required under accounting principles generally accepted in Sweden. Land and buildings may be revalued up to a maximum of the tax assessed value of the assets if the value of the assets is considerably higher than their underlying carrying value. The Swedish Companies Act requires that revaluations be credited to capital stock or to reserves not available for distribution and that they may be used for necessary write-downs of other items of property, plant and equipment and other noncurrent assets.

The appropriations of retained earnings to legal reserves in 1989 include earnings in associated companies amounting to SEK 232 m.

Increases or decreases in reserves not available for distribution have no effect on net income.

### Cumulative Translation Adjustments

This item is included in stockholders' equity consisting of translation adjustments resulting from the translation to Swedish kronor of financial statements of subsidiaries and associated companies to the extent that the local currencies of such companies, or the United States dollar, are considered to be functional currencies in accordance with Statement No. 52 of the Financial Accounting Standards Board of the U.S.A. (SFAS 52), see (d) under Principles of Consolidation.

### Changes in Stockholders' Equity

Consolidated	Capital stock	Reserves not avail- able for distribu- tion	Available retained earnings	Total
Balance, January 1, 1989	1,911	5,078	1,638	8,627
Appropriations to legal reserves	-	369	-369	-
Conversion of debentures	138	761	-	899
Dividends	-	-	-405	-405
Changes in cumulative translation adjustments	-	65	-	65
Translation at year-end exchange rates	-	-395	395	-
Net income for 1989	-	-	1,843	1,843
Balance December 31, 1989	2,049	5,878	3,102	11,029

The increase of SEK 138 m. in capital stock resulting from conversion of debentures was not registered with the Patent and Registration Office on December 31, 1989. Registration was made in 1990.

Effective 1989, cumulative translation adjustments have been included in restricted reserves. Of the change in cumulative translation adjustments, SEK +12 m. was attributable to companies sold.

Of the retained earnings, SEK 43 m. will be appropriated to reserves not available for distribution in accordance with the proposals of the respective companies' boards of directors. In evaluating the consolidated financial position, it should be noted that earnings in the foreign companies may in certain cases be subject to taxation when transferred to Sweden and that, in some instances, such transfers of earnings may be limited by currency restrictions.

Effective in 1989, Ericsson's share of uneliminated unrestricted reserves in foreign subsidiaries is translated at year-end exchange rates. The increase in unrestricted equity resulting from this revaluation has reduced Ericsson's restricted reserves.

Parent Company	Capital stock	Reserves not avail- able for distribu- tion	Available retained earnings	Total
Balance, January 1, 1989	1,911	2,313	1,223	5,447
Conversion of debentures	138	761	-	899
Dividends	-	-	-405	-405
Net income for 1989	-	-	878	878
Balance, December 31, 1989	2,049	3,074	1,696	6,819

### Note 19 Assets Pledged as Collateral

	Consolidated 1989	1988	Parent Company 1989	1988
Real estate mortgages	386	409	110	110
Other mortgages	682	629	160	160
Shares	78	-	-	-
Accounts receivable - trade	2	3	-	-
Bank deposits	-	2	-	-
	1,148	1,043	270	270

At December 31, 1989, the Parent Company had pledged no assets in favor of subsidiaries. However, under certain conditions, it may pledge collateral for certain subsidiaries' pension obligations.

### Note 20 Contingent Liabilities

	Consolidated 1989	1988	Parent Company 1989	1988
Discounted notes receivable	6	23	-	-
Receivables sold with recourse	765	671	541	665
Unrecorded pension commitments	65	67	-	-
Other guarantees	1,235	933	2,006	1,718
	2,071	1,694	2,547	2,383

Of the guarantees assumed by the Parent Company, SEK 1,306 m. in 1989 and SEK 1,271 m. in 1988 related to subsidiary companies.

### Note 21 Investments in Associated Companies

The Company has interests in associated companies which are accounted for under the equity method. Details of such investments are given in Note 10.

Intercompany profits arising on transactions between the Company and associated companies have been eliminated in the consolidated financial statements.

Dividends received from companies accounted for under the equity method were SEK 75 m. in 1989, SEK 71 m. in 1988 and SEK 50 m. in 1987.

Undistributed earnings of associated companies included in consolidated equity were SEK 641 m. in 1989, SEK 602 m. in 1988 and SEK 520 m. in 1987.



## Note 22 United States Generally Accepted Accounting Principles

Elements of the Company's accounting policies which differ significantly from generally accepted accounting principles in the United States (U.S. GAAP) are described below:

### (a) Revaluation of Assets

Certain property, plant and equipment has been revalued at an amount in excess of cost. This procedure, under certain circumstances, is allowed under Swedish accounting practice. Accounting principles generally accepted in the United States do not permit the revaluation of assets in the primary financial statements.

### (b) Appropriations and Untaxed Reserves

As described in Note 5, the Company is allowed to make appropriations to untaxed reserves which are used principally to defer income taxes. For financial reporting purposes, these appropriations are deducted in determining income before taxes. Accounting principles generally accepted in the United States would not allow such appropriations to be charged to income.

### (c) Capitalization of Interest Expenses

In accordance with Swedish accounting practice, the Company has not capitalized interest costs incurred in connection with the financing of expenditures for the construction of property, plant and equipment. Such costs are required to be capitalized in accordance with accounting principles generally accepted in the United States.

### (d) Business Combination Adjustments

In accordance with Swedish accounting practice, the Company shows negative goodwill as a deferred credit which is released as income over a period not exceeding ten years (also see Accounting Policies (b) and Note 11). Under accounting principles generally accepted in the United States, negative goodwill should be applied as a reduction of noncurrent assets acquired and be amortized over the economic life of each asset.

### (e) Tax Effects on Intercompany Transactions

Under accounting principles generally accepted in the United States, income tax paid by a selling company on intercompany profit eliminated in consolidation is deferred as a prepaid income tax. No such deferral is made under Swedish accounting practice since deferred income tax accounting is not applied in Sweden.

### (f) Income Taxes on Undistributed Earnings of Associated Companies

It is not Swedish accounting practice to provide for income taxes on undistributed earnings of companies accounted for in accordance with the equity method. Under accounting principles generally accepted in the United States, an investor should accrue for the tax effects resulting from distribution of earnings.

### (g) Translation of Noncurrent Receivables and Long-Term Liabilities

Under accounting principles generally accepted in the United States, all assets and liabilities denominated in foreign currencies are translated at the current exchange rate. Under Swedish accounting practice, exchange gains relating to noncurrent receivables and payables denominated in foreign currencies may not be recorded as income until realized. As described under Accounting Policies (d), receivables and liabilities in foreign currencies have been translated at year-end exchange rates. Thereafter the receivables and liabilities are translated using the lowest or highest of year-end exchange rate and historical rate of exchange, respectively. The difference resulting from applying the two valuation methods described above is included in untaxed reserves and the change during the period is included in appropriations to untaxed reserves (see Note 5).

In 1987, all noncurrent receivables and liabilities were translated at the year-end exchange rate, which resulted in a net loss.

### (h) Sale of Property

In 1984, 1986 and 1987, Group Companies sold properties which are being leased to other subsidiaries under contracts which expire in 1997. Under accounting principles generally accepted in the United States, the gain on sales during 1984 and 1986 is reduced by the present value of future rental payments, which are deferred and amortized over the remaining term of the contract, whereas the gain on the sale during 1987 is considered a financing arrangement and the income is therefore treated as a liability. The liability attributable to a 1986 sale has effected income in 1988 when the lease contract was

transferred. In accordance with Swedish accounting practice, no reduction in profit has to be made if the sale price does not exceed the market price and if leasing costs do not exceed normal market leasing rates.

### (i) Deferred Income Taxes

There is no provision for deferred income taxes under Swedish accounting practice. Accounting principles generally accepted in the United States require comprehensive deferred tax allocation on all significant timing differences.

The "deferred method" has been used in calculating deferred tax. Accordingly, the liability is the sum of the various years' deferred taxes, calculated by applying the tax rate for each year.

### (j) Pensions

The Company participates in several pension plans which cover substantially all employees of its Swedish operations as well as certain employees in foreign subsidiary companies. The Swedish plans are administered by an institution jointly established for Swedish industry (PRI) in which most companies in Sweden participate. The level of benefits and actuarial assumptions are established by this institution and, accordingly, the Company may not change these.

In December 1985 the Financial Accounting Standards Board issued a new recommendation on accounting for pensions, Statement No. 87, Employers' Accounting for Pensions. From 1989 this recommendation is used for determining income in accordance with generally accepted accounting principles in the United States.

The effects of using this recommendation for the Company principally relates to the actuarial assumptions, and that the calculation of the obligation should reflect future compensation levels. The difference relative to pension liabilities booked is distributed over the estimated remaining service period.

### (k) Net Income per Share

As previously described under Accounting Policies (k), net income per share, in accordance with accounting principles generally accepted in Sweden is not based upon net income. Accounting principles generally accepted in the United States require that net income be utilized in the computation of per-share amounts.

Net income per share has been calculated on the annual weighted average number of shares outstanding as well as the annual weighted average number of shares after full conversion of outstanding convertible debentures (also see Note 6).

The application of accounting principles generally accepted in the United States, as described above, would have had the following approximate effect on consolidated net income and stockholders' equity. It should be noted that, in arriving at the individual items increasing or decreasing reported net income, consideration has been given to the effect of minority interests.

	1989	1988	1987
(SEK m., except per share amounts)			
Net income as reported in the consolidated income statements	1,843	1,313	735
Items increasing reported income:			
Depreciation on revaluation adjustments including effect on sale	24	47	34
Capitalization of interest expenses	35	28	17
Tax effects of intercompany transactions	74	258	-36
Appropriations, including depreciation in excess of standard depreciation	492	-280	-51
Sale of property	8	34	-132
Pensions	18	-	-
	651	87	-168
Items decreasing reported income:			
Deferred income taxes	354	223	-261
Business combination adjustments	18	-65	-6
Income taxes on undistributed earnings of associated companies	12	14	7
Translation of noncurrent receivables and long-term liabilities	-	-	170
	384	172	-90



Net increase/decrease (-) in reported net income	267	-85	-78
Approximate net income in accordance with accounting principles generally accepted in the United States	2,110	1,228	657
Approximate net income per share in accordance with accounting principles generally accepted in the United States	52.71	32.17	17.22
after full conversion	49.94	29.05	16.79

<b>(I) Stockholders' Equity</b>	1989	1988	1987
Approximate stockholders' equity in accordance with accounting principles generally accepted in the United States	12,359	9,694	8,684

### Supplementary Information Required under the Swedish Companies Act

#### Average Number of Employees and Remuneration in 1989

	Consolidated		Parent Company	
	Average number of employees	Remuneration	Average number of employees	Remuneration
Sweden	30,044	4,510	12,268	1,826
Other countries	37,108	4,989	492	72
	67,152	9,499	12,760	1,898

Paid to Board of Directors, President and Corporate Executive Vice Presidents	9
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Remuneration in foreign currency has been translated to Swedish kronor at average exchange rates for the year.

The Parent Company has operational units with 20 or more employees in 9 Swedish municipalities and has operations in 22 countries. On a consolidated basis there are 36 operational units in Sweden and operations in 59 countries.

A detailed schedule showing the average number of employees and the amounts of remuneration, prepared in accordance with the requirements of the Swedish Companies Act, is filed with the Swedish Patent and Registration Office. The schedule is available upon request to Telefonaktiebolaget LM Ericsson, Corporate Financial Control, S-126 25 Stockholm, Sweden.

#### Special Information Regarding the Parent Company

Sales of the Parent Company amounted to SEK 11,041 m. (SEK 9,211 m.), of which exports accounted for 83 (82) percent. Consolidated companies were customers for 59 (61) percent of the Parent Company's sales, while 50 (55) percent of the Company's total purchases of goods and services were from such companies.

Loans totaling SEK 4 m. have been made to a total of 2,500 employees for the purchase of shares in LM Ericsson's Share Saving Fund. Assets totaling SEK 3 m. have been pledged as collateral for loans obtained by employees for the purchase of housing.

#### Publications for Investors

Financial publications, including the annual report, interim reports and Form 20-F (filed with The Securities and Exchange Commission, U.S.A. no later than June 30 every year) may be obtained without charge upon request to: Telefonaktiebolaget LM Ericsson, Ericsson Media, S-126 25 Stockholm, Sweden.

## Audit Report

Telefonaktiebolaget LM Ericsson

We have examined the annual report, the consolidated financial statements, the accounting records and the administration by the Board of Directors and the President for the year 1989 in accordance with generally accepted auditing standards.

The annual report and the consolidated financial statements present the financial position, the results of operations and changes in financial position of the Parent Company and of the Parent Company and consolidated subsidiaries in accordance with good accounting practice in Sweden, as described in the notes to the financial statements, and comply with the Swedish Companies Act.

We recommend

- that* the Company's statement of income and balance sheet be adopted,
- that* the consolidated statement of income and balance sheet be adopted,
- that* the unappropriated earnings be dealt with in accordance with the proposal in the administration report, and
- that* the Board of Directors and the President be discharged from responsibility for their administration in respect of the year 1989.

Stockholm, March 15, 1990

*David Jones*  
Chartered Accountant  
Price Waterhouse

*Nils-Axel Frisk*

*Olof Herolf*  
Swedish Authorized  
Public Accountant  
Price Waterhouse



## Ten-Year Summary

SEK m.	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980
<b>Results for Year</b>										
Net sales	39,549	31,297	32,400	31,644	32,496	29,378	25,244	19,470	16,194	12,174
Operating income	4,557	2,678	2,185	2,295	1,671	2,334	2,530	1,988	2,304	1,242
Financial net	-431	-553	-895	-1,180	-952	-914	-802	-949	-1,134	-307
Income before appropriations and taxes	3,715	1,840	1,108	911	878	1,569	1,758	1,349	1,192	935
<b>Year-End Position</b>										
Total assets	40,856	34,625	33,282	34,232	37,122	37,632	30,606	25,737	21,896	17,711
Working capital	14,975	12,944	13,880	14,724	16,707	17,042	12,828	10,250	9,133	7,895
Property, plant and equipment, net	7,776	6,679	6,778	6,835	7,549	7,144	6,176	5,817	4,783	3,833
Long-term liabilities	6,998	7,740	8,548	8,768	8,566	7,658	6,673	7,230	6,383	4,932
Untaxed reserves	4,995	4,506	4,742	4,789	4,794	5,030	4,333	3,617	3,251	3,233
Stockholders' equity	11,029	8,627	7,468	7,299	6,901	6,560	6,219	4,156	3,654	3,010
Adjusted stockholders' equity after full conversion	14,026	10,880	9,839	9,694	9,298	9,075	8,386	5,965	5,280	4,627
14,751	12,421	11,454	9,695	9,501	9,281	8,597	6,203	5,503	4,627	
<b>Other Information</b>										
Adjusted net income per share, SEK										
– after actual taxes paid	58.34	27.06	17.90	14.96	12.62	30.54	34.46	25.05	21.12	19.19
– after full conversion	55.35	24.07	17.79	14.93	12.55	29.89	33.67	24.35	21.06	19.19
– after actual and estimated deferred taxes	53.81	31.29	19.26	17.21	15.15	19.99	22.05	17.13	16.73	13.57
– after full conversion	51.18	27.79	19.09	17.17	14.99	19.70	21.67	16.78	16.69	13.57
Net income per share in accordance with U.S. GAAP, SEK										
– after full conversion	52.71	32.17	17.22	17.21	19.90	19.49	24.76	16.09	–	–
Adjusted stockholders' equity per share, SEK										
– after full conversion	49.94	29.05	16.79	17.21	18.96	19.49	24.48	16.09	–	–
350	285	258	254	252	246	227	183	242	212	
340	286	264	254	249	243	225	182	236	212	
Cash dividends per share	14.00*	10.50	9.00	9.00	9.00	9.00	9.00	7.50	6.50	5.67
Shares outstanding – average (in thousands)	40,027	38,167	38,162	38,011	36,951	36,899	35,331	32,683	21,788	21,788
Additions to property, plant and equipment	2,672	1,739	1,592	1,643	2,677	2,192	1,645	1,662	1,275	718
Depreciation	1,294	971	1,213	1,133	1,308	1,039	945	774	621	409
Research and development										
– expenses	4,329	3,529	3,204	3,117	2,798	2,355	1,973	1,638	1,359	1,013
– in percent of net sales	10.9	11.3	9.9	9.9	8.6	8.0	7.8	8.4	8.4	8.3
<b>Ratios</b>										
Return on equity, percent	17.3	11.5	7.5	6.9	6.1	8.5	10.9	10.0	11.0	10.4
Return on capital employed, percent	23.8	16.0	13.2	13.1	11.3	13.6	17.8	16.5	18.8	14.4
Equity ratio, percent	37.8	33.7	31.8	30.5	26.5	27.0	31.4	26.9	28.4	31.6
Risk-bearing capital ratio, percent	42.7	40.2	38.9	37.5	32.9	33.7	38.5	33.9	35.8	40.7
Debt-equity ratio	0.6	0.8	1.0	1.1	1.5	1.5	1.1	1.5	1.4	1.2
Current ratio	1.8	1.9	2.0	1.9	1.6	1.6	1.8	1.7	1.9	2.1
<b>Year-End Statistics</b>										
Backlog of orders	29,426	26,876	24,171	23,625	23,055	25,161	21,565	20,991	17,701	11,914
Number of employees										
– worldwide	69,229	65,138	70,893	72,575	78,159	75,116	70,783	66,300	69,860	65,910
– Sweden	32,226	32,094	37,386	38,559	40,172	37,458	34,543	31,130	31,030	27,970

\*For 1989, proposed by the Board of Directors

Definitions of terms used above are given on page 56.



# Ericsson's Personnel

## Attracting and retaining the best employees

Ericsson places great emphasis on personal development and accordingly invests actively to increase and stimulate the motivation and expertise of its employees.

Wherever Ericsson operates, it seeks to create workplaces that attract, retain and develop the best employees. This should occur as the result of effective leadership, a growth environment, and appropriate terms of employment. The combination of experience, knowledge and perseverance is a strong base.

The further refinement of these factors (management, environment and working conditions) and a strengthening of employee expertise will be decisive in determining Ericsson's future as an excellent employer.

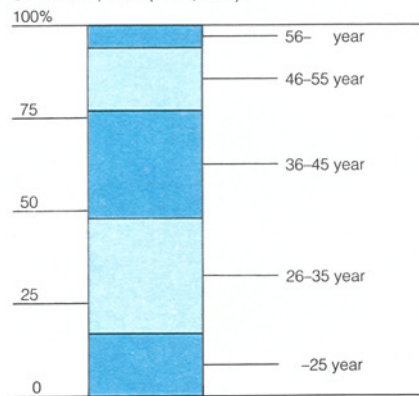
## Employee development

From having been a traditional industrial company, Ericsson has developed into a knowledge company that places greater emphasis on more comprehensive systems know-how. At the same time, its products are becoming more and more sophisticated and increasingly greater demands are being placed on special product knowledge. To deal with these changes, Ericsson has therefore invested in a large number of specialists who possess unique expertise in strategically important areas.

To give employees an opportunity to obtain a better total perspective, we are continuously refining the work organization by delegating both responsibility and authority. This makes it easier to understand the process and to see one's own role in a larger context.

## Personnel data

Sales per employee in 1989 amounted to SEK 571,000 (480,000).



Distribution of Ericsson employees, by age groups.

More than half of Ericsson's 70,000 employees are salaried employees. Of these, one third have university or college degrees. Another third have pre-university degrees. Most of them hold degrees in technical fields but Ericsson also has university graduates with training in law, finance and other disciplines.

## Executive development

Ericsson has had well-organized, effective executive development programs at the local level for many years. In 1989 a new Ericsson-wide system was introduced to identify potential managers and, most important, to conduct a qualified executive development program.

Ericsson Management Institute began operations during 1989. This will contribute to the development of even better qualified managers within Ericsson.

## Expertise

The ability to continuously develop the expertise of employees and utilize their experience is decisive for the future.

Accordingly, various activities are under way at all times within Ericsson to raise the level of competence of its employees.

## Relations with educational institutions

Ericsson allocates substantial resources to strengthen its relations with the educational community. The purpose is to influence both the orientation of educational programs and the students' selection of programs, and to increase students' interest in, and knowledge of, Ericsson.

This cooperation involves working primarily with technical institutions, but also in other educational areas, and through participation in decision-making bodies. Research grants, special college courses, and the sponsorship of doctoral and graduate work and adjunct professorships are examples of how this cooperation is carried out.

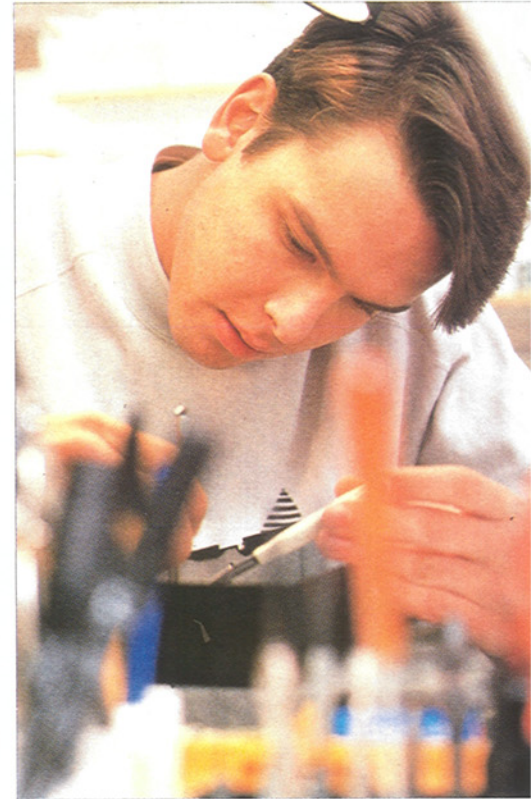
Ericsson also participates regularly in recruitment programs and similar activities at universities and colleges, as well as at the high school level locally. In addition, Ericsson attempts to interest young people in the Company by offering study tours and apprenticeships.

## Specialists and expert knowledge

Specialists and experts are appointed to ensure that Ericsson has, and will have, tomorrow's knowledge and expertise in strategically important areas.

Their task is to make sure that the Company has employees with the requisite knowledge in each area.

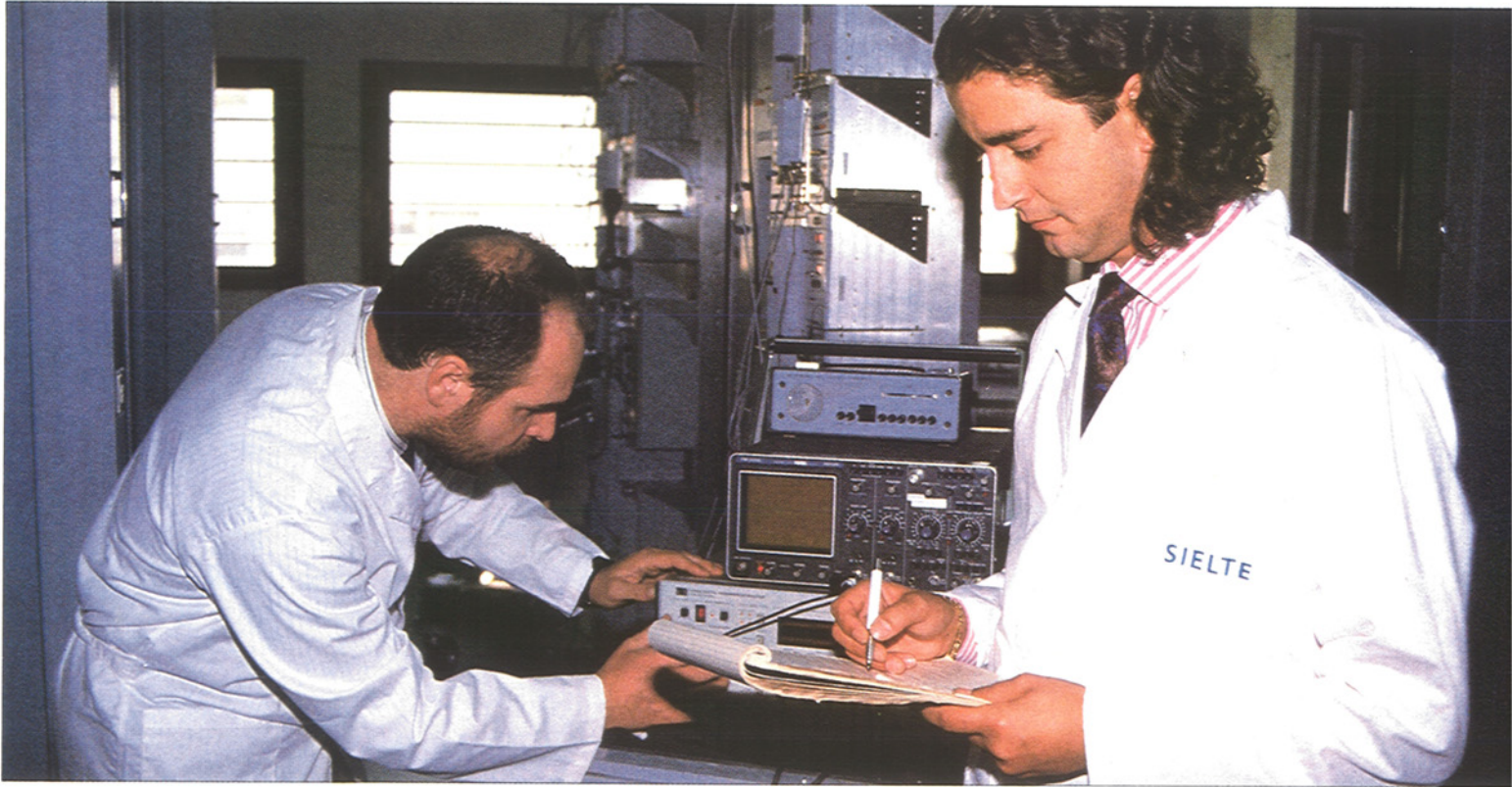
It is important for Ericsson to win the competition for the highest-skilled employees, not only where external recruiting is involved but, above all, in holding and developing existing personnel.





Ericsson is an international enterprise, with more than half of its 70,000 employees in locations outside Sweden. More than 10,000 are employed in Italy, one of Ericsson's most important markets.

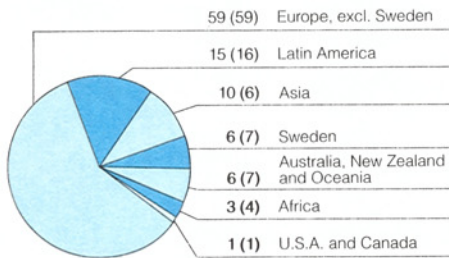
Intensive research and development programs, in which more than 8,000 persons are engaged, are carried out within Ericsson. (lower photo)





## Public Telecommunications Breakthrough for AXE in the U.S. market Increased installations in Western Europe

- 1 Geographic distribution of external sales, percent.



Jan Stenberg

Total sales in 1989 amounted to SEK 19,214 m.

Operations are focused on the development, production and installation of telecommunications equipment for telecom operators (percentage of total sales within parentheses).

**Telephone exchanges** (84%)

**Transmission equipment** (10%)

**Telex and data processing equipment** (1%)

Revenues from telephone operations and miscellaneous activities amounted to 5% of sales.

The AXE exchange system continued to be installed at an increasing rate during the year and this was reflected in sharply increased sales. As in the past, the largest orders were received in the industrialized countries, mainly in Western Europe. Substantial follow-on orders were also booked in Australia and Mexico.

The breakthrough for the AXE system in the United States was finally attained in 1989. At the beginning of 1990, Ericsson had the status of approved vendor to three of the seven regional Bell operating companies, which constitutes an important base for achieving long-term objectives in the U.S.

The greater part of the AXE deliveries involved exchanges for local telecommunications traffic. At the same time, orders for AXE for special applications in advanced telecom networks, and for use as exchanges in mobile telephone systems, also increased.

### Breakthrough in the U.S.

In October, a five-year general agreement was signed with Southwestern Bell covering the replacement of telephone exchanges in small and medium-size cities.

In December, a contract calling for volume deliveries was signed with US West. Two orders received in January 1990 confirmed Ericsson's status as third supplier to Nynex.

Earlier, during the autumn, an important order was received from Ameritech for AXE as Service Control Points (SCP) to monitor and control advanced telecommunications services.

Demand for AXE exchanges for the mobile telephone market in the U.S. rose sharply in 1989.

### Spain invests for 1992

Nearly one million AXE lines were installed in Spain during the year. Expansion of the telecommunications network in that country has accelerated in preparation for 1992, when Spain will be host to both the Summer Olympic Games and a World's Fair.

### Great Britain – the largest AXE market

At year-end 1989, 2.2 million AXE lines had been installed in British Telecom's national network. With a total of 3.5 million lines installed and on order, Great Britain has become the largest single market for the AXE system.

In addition, AXE exchanges are being used in mobile telephone systems. Racal Vodafone ordered 12 more AXE exchanges for its network, in which 23 have already been installed. These exchanges have a capacity to serve slightly more than one million subscribers.

An international AXE exchange was placed in service by Mercury Telecommunications at the beginning of 1989. Equipment to expand this exchange has been ordered.



### Millionth line in The Netherlands

The millionth AXE line was handed over to the telecommunications administration in The Netherlands during the year. In addition, the cornerstone was laid for a new development laboratory in Rijen, in the southern part of the country. The new unit will make it possible to involve 50 additional persons in development work on the AXE system.

### ISDN network in Australia

The increase in number of services that Telecom Australia can offer its customers via a nationwide AXE-based network for ISDN (Integrated Services Digital Network) has been well received in the market. Ericsson's strong position in Australia has thereby been further consolidated.

At year-end, a total of 2.4 million local AXE lines had been installed in Australia. Immediately after the first of the year, AXE equipment valued at an additional SEK 750 m. was ordered for delivery during 1990 and 1991.

### Investment in Norway

In the beginning of 1989, as part of the program to establish the AXE system in Norway, Ericsson acquired a telecommunications operation from Elektrisk Bureau A/S (EB). In November, a bid was submitted in preparation for the pending digitalization of the Norwegian fixed and mobile telephone networks.

The Danish telecom administrations signed a new six-year contract extending the AXE deliveries that began in 1983. The new contract also covers integration of ISDN functions in the AXE exchanges.

Business in Finland and Sweden also developed well.

### Difficulties in financing AXE projects in China

During the year, the millionth AXE line was handed over in the People's Republic of China, where Ericsson is one of the leading suppliers, with a 23-percent share of the market. Installations have been made primarily in the coastal provinces. A representative office, the fourth in China, was opened in Shanghai.

Deliveries continued in accordance with contracts during the year but no new orders could be signed during the second half due to difficulties in obtaining soft-loan financing. In mid-February 1990, preliminary contracts valued at SEK 900 m. were still frozen, pending financing arrangements. As a result, invoicing in 1989 was SEK 200 m. lower than expected.

### Strong position in North Africa

Morocco, Algeria and Tunisia have developed into important markets for the AXE system. In Morocco, Ericsson received contracts valued at SEK 200 m. for local and transit exchanges. In Tunisia, contracts totaling SEK 250 m. were signed covering international and local telephone exchanges. Algeria placed orders for AXE equipment amounting to SEK 280 m.

### Inroads in India and Pakistan

An important inroad for AXE was recorded in India, where Ericsson signed contracts for the installation of four international telephone exchanges. India is deemed to be an important market of the future.

In Pakistan, the signing of agreements covering the delivery of 50,000 lines marked a reentry into this market.

### Important markets in Latin America

Ericsson is maintaining its position as main supplier to TELMEX (Teléfonos de México). More than 3,000,000 lines have been ordered for installation in coming years. Ericsson will also supply a state-of-the-art dedicated network for business communications.

Contracts for substantial volumes of AXE equipment were signed with a number of the leading telecom administrations in Brazil.

In Uruguay, installation of a project involving 200,000 local AXE lines and a fiber optic transmission network was completed during the year. New orders covering expansion of the project were received at the same time.

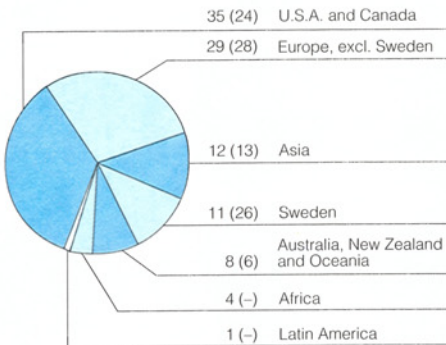
### The Business Area in brief SEK m. and percentage of Ericsson totals

	1989		1988		1987	
Order bookings, external	17,438	41.5%	15,868	44.5%	11,687	35.0%
Net sales, external	17,280	43.7%	13,677	43.7%	10,901	33.6%
Net sales, internal	1,934	–	1,302	–	1,346	–
Operating income after depreciation	3,539	–	1,929	–	1,359	–
Employees	33,289	48.1%	32,386	49.7%	29,854	42.1%



## Radio Communications Fastest-growing Business Area Joint venture with GE strengthens position

Geographic distribution of external sales, percent.



Lars Ramqvist

Total sales in 1989 amounted to SEK 8,113 m.

The Business Area comprises the following product areas (percentage of total sales within parentheses):

**Mobile telephone systems** (56%)

**Mobile telephones** (14%)

**Mobile radio** (15%)

**Mobile data systems** (1%)

**Personal paging systems** (7%)

**Defense communications** (7%)

The Business Area ended the Eighties with a sharp increase in sales and a strong improvement in profitability, notably in mobile telephone systems, which was also the fastest-growing operation. At year-end, the Business Area had more than 10,000 employees engaged in various forms of mobile communications, compared with slightly more than 6,000 a year earlier.

One factor contributing to the sharp growth is the joint venture that was started with GE at midyear.

### Ericsson GE Mobile Communications

Certain sectors of the Business Area were merged with GE's operations in mobile communications to form Ericsson GE Mobile Communications, in which Ericsson has a 60-percent interest and GE 40 percent.

The business concept is to offer advanced products, systems and services for cellular mobile telephone systems in the U.S. and Canada, as well as for mobile business communications systems and mobile telephones globally. The merger makes Ericsson the second largest mobile communications supplier in the world, after Motorola.

Most important, the merger strengthens

Ericsson's position in the U.S. and Canada, where it will have access to GE's sales and service network for mobile telephones, mobile data terminals and mobile radio systems. Production for the North American market will take place in the Lynchburg, Virginia plant, which has 1,600 employees.

The new company will benefit from its strong positions in the U.S. and Europe, helped by the Ericsson and GE names, both of which are firmly established in the market.

### Rapid growth for mobile telephone systems

The increase in deliveries to operators of mobile telephone systems is due primarily to the large influx of subscribers in the existing analog systems in Europe, North America and Australia. Ericsson's successful operations in the U.S. are continuing, with rapidly expanding systems in Florida and California, among other regions. Ericsson has nearly one fourth of the market for mobile telephone systems in the U.S., and more than half of the market in Canada.

### Digital mobile telephony

In 1991, the new GSM (Group Spéciale Mobile) Pan-European digital mobile telephone system will begin to be placed in service. During 1989 Ericsson signed contracts to deliver systems in Great Britain, France, Switzerland, Spain, Italy and Denmark. Sweden and Finland were added early in 1990.

In January 1989, the TDMA (Time Division Multiple Access) technology proposed by Ericsson was selected in the U.S. as the American standard for digital mobile telephony.

The changeover to digital technology in the U.S. is taking place through gradual conversion and expansion of existing analog systems. Ericsson's strong position where the latter are concerned constitutes a good base for continuing deliveries of digital systems.

### New generation of pocket telephones

During the autumn of 1989 Ericsson launched "HotLine Pocket," a new generation of pocket-format mobile telephones. The new unit weighs 420 grams (14.8 ounces), including battery, and has a talk time of one hour and 15 minutes. The excellent talk time effect, the ratio of call time to weight, resulted in rapid marketing successes.

During the year, Taiwan, Hong Kong, the People's Republic of China, and Italy became new markets for HotLine mobile telephones, which earlier had been produced only for NMT (Nordic Mobile Telephone) systems.

### Mobitex successes

New, strategically important orders for the Mobitex mobile data system were obtained in the U.S. and Great Britain. In the U.S., the



system will be delivered to RAM Broadcasting Corporation, which is building a nationwide mobile data network, beginning with the 50 largest cities.

Ericsson will also deliver a nationwide Mobitex system to the same customer in Great Britain. The expansion of mobile data networks is expected to be rapid. It is estimated that there will be four million subscribers throughout the world in 1995.

### Cordless telephones

During 1989 Ericsson's personal paging operations, based in The Netherlands, introduced local personal paging systems that can be linked to personal computers. Personal pagers for nationwide networks were also delivered during the year. This business was formerly concentrated on local networks.

Development of a new small cordless telephone, to be introduced during 1990, was completed in 1989. This instrument will make it possible for employees of companies and organizations to move freely about their premises and still be able to make and receive

calls via the subscriber exchange without being tied to the permanently installed telephone at their work station.

The new DCT 900 (Digital Cordless Telephone) instrument will later be adapted to the DECT (Digital European Cordless Telecommunications) standard. This European standard, which is supported by Ericsson, is expected to be ready in 1992.

Around the year 2000 there can be 30 million DECT-based cordless telephones in Europe.

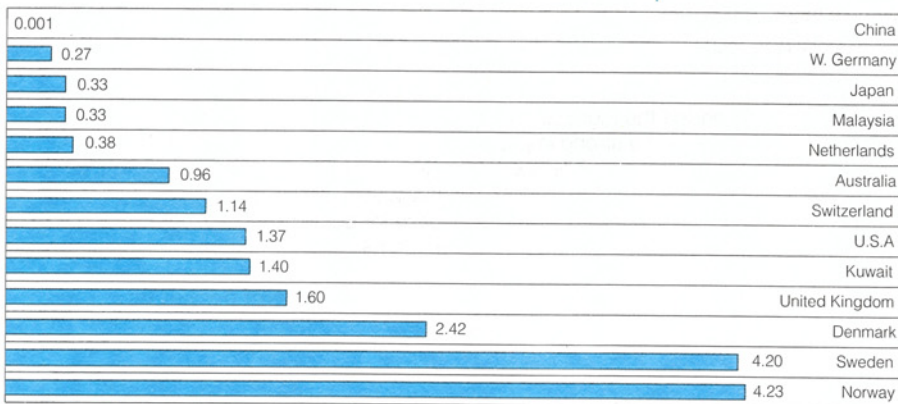
### Defense communications

Deliveries of the new, advanced "8000" digital tactical radio to the Swedish Defense Forces were begun during 1989. The radio contains a ciphering system, based on "frequency-hopping," that is very difficult to break and which will also be used in the new commercial mobile telephone systems in the Nineties.

Operations in the defense communications sector are being restructured to adapt to the new conditions in the defense industry throughout the world.

### Penetration in countries

Number of mobile telephone subscribers per 100 inhabitants. January 1990.



Source: Ericsson

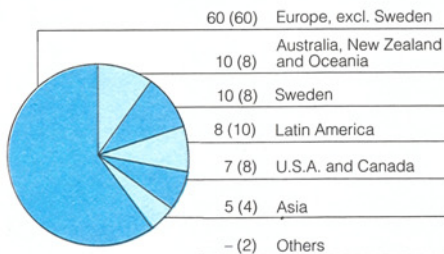
### The Business Area in brief SEK m. and percentage of Ericsson totals

	1989		1988		1987	
Order bookings, external	9,340	22.2%	5,107	14.3%	3,267	9.8%
Net sales, external	8,062	20.4%	4,745	15.2%	2,839	8.8%
Net sales, internal	51	-	91	-	44	-
Operating income after depreciation	692	-	264	-	210	-
Employees	10,142	14.6%	6,298	9.7%	4,777	6.7%



## MD110 exchange stronger in the world market Complete program for private communications

Geographic distribution of external sales, percent.



Ronny Lejdemalm

Total sales in 1989 amounted to SEK 5,186 m.

The Business Area is active in the following product areas (percentage of total sales within parentheses):

- MD110 subscriber exchange** (57%)
- Other subscriber exchanges** (20%)
- Telephone instruments** (9%)
- Data networks** (7%)
- Other products** (7%)

The continued improvement in operating results was due to sharply higher sales and further improvements in operating efficiency. The increase in sales was attributable mainly to the MD110 product area, which accounts for a steadily rising percentage of the Business Area's operations. The single fastest-growing product area is the Eripax data network, whose sales nearly doubled in 1989.

### Western Europe is largest MD110 market

A total of 800,000 MD110 lines were installed during the year and a number of new contracts were signed. Western Europe, where Ericsson has established an ever-stronger po-

sition as a supplier of private communications systems, is the most important market area.

In West Germany, ABB Asea Brown Boveri in Mannheim placed an order for 8,000 MD110 lines; in The Netherlands, contracts were signed with the City of Rotterdam covering the installation of 15,000 lines over a five-year period. In Norway, 6,000 lines were installed in a communications system for the University of Trondheim.

### Breakthrough orders in Eastern Europe

The operator of the Brno Trade Fair in Czechoslovakia, one of the larger exhibition sites in Eastern Europe, ordered an MD110 system to be placed in service during the summer of 1990. This will be the first MD110 installation in Eastern Europe.

### Sharp increase in sales of data networks

Sales of the Eripax data network rose sharply during the year and the system has now been installed in 14 countries.

Italy, where Ericsson has more than half of the market for private networks used in large companies and organizations, is the largest market. An order for a data communications system for the underground railway in Milan

was received during the year. Another contract was placed by the Stock Exchange in Milan.

The Stock Exchange in Frankfurt also ordered Eripax, which has now been installed in the stock exchanges in London, Helsinki and Stockholm, among other locations.

### Launch of BCS150 proves successful

The BCS150, a new, advanced digital communications system for small and medium-size customers, was introduced in 1988. The system has been marketed successfully in a number of countries. Important contracts were signed in Australia, New Zealand, Sweden and The Netherlands during 1989. In all, 300,000 lines of BCS150 and equipment for other small exchanges were delivered during the year.

### International private networks

Companies and organizations are increasingly demanding private voice-and-data networks that serve broad geographical areas within a country and internationally.

A number of important orders in this sector were received in 1989. One contract involves a nationwide network for BP in Australia. Another is a general agreement with Polaroid covering a global private network and the purchase of Ericsson products by Polaroid companies in 25 countries.

### Cooperation agreement with N.E.T

A cooperation agreement with N.E.T. (Network Equipment Technologies, Inc.), an American company, was concluded in December. The company has products that will be marketed along with MD110 and Eripax. Ericsson will thereby be able to offer its customers more flexible and complete communications programs, especially when nationwide and global networks are involved.

### Distribution in Sweden via Swedish Telecom

An agreement was signed with Televerket (the Swedish Telecommunications Administration) under the terms of which Televerket will become the exclusive distributor of the Business Area's products in Sweden. The agreement covers the MD110, BCS150 and Eripax systems, among others. It also calls for broadened cooperation in development work, as well as the sale to Televerket of operations within Ericsson Sverige AB, a marketing company.

### The Business Area in brief SEK m. and percentage of Ericsson totals

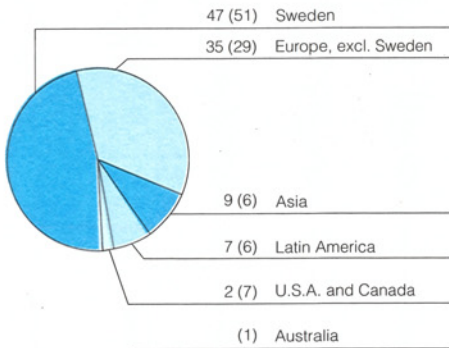
	1989		1988		1987	
Order bookings, external	4,854	11.5%	4,113	11.6%	3,303	9.9%
Net sales, external	4,912	12.4%	3,540	11.3%	3,139	9.7%
Net sales, internal	194	-	163	-	175	-
Operating income after depreciation	252	-	155	-	-2	-
Employees	8,066	11.6%	7,138	11.0%	6,580	9.3%



## Cable and Network

# Merger of Business Areas strengthens competitiveness in the market

Geographic distribution of external sales, percent.



Total sales in 1989 amounted to SEK 5,465 m.

During 1989 the Business Area had operations in the following areas (percentage of total sales within parentheses):

**Cable** comprising power cable used for distribution of electricity, telecommunications cable used for the transmission of telecommunications, and speciality cable (55%)

**Network construction** including planning and installation of telecommunications and data networks, and telecom plants (45%)

The two former Business Areas, Cables and Network Engineering and Construction, were merged at midyear to form a single unit, Cable and Network. The signaling sector within Network Engineering and Construction had been divested earlier in the year. An agreement has been reached covering the sale of the Töcksfors Verkstads AB cable company. It was also decided during the year to carry out a certain restructuring of the specialty cable division in Kungsbacka, and of the Swedish network company, Ericsson Network Engineering AB.

With Cable's emphasis on operations in Sweden and Latin America, and Network Engineering and Construction's focus on the



Lars Berg

Middle East and Southeast Asia, the merger will offer increased competitiveness in the market. In addition, cables constitute a significant part of large network projects.

The restructuring placed demands on resources during 1989 and accordingly had a short-term negative impact on operating results.

### Strong cable business in Sweden

Ericsson Cables strengthened its position in the Swedish market despite stiffening competition from outside suppliers. The percentage of optical cables delivered to the Swedish Telecommunications Administration increased and new contracts were signed covering deliveries during 1990. Exports of optical cables to such countries as Saudi Arabia, Oman, China and the Philippines also increased.

Continuing increases in investments in the construction sector and in industry contributed to strong sales by both the Power Cable Division and SELGA, the electrical equipment wholesaler.

### Difficult economic problems in Latin America

Ericssons' cable companies in both Argentina

and Brazil reported lower order bookings and poorer operating results as a consequence of the high inflation and economic problems in the two countries.

The cable company in Mexico reported good earnings, despite stiffer competition caused mainly by lower import tariffs.

### Continued expansion in Southeast Asia

Network operations in Southeast Asia, managed from the regional company in Singapore, continued to expand. The project under way in Thailand was increased and a similar project in Malaysia is continuing into the Nineties. A wholly owned company and a partly owned subsidiary were established in the Philippines.

### Project in Turkey

The Ericsson company in Turkey, which is now wholly owned, is engaged in a number of different network construction projects. The largest are in the cities of Istanbul and Ankara. The company intends to remain one of the largest builders of networks in the country during the Nineties.

### Focus on European markets

During the year the Business Area formed a new group of companies in Spain and planning for the construction of a cable plant for fiber optics in Barcelona was begun. There are major prospects for continuing substantial growth of the network construction market in Spain.

In Italy, SIELTE, the Business Area's largest company, received large orders from the telecom administrations.

A new network project for British Telecom was started up in a very short time. Ericsson Network Engineering Ltd. is now building public telecommunications networks in a number of East Midlands cities. This project has been expanded successively.

### Large project completed in Africa

A very large, technically advanced private telecommunications network for NNPC, the Government-owned Nigerian oil company, was completed during the year. More than 900 kilometers long, it is today one of the largest digital fiber optical telecommunications networks in Africa.

### The Business Area in brief SEK m. and percentage of Ericsson totals

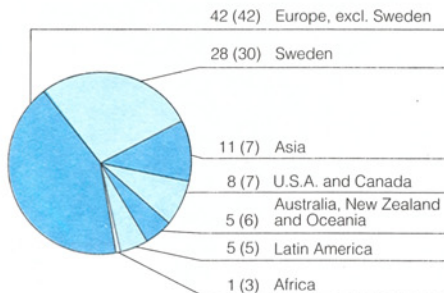
	1989		1988		1987	
Order bookings, external	5,759	13.7%	6,218	17.5%	5,864	17.6%
Nets sales, external	5,220	13.2%	5,643	18%	5,423	16.7%
Net sales, internal	245	-	426	-	522	-
Operating income after depreciation	350	-	490	-	397	-
Employees	8,742	12.6%	9,846	15.1%	10,098	14.2%



## Components

# Increased production for Ericsson systems Power supply equipment a growing sector

Geographic distribution of external sales, percent.



Bert Jeppsson

Total sales in 1989 amounted to SEK 1,983 m.

The Business Area manufactures and markets electronic components, including fiber optical components, and power supply equipment, with emphasis on applications in telecommunications. Standard components are sold in certain markets on an agency basis. Operations comprise three product areas (percentage of total sales within parentheses):

**Microelectronics, including fiber optical components** (36%)

**Power supply equipment and cooling systems** (47%)

**Standard components** (17%)

The increase in sales is attributable primarily to products used in Ericsson systems, which accounted for 64 percent of total sales. External sales, in contrast, were virtually unchanged from 1988, reflecting the depressed external market for components.

### Strong growth in power supply sector

There was a strong increase (42%) in sales of power supply equipment, notably for use in power systems in telecommunications but also for built-in power systems.

The growth in sales has resulted in increased demand for higher production capacity. Spain, Mexico and Great Britain were strong markets.

As a consequence of changes in technology and depressed prices for chips, the market for sales of microelectronics became more difficult.

### Fiber optics – a growth market

Advanced fiber optical components account for part of the Business Area's sales of microelectronic products. Sales of these components increased in 1989 and continuing growth is indicated. Substantial resources have been allocated for research, development and production of these products, and external marketing has begun.

### Continued concentration on telecommunications

Continuing product development has been increasingly focused on telecommunications, both access and system functions and terminal functions.

A new generation of power supply equipment for telecommunications applications – employing a combination of the knowledge gained in developing power supplies and microelectronics – is under development.

### Strong sales of standard components in Scandinavia

As an agency for the sale of standard components, the Business Area has maintained its position as the largest supplier of electronic components in Scandinavia. A weaker market could be noted during the latter part of 1989, however.

### Specialized research and development

Ericsson Components acts as a central development unit in certain specialized areas and carries out research projects in its fields of expertise for other Business Areas within Ericsson. During the year considerable resources were allocated for the next generation of line circuits and other access circuits, as well as for the next generation of power supply equipment.

The Business Area is participating in the development of components technology for fiber optics as part of Ericsson's involvement in the European RACE programs in the field of information technology.

### The Business Area in brief SEK m. and percentage of Ericsson totals

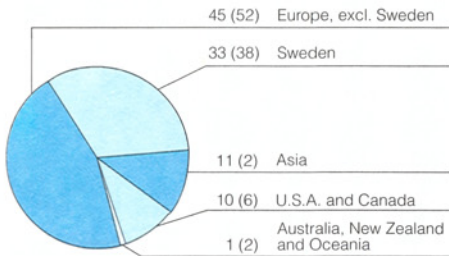
	1989		1988		1987	
Order bookings, external	733	1.7%	676	1.9%	768	2.3%
Net sales, external	716	1.8%	707	2.3%	763	2.4%
Net sales, internal	1,267	–	1,032	–	1,047	–
Operating income after depreciation	142	–	113	–	88	–
Employees	2,218	3.2%	2,160	3.3%	3,578	5.0%



## Defense Systems

# Local search radar for the Swedish Defense Forces Other important projects postponed

Geographic distribution of external sales, percent.



Total sales in 1989 amounted to SEK 3,394 m.

Operations of the Business Area were conducted in four different product areas during the year (percentage of total sales within parentheses):

**Avionics and airborne electronics** (35%)

**Mobile defense systems** (36%)

**Command and control systems** (17%)

**Microwave and satellite communications** (12%)



Ulf H Johansson

In both the Swedish and Italian sectors of the Business Area, the trend of the market and of order bookings continued to be weak in 1989. A number of important defense projects were postponed and appropriations for procurement of defense materiel declined in Sweden as well as internationally. However, the trend of business in 1989 was somewhat more favorable than in 1988, resulting in some large orders from Swedish and foreign customers.

The loss recorded in 1989 was due to excess capacity and high project costs, notably in radar operations. But operating results improved in the Swedish sector, in which Ericsson Radar Electronics is the core company. The trend of operating results in the Italian operations was somewhat less favorable than expected.

### Local search radar for the Swedish Defense Forces

The mobile defense systems product area received a contract valued at SEK 475 m. covering series deliveries of PS-91 local search radar for the Swedish Defense Forces. This marked a breakthrough in the market for this new product. Ericsson was also designated as supplier of the thermal imager sight for the new RBS90 air defense system.

### Norway and Canada order GIRAFFE systems

Norwegian authorities placed a contract valued at SEK 615 m. for the GIRAFFE 50AT mobile radar and command and control air defense system. Canadian authorities signed an additional contract for SeaGIRAFFE naval air/surface search radar, this time for frigates in the Montreal class.

### The JAS accident – Costs not fully covered

The work on airborne radar, system computer, electronic display system, and electronic countermeasures for the JAS 39 Gripen, the new Swedish multirole combat aircraft, proceeded according to plan, taking into account the comprehensive and costly changes that had to be made in test programs following the accident to the first test aircraft in February 1989.

The costs incurred as a result of the accident were settled with the customer during the year, but were not fully covered. Series deliveries of the JAS 39 Gripen are expected to begin in 1993.

The Swedish Defense Materiel Administration placed an order for the initial development of the PS 890 airborne early warning radar (ERIEYE).

### Radio links for the U.S. Armed Forces

Growth of the market for radio links (MINI-LINK) was highly favorable during 1989. GTE placed a new order for radio links for the U.S. Army's new MSE tactical communications system. A number of important commercial orders for radio links were received from international customers. During the year, Ericsson delivered radio link number 5,000 to the Finnish PTT.

### Merger of command and control system division with Bofors unit

At year-end, as part of the restructuring of the Swedish defense industry, Ericsson's division for command and control systems was transferred to Bofors Electronics AB, in which AB Bofors now has an 80-percent interest, and Ericsson 20 percent. At the same time, responsibility for weather radar operations was transferred from Ericsson Radar Electronics to the Business Area's Spanish company, SATESA, and responsibility for operating and maintenance systems was moved to Ericsson Telecom.

### The Business Area in brief SEK m. and percentage of Ericsson totals

	1989		1988		1987	
Order bookings, external	3,814	9.1%	3,286	9.2%	2,767	8.3%
Net sales, external	3,252	8.2%	2,548	8.1%	3,203	9.9%
Net sales, internal	142	–	280	–	169	–
Operating income after depreciation	–46	–	–87	–	182	–
Employees	5,510	7.9%	6,070	9.3%	6,874	9.7%



# LM Ericsson Share Data

## Capital stock

The capital stock of the Parent Company, Telefonaktiebolaget LM Ericsson, amounted at December 31, 1989 to SEK 2,049 m., represented by 40,974,934 shares. The par value of each share is SEK 50. Of the total number of shares outstanding, 2,479,684 are restricted "A" shares and 1,248,831 are unrestricted "A" shares, all carrying one vote, and 37,246,419 are unrestricted "B" shares, each of which carries one thousandth of a vote.

The Articles of Association of the Parent Company stipulate that not more than 35 percent of the voting rights in the Company may be represented by unrestricted shares that may be owned by foreign citizens as well as citizens of Sweden. At year-end the maximum possible voting rights of unrestricted shares outstanding amounted to 34.2 percent of the total voting rights, and the actual voting rights of unrestricted shares outstanding represented 0.3 percent of the total.

During 1989 the number of shares increased by 2,760,310 through conversion of debentures. During the period between January 1 and February 15, 1990 additional

debentures were converted to 18,689 "B" shares, thereby increasing to 40,993,623 the total number of shares entitled to dividends as of the record date.

## Employee ownership of Ericsson shares

Ericsson employees are able to purchase the Company's shares via bank loans arranged on favorable terms by the Company. Since 1973, when Ericsson began to arrange such loans, more than 5,900 employees have taken advantage of this opportunity, purchasing a total of approximately 425,000 shares.

Ericsson's Share Savings Fund was started in 1981 and Ericsson's General Savings Fund in 1984. There are 2,533 participants in the Share Savings Fund and 2,719 in the General Savings Fund. The funds have invested in Ericsson shares and at year-end the total holdings of the two funds amounted to 99,890 shares, or approximately 0.2 percent of the total number outstanding. During the year, the General Savings Fund sold shares and in their place acquired additional debentures pertaining to the convertible debenture loan Ericsson issued to employees in the autumn of 1987.

Following this, the Fund's holding amounted to 3,650 blocks representing 91,250 shares. In addition to the participants in the General Savings Fund, slightly more than 15,000 employees own convertible debentures issued in connection with the loan.

The debenture certificates may be converted to shares up to and including March 15, 1993; to date, SEK 1.2 m. of the loan has been converted to 4,525 "B" shares. The convertible debentures were listed on the Stockholm Stock Exchange on February 23, 1990.

## Volume of trading

Ericsson shares are one of the Swedish securities most actively traded outside Sweden. During 1989 24 percent of the total trading in Ericsson shares occurred on the Stockholm Stock Exchange; virtually all of the remaining trading occurred in London and in the U.S. The Company's shares were introduced on the exchanges in Basel and Zürich during the autumn of 1989.

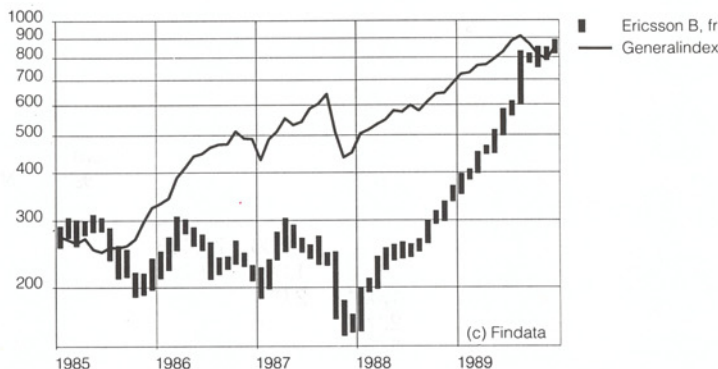
In all, approximately 75 percent of Ericsson's shares are owned by Swedish and international institutions.

## Stock exchange trading

LM Ericsson's "A" and "B" shares are listed on the Stockholm Stock Exchange.

The "B" shares are also traded in the form of ADRs (American Depositary Receipts) via the NASDAQ electronic quotation system in the U.S. and are listed on the exchanges in Basel, Dusseldorf, Frankfurt am Main, Geneva, Hamburg, London, Oslo, Paris and Zürich.

Each ADR represents one "B" share. The most active trading occurs in Stockholm, London and New York.



## Trading volume in Stockholm

The turnover of LM Ericsson shares during the years 1985-1989, as recorded on the Stockholm Stock Exchange, is shown in the accompanying table. Ericsson shares accounted for 1.6 percent of the total number of shares traded on the Exchange during 1989, and for 5.4 percent of the volume in Swedish kronor.

Year	Number of shares
1989	9,933,706
1988	15,404,776
1987	21,189,730
1986	21,321,417
1985	13,379,300

## Exports/Imports (SEK m.)

Exports of LM Ericsson shares from Sweden and imports of such shares to Sweden during the years 1985-1989 were as shown in the accompanying table.

Year	Exports	Imports	Net
1989	499	1,384	-885
1988	585	635	-50
1987	401	1,233	-832
1986	1,319	1,398	-79
1985	1,374	1,165	209

Sources: Bank of Sweden and Swedish Bank Inspection Board



Share	1989	1988	1987	1986	1985
Dividend	14.00*	10.50	9.00	9.00	9.00
Adjusted net income per share					
– after actual taxes paid	58.34	27.06	17.90	14.96	12.62
– after full conversion	55.35	24.07	17.79	14.93	12.55
– after actual and estimated deferred taxes	53.81	31.29	19.26	17.21	15.15
– after full conversion	51.18	27.79	19.09	17.17	14.99
Net income per share in accordance with U.S. GAAP	52.71	32.17	17.22	17.21	19.90
– after full conversion	49.94	29.05	16.79	17.21	18.96
P/E ratio I Ericsson B share <sup>1)</sup>	15.1	13.6	8.5	14.3	17.8
P/E ratio II Ericsson B share <sup>2)</sup>	16.4	11.8	7.9	12.4	14.9
Share price, December 31					
Stockholm Stock Exchange					
– Series "A" restricted	1,000	470	300	325	260
– Series "A" nonrestricted	950	470	300	325	250
– Series "B" nonrestricted	880	368	153	214	225
High for year					
– Series "B" nonrestricted	940	369	304	307	311
Low for year					
– Series "B" nonrestricted	356	155	149	208	189

1) P/E ratio I = Price per share divided by profit per share after actual taxes paid.

2) P/E ratio II = Price per share divided by profit per share after actual and estimated deferred taxes.

\* For 1989, proposed by the Board of Directors

### Changes in capital stock

		Number of shares	Capital stock
1976	January 1	15,380,117	769,005,850
	1-for-4 stock divided	3,845,029	192,251,450
	1-for-6 new issue, SEK 75	2,563,352	128,167,600
1982	1-for-2 stock dividend	10,894,248	544,712,400
1983	Special new issue, USD 62.5	4,000,000	200,000,000
	Conversions	181,677	9,083,850
1984	Conversions	39,049	1,952,450
1985	Conversions	47,789	2,389,450
1986	Conversions	1,211,121	60,556,050
1988	Conversions	52,242	2,612,100
1989	Conversions	2,760,310	138,015,500
1989	December 31	40,974,934	2,048,746,700

### Distribution of shares

(Year-end 1989)

At December 31, 1989, approximately 25 percent of the Company's shares were held by shareholders outside Sweden. The voting rights accruing to these shares amounted to about 0.3 percent of the total.

Size of holding	Shareholders		Shares		Number of shares per shareholder
	Number	%	Number	%	
1 – 500	70,435	94.6	4,738,684	11.6	67
501 – 1,000	2,127	2.9	1,649,318	4.0	775
1,001 – 2,000	858	1.2	1,316,485	3.2	1,534
2,000 – 5,000	466	0.6	1,577,425	3.9	3,385
5,001 – 10,000	193	0.3	1,422,909	3.5	7,373
10,001 – 20,000	107	0.1	1,567,513	3.8	14,650
More than 20,000	196	0.3	28,702,060	70.0	146,439
Total	74 382	100.0	40,974,394	100.0	551

### Stockholders

The dominant influence is divided between the so-called Svenska Handelsbanken interests, with 42.3 percent of the voting rights, and the Wallenberg and Skandinaviska Enskilda Banken interests, with 41.9 percent.

The largest stockholders, ranked by voting rights, at December 31, 1989 were as follows:		
	Number of shares	Percent of voting
AB Industrivärden	840,000	22.3
Knut och Alice Wallenbergs Stiftelse	530,296	14.1
Förvaltnings AB Providentia	444,000	11.8
AB Investor	394,000	10.5
Svenska Handelsbankens Pensionsstiftelse	188,000	5.0
Pensionskassan SHB Försäkringsförening	188,000	5.0
Stockholms Enskilda Banks Pensionsstiftelse	115,000	3.1
Förvaltnings AB Delus	110,000	2.9
Handelsbankens Skattefond	134,807	2.6
Wallenbergs Stiftelse, Marianne och Marcus	90,000	2.4
Oktogonen, Stiftelsen	80,000	1.6
Jan Wallanders Stiftelse för Samhällsvetenskap	56,000	1.5
Livförsäkrings AB Skandia	1,496,253	1.4
Svenska Handelsbankens Personalstiftelse	54,000	1.4



# Board of Directors



Hans Werthén



Sten Wikander Peter Wallenberg



Sven Olving



Björn Svedberg Jan Wallander



Carl Wilhelm Ros



Georg Karnsund Sven Ljungberg



Jan Stenberg Tommy Lindbohm Arne Mohlin Göthe Söderkvist

## Members

**HANS WERTHÉN**  
(1919\*)  
Chairman  
Honorary Doctor of  
Technology, Chairman of  
the Boards of AB  
Electrolux and Stockholms  
Optionsmarknad OM  
Fondkommission AB  
Member since 1981  
Shares held: B 3,000

**JAN WALLANDER**  
(1920\*)  
Deputy Chairman  
Doctor of Philosophy,  
Chairman of the Boards of  
Svenska Handelsbanken,  
Investment AB Bahco and  
the Wennergren Center  
Foundation  
Member since 1970  
Shares held: A 15, B 797

**PETER WALLENBERG**  
(1926\*)  
Deputy Chairman  
Honorary Doctor of  
Economics, First Vice  
Chairman of the Board of  
Skandinaviska Enskilda  
Banken, Chairman of the  
Boards of Atlas Copco AB,  
AB Investor, Förvaltnings  
AB Providentia, STORA  
and President of the Inter-  
national Chamber of  
Commerce (ICC).  
Member since 1972  
Shares held: B 5,635

**GEORG KARNSUND**  
(1933\*)  
President and Chief  
Executive Officer of  
Saab-Scania AB,  
Chairman of the Board of  
Industrigruppen JAS AB  
Member since 1987

**TOMMY LINDBOHM**  
(1947\*)  
Employee representative  
Member since 1988  
Shares held: B 205  
Convertible  
debentures: 500\*\*

**SVEN LJUNGBERG**  
(1944\*)  
Employee representative  
Member since 1986  
Shares held: B 4  
Convertible  
debentures: 125\*\*

**SVEN OLVING**  
(1928\*)  
Doctor of Science,  
Professor of Chalmers  
University of Technology,  
Chairman of the Royal  
Swedish Academy of  
Engineering Science,  
Chairman of the Board of  
AB Volvofinans  
Member since 1980

**STANLEY OSCARSSON**  
(1927\*)  
Employee representative  
Member since 1987

**STEN WIKANDER**  
(1927\*)  
Chairman of the Boards  
of Hennes & Mauritz AB  
and the Swedish Export  
Credit Corporation  
Member since 1987

**SVEN ÅGRUP**  
(1930\*)  
Chairman of the Board  
of AGA AB  
Member since 1983

**BJÖRN SVEDBERG**  
(1937\*)  
President and Chief  
Executive Officer,  
Honorary Doctor of  
Technology  
Member of the  
Boards of AGA AB,  
Atlas Copco AB and  
the Federation of  
Swedish Industry  
President and  
member since 1977  
Shares held: B 3,755  
Convertible  
debentures: 5,650\*\*



# Corporate Officers



Thomas Olsson

Stanley Oscarsson



Thomas Olsson

Claes-Göran Larsson

## Deputy Members

**CLAES-GÖRAN LARSSON**  
(1954\*)  
Employee representative  
Member since 1988  
Convertible debentures: 50\*\*

**ARNE MOHLIN**  
(1921\*)  
Former Executive Vice President  
Chairman of the Board of the Swedish Standards Association (SIS)  
Member since 1976  
Shares held: B 1,819  
Convertible debentures: 4,325\*\*

**THOMAS OLSSON**  
(1944\*)  
Employee representative  
Member since 1985  
Shares held: B 300

**CARL WILHELM ROS**  
(1941\*)  
Executive Vice President  
Member since 1986  
Shares held: B 1,006  
Convertible debentures: 4,325\*\*

**JAN STENBERG**  
(1939\*)  
Executive Vice President  
Member since 1982  
Shares held: A 4, B 4  
Convertible debentures: 4,325\*\*

**GÖTHE SÖDERKVIST**  
(1945\*)  
Employee representative  
Member since 1989  
Convertible debentures: 125\*\*

## Corporate Executive Committee

**BJÖRN SVEDBERG**  
President and Chief Executive Officer  
Telefonaktiebolaget LM Ericsson

**LARS RAMQVIST**  
Executive Vice President

**CARL WILHELM ROS**  
Executive Vice President and  
Chief Financial Officer

**JAN STENBERG**  
Executive Vice President

## Corporate Staffs

**STEPHAN ALMQVIST**  
Senior Vice President  
Corporate Treasury

**LENNART GRABE**  
Senior Vice President and General Counsel  
Corporate Legal Affairs

**HARRY JOHANSSON**  
Senior Vice President, Corporate Audit

**BO LANDIN**  
Senior Vice President, Corporate  
Markets and Corporate Planning

**GÖSTA LINDBERG**  
Senior Vice President, Corporate Technology  
and Standards, and Chief Technical Officer

**NILS INGVAR LUNDIN**  
Senior Vice President  
Corporate Relations

**BRITT REIGO**  
Senior Vice President  
Corporate Human Resources and  
Organization

**ÅKE STAVLING**  
Senior Vice President  
Corporate Financial Control

## Business Areas

**LARS BERG**  
Senior Vice President  
Cable and Network  
President, Ericsson Cables AB and  
Ericsson Network Engineering AB

**BERT JEPSSON**  
Senior Vice President  
Components  
President, Ericsson Components AB

**ULF H. JOHANSSON**  
Senior Vice President  
Defense Systems  
President, Ericsson Radar Electronics AB

**RONNY LEJDEMALM**  
Senior Vice President  
Business Communications  
President, Ericsson Business  
Communications AB

**LARS RAMQVIST**  
Executive Vice President  
Radio Communications  
President, Ericsson Radio Systems AB  
(Until January 31, 1990)

**JAN STENBERG**  
Executive Vice President  
Public Telecommunications  
President, Ericsson Telecom AB

## Auditors

### Statutory Auditors

**DAVID JONES**  
Chartered Accountant, Price Waterhouse

**NILS-AXEL FRISK**  
Former Executive Vice President (Finance),  
Swedish Staff Pension Fund

**OLOF HEROLF**  
Authorized Public Accountant, Price Waterhouse

### Deputy Auditors

**CARL-ERIC BOHLIN**  
Authorized Public Accountant, Price Waterhouse

**KRISTER HERTZEN**  
President, Swedish Staff Pension Fund

**STEPHAN TOLSTOY**  
Authorized Public Accountant, Price Waterhouse

\* Year of birth

\*\* Each convertible debenture corresponds to one "B" share



# Ericsson

Parent Company, Subsidiaries, Associated  
Companies, Regional and Technical Offices



## Algeria

Telefonaktiebolaget LM Ericsson  
Bureaux Techniques d'Algérie  
El Djazair  
Hugo Agnvall

SITEL – Société Industrielle  
Algérienne de  
Télécommunications  
Tlemcen  
Ibrahim Bensmail

## Argentina

Compañía Argentina de  
Teléfonos S.A.  
Buenos Aires  
Stig Johansson

Compañía Ericsson S.A.C.I.  
Buenos Aires  
Pär Waller

Industrias Eléctricas de Quilmes  
S.A.  
Quilmes  
Arvid Jauring

## Australia

LM Ericsson Pty. Ltd.  
Broadmeadows  
Lars Estberger

Ericsson Components Pty. Ltd.  
Preston  
Neil McCormick

Ericsson Defense Systems Pty. Ltd.  
Preston  
Ivan Trayling

Nira Australia Pty. Ltd.  
Alexandria NSW  
Brian Fitzgerald

## Belgium

Ericsson Business  
Communications NV/SA  
Brussels  
Göran Schlyter

Ericsson European Support  
Centre SNC/VOF  
Brussels  
Kristen Erlandsson

N.V. Nira Communication  
Systems  
Zaventem  
Tony Weyns





### **Brazil**

Ericsson Amazonia S.A.  
Manáus  
Sergio Monteiro De Carvalho

Ericsson do Brasil Comércio e Indústria S.A.  
São Paulo  
Sergio Monteiro De Carvalho

Fios e Cabos Plásticos do Brasil S.A.  
Rio de Janeiro  
Jan Erik Andersson

### **Brunei**

Ericsson Network Engineering (Brunei) Sdn Bhd  
Negara Brunei Darussalam  
Trygve Urdahl

### **Canada**

Ericsson GE Mobile  
Communications Canada Inc.  
Quebec  
Lionel P. Hurtubise

Ericsson Communications Inc.  
Quebec  
Lionel P. Hurtubise

### **Chile**

Compañía Ericsson de Chile S.A.  
Santiago  
Nelson Sigueroa

### **China, People's Republic of**

Telefonaktiebolaget LM Ericsson  
Representative Office  
Beijing  
Per-Olof Björk

Telefonaktiebolaget LM Ericsson  
Liaison Office  
Dalian  
Per-Olof Björk

Telefonaktiebolaget LM Ericsson  
Representative Office  
Shanghai  
Bo Almlöf

Ericsson Telecom AB  
Representative Office  
Guangzhou  
Jan Hågne

### **Colombia**

Ericsson de Colombia S.A.  
Bogotá  
Hector Perez

FACOMECA S.A.  
Cali  
Arvid Jauring (fr. 1/5)

### **Costa Rica**

Ericsson de Costa Rica S.A.  
San José  
Alejandro Guerrero

### **Denmark**

LM Ericsson A/S  
Brøndby  
Asbjørn Dehlie

Ericsson Radio Systems A/S  
Taastrup  
Henrik Abildtrup

### **Ecuador**

Teléfonos Ericsson C.A.  
Quito  
Bo Zaine

### **Egypt**

Telefonaktiebolaget LM Ericsson  
Egypt Branch  
Cairo  
Staffan Hult

### **El Salvador**

Telefonaktiebolaget LM Ericsson  
Sucursal El Salvador  
San Salvador

### **Finland**

Oy LM Ericsson Ab  
Jorvas  
Yngve Ollus

Oy Ericsson Radiopuhelin Ab  
Helsinki  
Pekka Erna

### **France**

Ericsson Composants S.A.  
Guyancourt  
Gilles Pichon

MET S.A.  
Massy  
Nils Söderqvist/Jacques Payer

Nira S.A.  
Nanterre  
Jacques François

### **Germany, Federal Republic of**

Ericsson Business  
Communications GmbH  
Düsseldorf  
Heinrich Thanscheidt

Ericsson Components GmbH  
Engen  
Richard Allingham

Ericsson Paging Systems  
Zweigniederlassung,  
Deutschland  
Frankfurt  
Manfred Wiegand

Ericsson Telekom GmbH  
Frankfurt  
Kjell Nilsson

DPESA Deutsche Personensuch-  
anlagen GmbH  
Frankfurt  
Colin Buckingham

Nira Deutschland  
Zweigniederlassung  
der Nira International BV  
Frankfurt  
Fritz Schlichtenberger

### **Greece**

Ericsson (Hellas)  
Telecommunications  
Equipment S.A.  
Athens  
Willy Johansson

### **Guatemala**

Ericsson de Guatemala S.A.  
Guatemala City  
Ignacio Gonzales

### **Hongkong**

Ericsson Communications  
(Hong Kong) Ltd.  
Hongkong  
Rolf Granström

### **India**

Ericsson India Ltd.  
New Delhi  
Satish C. Sood

LM Ericsson International AB  
Liaison Office  
New Delhi  
Tommy Ericsson

SAB Electronic Devices Ltd.  
New Delhi  
B.J. Katrak

### **Iran**

Simco Ericsson Ltd.  
(Private Joint Stock Company)  
Teheran  
Parviz Hourfar

### **Iraq**

Telefonaktiebolaget LM Ericsson  
Iraq Branch  
Baghdad  
Christer Hedberg

### **Ireland**

Ericsson Business  
Communications Ltd.  
Dublin  
John L. Kennedy

Ericsson Expertise Ltd.  
Glasthule, Dun Laoire,  
Dublin  
Diarmuid O'Colmain

Electra Insurance Ltd.  
Dublin  
John Ronaghan

Ericsson Treasury Ireland Ltd.  
Dublin  
John Ronaghan

LM Ericsson Holdings Ltd.  
Dublin  
Vincent Daly

LM Ericsson Ltd.  
Athlone  
Vincent Daly

### **Italy**

C.E.S.I. Centro Elaborazioni e  
Studi Informatici S.p.A.  
Rome  
Maurizio Marcovaldi

CELTE S.p.A.  
Limena (Padova)  
Aurelio Casali

Ericsson Components S.r.l.  
Milan  
Enzo Zenga

EL. TE. Siciliana Electronica &  
Telecomunicazioni S.p.A.  
Palermo  
Gianluigi Molinari



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Sistemas Ericsson C.A.  
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Alvaro Cifuentes



## Definitions of Terms Used in "Ten-Year Summary" on page 37

*Operating income.* Takes into account standard depreciation.

*Financial net.* Financial income less financial expenses. Financial expenses include both operational and financial gains and losses on foreign exchange in the years 1980 through 1981. Financial expenses in 1982 through 1989 include only financial gains and losses on foreign exchange as explained in (d) under Accounting Policies.

*Working capital.* Current assets less non-interest-bearing current liabilities.

*Property, plant and equipment.* Stated net of accumulated standard depreciation.

*Adjusted net income per share.* See (k) under Accounting Policies, and Note 6.

*Current ratio.* Current assets divided by current liabilities.

*Adjusted stockholders' equity.* Defined as stockholders' equity as shown in the balance sheet (excluding minority interest in stockholders' equity) plus 60 percent of untaxed reserves (assuming 40 percent deferred taxes on untaxed reserves).

*Return on equity.* Defined as adjusted net income (after actual taxes paid and estimated deferred taxes) expressed as a percentage of average adjusted stockholders' equity (based on the amounts at January 1 and December 31).

*Return on capital employed.* Defined as the total of operating income plus financial income as a percentage of average (based on the amounts at January 1 and December 31) capital employed. Capital employed is defined as total assets less current noninterest-bearing debts and 40 percent of untaxed reserves. For the years 1980–1985 the return has been based on capital employed at year-end.

*Equity ratio.* Defined as the total of stockholders' equity, 60 percent of untaxed reserves, and minority interest in equity of consolidated subsidiaries, expressed as a percentage of total assets.

*Risk-bearing capital ratio.* Defined as the total of stockholders' equity, untaxed reserves and minority interest in equity of consolidated subsidiaries, expressed as a percentage of total assets.

*Debt-equity ratio.* Defined as full interest-bearing liabilities divided by the total of stockholders' equity, 60 percent of untaxed reserves, and minority interest in equity of consolidated subsidiaries.

*Net income per share after full conversion.* If adjusted net income per share after full conversion is higher than adjusted net income per share before full conversion, the lower amount is shown.

## Financial information from Ericsson

Interim Report January–March	May 8, 1990
Interim Report January–June	August 23, 1990
Interim Report January–September	November 15, 1990
Preliminary results, 1990	February 7, 1991
Results, 1990	March 14, 1991
Annual Report 1990	Mid April, 1991

Financial reports are available from Ericsson Media:  
Telefonaktiebolaget LM Ericsson, S-126 25 Stockholm, Sweden (Tel: 08-719 00 00),  
The Ericsson Corporation, 100 Park Avenue, Suite 2705, New York, N.Y. 10017, U.S.A.  
(Tel: +1 212 685 4030)

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### **Annual General Meeting**

The Annual General Meeting will be held in the Berwald Hall, Strandvägen 69, Stockholm, at 5.00 p.m. Tuesday, May 8, 1990.

Shareholders intending to participate in the Annual General Meeting must be entered as shareholders in the share register kept by Värdepapperscentralen VPC AB (Swedish Securities Register Center) not later than April 27, 1990. Shareholders whose shares are registered in the name of an agent must reregister the shares temporarily in their own names in order to participate in the meeting.

In addition to the above-mentioned requirements, shareholders shall give notice of attendance to the Headquarters of Telefonaktiebolaget LM Ericsson, Corporate Legal Affairs, S-126 25 Stockholm, between 10.00 a.m. and 4.00 p.m. not later than Thursday, May 3, 1990 at 4.00 p.m.

### **Dividend**

The Board of Directors has proposed May 11, 1990 as the record day for payment of dividends. Provided this proposal is approved, the dividend is expected to be paid by Värdepapperscentralen VPC AB on May 18, 1990.

Dividends on shares for which certificates have been issued under the former system will not be paid until the exchange of certificates and the entry in the share register kept by Värdepapperscentralen VPC AB have been made.

### **Stock split**

At the Annual General Meeting of the Company, the Board of Directors will propose that, following payment of the dividend, the shares be split so that five new shares replace each "old" share outstanding.

### **Change of addresses**

Shareholders who have changed their names or mailing addresses should as soon as possible notify Värdepapperscentralen VPC AB, S-171 18 Solna, Sweden.

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